The Federal Role in Higher Education

By Thomas R. Wolanin

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The range of federal involvement in higher education extends from admission standards to zoology research. This range is not surprising for those who know its long history. The Supreme Court, for example, in *Trustees of Dartmouth College* v. Woodward (1819) established the independence of private higher education—actually all higher education—from direct government control. The Land-Grant College Acts (1862, 1890) accelerated the growth of public higher education and explicitly linked higher education to economic development by promoting "the liberal and practical education of the industrial classes in the several pursuits and professions in life." The G.I. Bill (1944) democratized and "massified" higher education, thereby laying the foundation for a nation with a broad middle-class.¹ World War II forged a partnership in research between the federal government and higher education. Science, The Endless Frontier (1945), a report to the president, pointed the direction for a permanent federal role in supporting basic research at colleges and universities. The Civil Rights Act of 1964 broke the back of *de jure* segregation in higher education. This historical enumeration suggests the depth, breadth, and decisiveness of the federal influence on American higher education. This influence continues; here, we outline the current connections and prospects for the future.

The federal government, above all, seeks to provide for the security of our borders from hostile action, to ensure domestic tranquility and the rule of law, and to produce economic stability and prosperity. The success of the federal government in each realm directly affects higher education. Higher education is buffeted by political and economic tides-no isolated and insulated ivory tower here. Economic hard times affect enrollments, depress faculty salaries, reduce public and donor support, and erode the value of endowments. International events, such as the Cold War or the current war on terrorism, affect the climate of inquiry and teaching, the amount of secret research, the ability of military and security agencies to recruit, and the administration of policies concerning foreign students. Thus, the federal government is the ultimate guarantor: A secure and prosperous nation benefits American higher education;

conversely, threats to security and prosperity jeopardize the welfare of our colleges and universities.

The federal government also influences higher education in specific areas, including student assistance, tax policy, research support, civil rights, and employment regulation. Federal policy also affects such policy areas as information technology, language and area studies, and support for minority-serving institutions. This essay focuses on policy formation in these several key areas.

STUDENT ASSISTANCE

Student assistance programs affect more institutions than any other federal program. Participants include about 2,100 non-profit public and about 2,000 non-profit private two-year and four-year institutions. About 2,300 private for-profit (proprietary) schools also participate, and enroll about four percent of all students.² Students received \$43.7 billion in federal assistance in the 2001–2002 school year.³ Parents borrowed an additional \$4.6 billion under these programs.⁴

These programs are intended to help students attend college who are qualified but who would otherwise be excluded. Spending taxpayer funds on financial aid is justified because public benefits result from the expenditure. Helping needy students increases the nation's economic productivity and supplies students with key skills for the labor market. The result: a larger economic pie for all to share. These programs also create non-economic public benefits including stronger democratic institutions, better health, and a protected environment.⁵ Last, increasing higher education opportunity is the right and moral thing to do-it makes America a more fair and just society.

The Higher Education Act, President Lyndon B. Johnson stated in 1965, "means that a high school senior anywhere in this great land of ours can apply to any college or any university in any of the 50 States and not be turned away because his family is poor."⁶ President Nixon reiterated the goal of expanded access in 1970: "No qualified student who wants to go to college should be barred by lack of money. That has long been a great American goal; I propose that we achieve it now."⁷

Congress enacted the Perkins Loan program—originally the National Defense Student Loan (NDSL) program—in 1958 to help increase the supply of teachers, scientists, and other highly trained persons. The goal of this first federal student aid program: to win the "space race" after the launching of Sputnik by the Soviet Union. Needy undergraduate and graduate students receive lowinterest loans under this program. Next came the Work-Study program, launched in 1964 by the Office of Economic Opportunity. Work-Study provides federal funds to colleges and universities to pay the wages of needy undergraduate and graduate students who work on campus or in public service jobs. The Supplemental Educational Opportunity Grant program (originally the Educational Opportunity Grant)—another War on Poverty program (1965)-distributes funds to colleges and universities to provide grants to needy undergraduates. The Guaranteed Student Loan program (1965) authorizes the federal government to guarantee student loans to needy students and to pay the interest on these loans while students remain in college. This program in which the capital is provided by private sector lenders continues today under the name of the Federal Family Education Loan Program (FFELP). In 1993 institutions of higher education were provided with the option of participating in the federal student loan program either through FFELP or through the new Direct Loan Program in which the federal government provides the loan capital, not private lenders. Both FFELP and Direct Loans offer identical terms to student borrowers, and both programs also make unsubsidized loans to students who do not demonstrate financial need and to parents to pay the educational expenses of their children.

Pell Grants—originally Basic Educational Opportunity Grants (1972)—are made directly to needy undergraduates; it is the largest federal grants program. The Leveraging Educational Assistance Partnerships (LEAP) program—originally State Student Incentive Grants (1972)—provides matching funds to states for grants to needy students.

The Perkins Loan Program, the Work-Study Program and the Supplemental Educational Opportunity Grant Program are collectively known as the "campus-based programs." Federal funds are distributed by formula to colleges and universities that provide matching funds. These institutions then decide how to "package" or combine grants, loans, and work assistance to needy students. The law specifies the maximum award limits for each program, but the funds appropriated for campus-based programs are not adequate to aid all eligible students up to the legislated limits. The statutory formulas also provide more funds to some institutions than to others, holding constant the financial need of their students. The aid received by a student from the campus-based programs therefore depends on the allocation formulas and on the discretion of the campus financial aid officer.

Table 1 shows the total amount of aid provided through each program in 2001–02 and the number of students aided by each program. The amounts listed for student aid include the institutional- and state-matching funds required in some programs. The actual federal appropriation is substantially less than the amounts listed on the table because of the matching requirements and because of the multiplier effect of federal support for the loan programs. In 2002–03, for example, students will be able to borrow \$11 in FFELP for each dollar of federal spending for the program.⁸

These student financial aid programs aim to overcome financial barriers to obtaining a college education. The federal TRIO programs that complement these programs provide services to nearly 700,000 low-income firstgeneration-in-college students between the ages of 11 and 27 in more than 1,900 projects; federal appropriations for 2002–03 totaled \$802 million.9 These services include information about college admissions and financial aid programs, tutoring, mentoring, counseling, and remedial instruction. Students in secondary school and in higher education are aided in overcoming social, cultural, and academic barriers to access to higher education. The first TRIO program was launched in 1964 as part of the War on Poverty; today the TRIO umbrella includes six outreach and support programs: Talent Search, Upward Bound, Student Support Services, Educational Opportunity Centers, the Ronald McNair

Table 1

Federal Student Financial Aid: 2000–2001 Academic Year

Aid Available (in billions)	Number of Students Aided (in millions)
\$7.9	3.9
0.8	1.1
0.1	0.1
1.1	1.0
1.1	0.7
18.1	4.3
14.8	3.0
4.1	0.5
	Aid Available (in billions) \$7.9 0.8 0.1 1.1 1.1 1.1 18.1 14.8 4.1

Total aid available to students: \$43.9 billion.

Sources: The College Board. Trends in Student Aid 2001. Washington, D.C.: author, 2001, and U.S. Department of Education, FY2001 Budget Summary.

Post-Baccalaureate Achievement Program, and Staff Development. The GEARUP program, enacted in 1998, provides similar services to cohorts of low-income students beginning in grade six.

Except for the unsubsidized and parent loans, all aid reported in Table 1 is based on financial need. But unsubsidized loans are the most rapidly growing category of federal financial aid. Nor do federal tax benefits to individual students and their parents for higher education target the needy. Grants awarded by states and individual colleges and universities are increasingly based on academic merit rather than financial need. Thus, the commitment to provide opportunities to students who are qualified for college but needy is under threat from all sides.

In 1999–2000, 64 percent of graduating students were borrowers under at least one federal student loan program; two-thirds of this year's full-time undergraduates are borrowers. Not only are more students borrowing, but also the amounts borrowed are growing. The average debt grew over 80 percent from \$9,188 to \$16,928 since 1992–1993.¹⁰ An aversion to borrowing resulting from this increasing student debt burden, some observers believe, may lead low-income and minority students to reject the opportunity for higher education. Worries about the amount borrowed and how to pay it back may distort their choice of institutions, ability to enroll full-time, choice of major, persistence to graduate school, and choice of job and career.

These trends in borrowing, combined with the declining purchasing power of federal grants as college costs increase, create an opportunity gap between students from lowincome and upper-income families. Among college-qualified high school graduates, only 33 percent from low-income families attended a four-year college after high school while 77 percent of their peers from high-income families attended a four-year college.¹¹

All federal student aid programs are available to students regardless of their field of study or intended occupation; these programs are not instruments of manpower planning. Partial loan cancellations for some types of teaching are political window dressing—too small to leverage the career choices of students. Veterans' education benefits, in contrast, help to make the all-volunteer military services more attractive; they are not intended to equalize educational opportunity. Veterans received \$1.9 billion in 2000–2001 for higher education expenses.¹²

These complex and costly federal student aid programs impose a substantial regulatory burden on the 6,400 public and private, nonprofit and for-profit participating institutions. Access to federal aid is essential for the survival of many institutions. Participation in these programs therefore is a powerful hook for many requirements, not all of them related directly to financial aid. To participate, institutions must be licensed by a state to ensure quality, be certified by the Department of Education to ensure their administrative competence and their financial solvency, and be approved by an accrediting agency that meets federal standards. These institutions must also comply with federal requirements for reporting data about operations, enrollments, staffing, degree production, and campus crime.

TAX BENEFITS

Tax benefits for favored activities are a popular form of federal support. These benefits are less visible than direct spending, appear to involve less federal control, and are portrayed as "tax cuts" rather than federal "spending." Federal tax benefits to higher education were historically accorded to *institutions* of higher education. Exempting the income of non-profit colleges and universities from federal taxation is the most important benefit—the concept of "non-profit" status is largely derived from tax law. A rough approximation of the value of this benefit to higher education is \$50 billion per year.¹³

Tax exemption is provided for a historical reason-kings did not tax churches. The state, successor to kings in a republic, taxes neither churches nor institutions that perform functions formerly assumed by churches, such as providing education, health care, and "social services." Historical precedent and the political power of the beneficiaries have preserved tax-exempt status. Some observers ask if there would be a net loss in benefits to the public if governments taxed the income of non-profit organizations.¹⁴ About 2,300 for-profit (proprietary) institutions, these observers note, provide postsecondary education to more than 600,000 students. These institutions pay taxes on their income like any other business and meet the same federal standards as non-profit institutions.15

In any case, income from activities unrelated to the charitable purpose is subject to a federal unrelated business income tax (UBIT). Interested parties continue to define the border between income related to the charitable or eleemosynary mission of the non-profit institution—teaching and research in the case of higher education—and income derived from other activities. The Internal Revenue Service, for example, recently decided that colleges must pay this tax on lump-sum payments made by soft drink companies in return for exclusive access by the beverage brand. Providing brand visibility and an exclusive campus market for a soft drink, the IRS determined, was not part of the core mission of an institution of higher education.¹⁶

The deductibility of contributions from the taxable income of donors—the other critical tax benefit to colleges and universities—substantially increases the amount and value of donations. The value of this benefit to elementary and secondary schools and to colleges was \$5.6 billion in 2002.¹⁷ Total private contributions to higher education totaled \$24.2 billion in FY 2001.¹⁸ Most of this goes to institutions that receive a substantial amount of donations. If an endowment in excess of \$50 million indicates such a recipient, then only 420 colleges and universities (12 percent of all non-profit institutions of higher education) derive significant gains from this tax benefit.¹⁹

When does a donor receive a substantial benefit in return for a "gift?" This controversial question is a source of regulatory conflict because receiving a substantial benefit changes the "gift" from an eligible charitable deduction to a purchase that is subject to taxation. One example of a recent IRS decision: A donor who received the right to buy a luxury box at a football stadium in return for a large donation to a university athletic foundation for the construction of the box could deduct the donation.²⁰

Individuals may benefit from other longstanding federal tax code provisions. Two examples: Scholarships and fellowships are non-taxable income under the code, and educational expenses required by an employer or by law—legal and medical continuing education, for example—are deductible. Tax benefits aimed at making college more "affordable" for middle-income families proliferated in the last decade. These new benefits encourage saving and investment to pay for higher education and provide tax reductions to those who pay higher education expenses or student loans. Table 2 summarizes the tax benefits available to individuals in 2001.

The Hope tax credit—the largest of the tax benefits for higher education expenses-highlights the education-related benefits provided by the Taxpayer Relief Act of 1997. A tax credit reduces the taxes to be paid by the amount of the credit. A student in the first two years of undergraduate education or whoever claims the student as a dependent—typically the student's parents—can claim the Hope credit. The student on whose behalf the credit is claimed must have at least \$2,000 in tuition expenses to claim the maximum \$1,500 annual credit. The Hope credit is not refundable; it can only be claimed up to the amount of the taxpayer's tax liability. Thus, if a taxpayer has no federal income tax liability, the taxpayer receives no Hope credit despite paying

tuition. Or, a taxpayer with a tax liability smaller than the Hope credit that would be generated by their tuition payments has only the smaller tax liability canceled.

In FY 2002, the Hope credit provided \$5.3 billion in benefits to taxpayers.²¹ When taxpayers fully use the Hope credit and other tax benefits to individuals in higher education, their cost to the federal government "is projected to equal the cost of all other existing federal financial aid programs combined."22 These credits represent a major shift in federal higher education policy. Tax benefits do not help families without significant tax liabilities, and therefore fail to increase access to higher education for students from low- and moderateincome families. Instead, these benefits primarily aid students from middle- and upperincome families who would attend college even without the benefits.23

RESEARCH SUPPORT

The federal government is the primary source of support for academic research; federal sources supplied approximately 58 percent (\$17.5 billion) of the expenditures for research in higher education in FY 2000.²⁴ In contrast to federal student financial aid programs and tax policies, which significantly affect all colleges, federal support for research is concentrated. The top 100 of the nation's 2,000 four-year non-profit colleges and universities received 82 percent of federal research and development expenditures in FY 2000.²⁵ The trend, though, is toward less concentration: The proportion of federal research funding received by the top 10 university recipients declined from 43 percent in 1952 to 21 percent in 2000.²⁶

Federal support for basic research may be traced to Article 1, Section 8 of the Constitution, which gives Congress power "to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."²⁷ The key justification for federal support for basic research: In the short run at least, the marketplace underinvests in basic research relative to the long-term benefits research brings to the nation. Nanotechnology, for example, is a current priority in federal support for basic

Table 2

Highlights of Tax Benefits for Higher Education, Tax Year 2001

	Hope Credit	Lifetime Learning Credit	Coverdell ESA	Traditional and Roth IRAs	Student Loan Interest	Student Tuition Programs	Education Savings Bond Program	Employer's Educational Assistance Program
What is the benefit?	Credits can reduce the amount of tax you must pay		Earnings are not taxed	No 10% additional tax on withdrawal	You can deduct the interest early	Earnings are not taxed	Interest is not taxed	Employer benefits are not taxed
What is the annual limit?	Up to \$1,500 per student	Up to \$1,000 per family	\$500 contribution per beneficiary	Amount of qualifying expenses	\$2,500	None	Amount of qualifying expenses	\$5,250
What expenses qualify besides tuition and required enrollment fees?	None	None	Books Supplies Equipment Room & Board if at least a half-time student	Books Supplies Equipment Room & Board if at least a half-time student	Books Supplies Equipment Room & Board	Books Supplies Equipment Room & Board if at least a half-time student		Books Supplies Equipment
					Transportation Other necessary	oldeon	Payments to Coverdell ESAs	
			Payments to state tuition programs		expenses		Payments to state tuition programs	
What education qualifies?	First 2 years of under- graduate	All undergraduate and graduate						Under- graduate
What are some of the other conditions that apply?	Can be claimed only for 2 years		Cannot contribute to a Coverdell ESA and state tuition program in the same year		Applies to first 60 months of required interest	Beneficiary must pay tax on withdrawn earnings	Applies only to qualified series EE bonds issued after 1989 or series I bonds	
	Must be enrolled at least half-time in a degree program		Must withdraw assets at age 30		Must be enrolled at least half-time in a degree program			
In what income range do benefits phase out?	\$40,000-\$50,000 \$80,000-\$100,000 for joint returns		\$95,000– \$110,000 \$150,000– \$160,000 for joint returns	No phaseout	\$40,000- \$55,000 \$60,000- \$75,000 for joint returns	No phaseout	\$55,750– \$70,750 \$83,650– \$113,650 for joint returns	No phaseout

Source: Internal Revenue Service Publication 970, Appendix B for Tax Year 2001.

research. Nanotechnology deals with matter measured in nanometers: one billionth of a meter or about 1/10,000 of the width of a strand of hair.²⁸ "Government officials want to become more active in nanotechnology research," states a recent account, "because they worry that the private sector has been unable or unwilling to make a major commitment in the field, which requires long-term investment without immediate benefit."²⁹

About two-thirds of federal research expenditures at colleges and universities goes for basic research.³⁰ The National Science Foundation is the lead supporter of basic research, but nearly two-thirds of federal research funds for higher education comes from the National Institutes of Health.³¹

Article I, Section 8 of the Constitution also gives Congress the power to promote "useful arts." Support for practical or applied research—justified by this clause—now amounts to about one third of federal funding. The Hatch Act (1887) helped to ensure the primacy of universities in conducting federally supported applied research. This act provided funds to land grant universities to conduct agricultural research and to disseminate the results though experiment stations to farmers. Today, many federal agencies seek to accomplish their missions by funding applied research at universities. The range of missions includes killing pests to enhance agricultural productivity, putting a man on the moon, designing anti-missile technology components, developing solar energy, and finding "cures" for diseases such as cancer and AIDS.

The pattern of federal research support constantly shifts along with changing political priorities, such as the current heightened interest in smallpox and anthrax, two potential bioterrorism agents. These shifts can disrupt university research that is premised on years of stable support. Democratic control of government funding may thus conflict with the demands of research for long-term commitments.

Federal funding for research is divided into support for the direct expenses of the research project and support for "indirect" expenses, that is, overhead. Overhead costs, expressed as a percentage of direct costs, pay for maintaining the university infrastructure, such as administrative services, utilities, libraries, and buildings and grounds. These expenses cannot be reasonably allocated among funded projects. You might be able to figure out, for example, the cost for the electricity in a particular laboratory and divide that cost among the projects housed in that lab. But, what portion of the electricity for the streetlights in the parking lot do you allocate to the projects in the buildings served by the lot? The federal government and research universities continually debate the appropriate proportion of overhead costs to direct costs and the expenses to be included as overhead.

Most federal research funds are awarded competitively, with peer reviewers judging applications for support on their merit. But Congress earmarks a significant share of federal research funding for projects outside of the peer review process. These earmarks totaled \$1.8 billion in FY 2002, about nine percent of the federal research funds for higher education.³² NSF and NIH appropriations have been largely free of earmarks. But earmarking elsewhere, argue critics, deters agencies from funding the highest quality research, and distorts research priorities. Critics also note the unfairness of determining research funding by whether the university is represented by senior members of Congress who serve on the appropriations committees. Peer review, counter supporters of earmarking, is an old boy network. The result: The same rich institutions get richer. Spreading federal research dollars, supporters add, builds a larger national research infrastructure and extends more equitably the local economic development stimulated by university research.33

The economic benefits of federal research spending extend beyond direct and indirect cost payments. The little-noted Dole-Bayh Act of 1981, for example, authorized universities—not the federal agency funding the research—to hold patent and licensing rights to discoveries produced with federal funds.³⁴ This act created a lucrative new funding stream for research universities and spawned university involvement in commercial and joint ventures. The University of Rochester, for instance, is defending its patent claim and that of one of its faculty members for the antiinflammatory drug Celebrex, the royalties from which are estimated to be in the billions of dollars per year.³⁵ In 2000, licensing fees provided more than \$1 billion to American universities.³⁶ The Dole-Bayh Act also authorized for the first time copyright protection for computer programs, shaping the development of our knowledge-based economy.

The conduct of research at universities raises difficult ethical issues, including the appropriate treatment of human research subjects and research animals, use of human embryos, limits on human cloning, and genetic manipulation of plants and animals used for food. When federal government funds this university research, the intrusion of public values and concerns—less delicately called politics—and calculations of political advantage inevitably complicate, even threaten to compromise, academic inquiry.

CIVIL RIGHTS

Federal civil rights laws have changed the face of American higher education in the last four decades. The most important civil rights laws are:

- Title VI of the Civil Rights Act of 1964 (race, color, and national origin).
- Title IX of the Education Amendments of 1972 (sex).
- Section 504 of the Rehabilitation Act of 1973 (disability) and the Americans with Disabilities Act of 1990.

Title VI of the Civil Rights Act of 1964 established the pattern for subsequent civil rights laws. "No person in the United States shall, on the ground of race, color, or national origin," the title provides, "be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." This prohibition of discrimination—not limited to education—is thus tied to the receipt of federal funds. If a college or university does not receive federal funds, the prohibition does not apply. For this reason, Hillsdale College in Michigan explicitly refuses to participate in federal student financial aid or research support programs. Title IX, which applies only to education programs, does not apply to undergraduate admissions at private colleges. Section 504, patterned

after Title VI of the Civil Right Act, provides that "no otherwise qualified individual with a disability...shall, solely by reason of her or his disability...be subjected to discrimination...." The Americans with Disabilities Act is not tied to the receipt of federal funds. It expands upon and reinforces Section 504 by providing "a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities."

When Title VI of the Civil Rights Act ended legal segregation in American higher education, 19 states had separate state-supported higher education institutions for black and for white students.³⁷ One index of the desegregation of American higher education is the growing percentage of minority enrollments. These enrollments nearly doubled from 15.7 percent in 1976 to 28.1 percent by 1999.³⁸ The percentage of black high school graduates enrolling in higher education increased from 23 percent in 1967 to 56 percent in 2000.³⁹

Title IX has become synonymous with expanding opportunities for women and girls in sports, and for the dramatic growth in women's sports, symbolized by the new professional leagues for women's soccer and basketball. But Title IX has also had a pervasive, though less visible, impact on the *academic* opportunities available to women. Between 1972–73 and 1999–2000, for example, the proportion of degrees in medicine and law received by women increased from nine to 43 percent and from eight to 46 percent, respectively.⁴⁰

Ramps, curb cuts, and handicapped-accessible lavatories along with sign interpreters at public lectures and commencement ceremonies are some visible signs of broader opportunities for students with disabilities resulting from Section 504 and the Americans with Disabilities Act. The percentage of college freshmen with a disability has more than tripled from fewer than three percent in 1978 to over nine percent in 1998.⁴¹ Most colleges now offer services to help students with disabilities succeed—88 percent, for example, offer alternative examination formats for students with disabilities.⁴²

Attaining the equity and fairness envisioned by these civil rights laws is still in the future. But the laws themselves are now enmeshed in controversy. Opponents of affirmative action—used by colleges and universities to increase their enrollments of minority students-have challenged this practice as violating the Title VI prohibition against discrimination on the basis of race or ethnicity. Colleges have defended affirmative action practices as necessary for student diversity, which contributes "powerfully to the process of learning and to the creation of an effective educational environment."43 In Regents of the University of California v. Bakke (1978), the Supreme Court held that a quota or "setaside" of admission's slots for a racial group was impermissible. But the Court said that race could be used as one of a constellation of factors in admissions to promote diversity that contributed to educational quality. The Supreme Court is reexamining the decision since lower federal courts have offered different interpretations of the Bakke standard.

Passage of Title IX resulted in substantial progress in eliminating discrimination based on sex. But difficulties remain. Women are still significantly underrepresented in the top ranks of academic administration and in many scientific and technical fields. Between 1979-1980 and 1998-1999, the percentage of engineering doctorates received by women increased from 3.6 percent to 14.9 percent (400 percent). But this increase still left men with 85.1 percent of engineering degrees.⁴⁴ Title IX enforcement standards in athletics are subject to continuing challenges, particularly by men's sports such as wrestling, that some colleges eliminated to create greater parity between the resources available for men's and women's sports.

Students with disabilities also continue to face challenges to access and retention. For example, 72 percent of high school graduates without disabilities, but only 63 percent of peers with disabilities, were enrolled in college two years later. Students with disabilities are less likely to attain a college degree: 12 percent of people with disabilities vs. 23 percent of non-disabled persons.⁴⁵ Students with disabilities also face challenges of program accessibility, and of full inclusion in academic, social, and cultural offerings at many colleges. One difficult issue: When can an educational program exclude a person with a disability as not "otherwise qualified," as required by Section 504? A college, for example, could not

refuse to permit a blind students to participate in a hiking class that covers rough terrain because of fear that the student might trip and fall. But a college might appropriately exclude a blind student from a scuba diving class that pairs up participants to monitor each other's safety through visual inspection of valves and gauges.⁴⁶

HIGHER EDUCATION INSTITUTIONS AS EMPLOYERS⁴⁷

Colleges and universities, as employers, are subject to federal laws that regulate the workplace. Several laws apply almost entirely to *private* colleges and universities:

- The Occupational Safety and Health Act (OSHA).
- The National Labor Relations Act (NLRA), which deals with the right to organize and bargain collectively.
- The Fair Labor Standards Act (FLSA), which regulates minimum wages and overtime pay.
- The Employee Retirement Income Security Act (ERISA), which establishes standards and obligations for employee benefit and pension plans.

Laws that apply to *public and private* institutions include:

- The Family and Medical Leave Act (FMLA), which requires employers to grant unpaid leave for the birth or adoption of a child, placement in the employee's home of a foster child, or a serious health condition of either the employee or member of the employee's family.
- The Social Security programs including the Federal Insurance Contributions Act (FICA).
- The federal unemployment compensation system including the Federal Unemployment Tax Act (FUTA).

Most institutions that are not covered by these federal laws, particularly public institutions, are subject to similar state laws.

A key area of federal regulation is employment discrimination. Title VII of the Civil Rights Act of 1964 states: It shall be an unlawful employment practice for an employer:

- To fail or refuse to hire or to discharge any individual, or otherwise to discriminate against any individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, sex, or national origin; or
- 2. To limit, segregate, or classify his employees or applicants for employment in any way which would deprive or tend to deprive any individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, sex, or national origin.

Many remedies are employed to enforce Title VII, including back pay, retroactive seniority, affirmative action measures to remedy past discrimination against a group, and compensatory and punitive damages. Federal courts have recently begun to entertain employment discrimination cases related to academic promotion and denial of tenure, raising delicate issues of judicial secondguessing of academic judgments. Another area of frequent and strong disagreement: Are faculty salary differentials caused by sex or race discrimination or by legitimate factors such as the length of academic employment or performance differences?

Are federal employment laws appropriate when applied to colleges and universities? These laws, written with industrial employers and hourly wage employees in mind, often are ill-suited to higher education. For example, the Supreme Court in NLRB v. Yeshiva University (1980) said that private university faculty were not "employees" eligible to form a union. Instead, they had "managerial status" because they participated in university governance, particularly in academic matters, the core function of the university. Subsequent federal decisions have found faculty at "Yeshiva-like" institutions to be "managerial" and faculty at other private colleges to be employees eligible to form a union. Similarly contentious has been the issue of whether graduate teaching assistants are "primarily students" not protected by the NLRA, or primarily employees who are protected.

ENHANCING THE QUALITY OF HIGHER EDUCATION

This catchall category includes federal activities and programs that aim at enhancing the quality of higher education, consistent with advancing national priorities. The name and mission of the Fund for the Improvement of Postsecondary Education (FIPSE) capture the spirit of these activities. The Fund makes discretionary grants to colleges and universities for "encouraging the reform, innovation, and improvement of postsecondary education, and providing equal educational opportunity for all."

The Internet, the engine of the knowledgebased economy and globalization, is a product of the federal investment in university research. Beginning in the 1960s, the Defense Advanced Research Projects Agency (DARPA) supported the research that laid the foundation for transmitting information through linked and interactive computer networks.⁴⁸ Involvement with the Internet continues on many fronts: The federal government, for example, is now trying to protect the Internet from cyber-terrorism and to protect children from pornography while maintaining the Internet's basic structure and utility.

The National Defense Education Act (1958), enacted in reaction to the launching of the Soviet Sputnik, encouraged study of regions and languages of strategic interest to the United States by funding area and language centers. This program assumed renewed importance with our increased attention to Moslem nations.

The federal government is also involved in the international activities of colleges and universities through Immigration and Naturalization Service (INS) regulation of foreign students and scholars attending U.S. institutions. In the 2000–01, nearly 550,000 foreign students and 80,000 foreign scholars studied, taught, and conducted research at U.S. colleges and universities.⁴⁹ The new INS Student Exchange Visitor Information System (SEVIS), which tracks the status of foreign students, places unprecedented, difficult responsibilities on our colleges.⁵⁰

Federal grant programs support minorityserving institutions, including Historically Black Colleges and Universities (HBCUs), American Indian Tribally Controlled Colleges and Universities (AITCCUs), and Hispanic Serving Institutions (HISs). These colleges and universities play a key role in educating minority students—mostly low-income and first-generation-in-college. Formula and competitive grants help these institutions to improve academic quality, institutional management, and fiscal stability.

Federal programs come and go as national and political priorities change. Beginning in the 1950s, for example, Congress enacted programs of grants, loans, loan guarantees, interest subsidies, and bond insurance that provided billions of dollars to build academic facilities, including hundreds of thousands of dormitory rooms. By the 1960s many in Congress viewed higher education construction as the complement to student aid in expanding educational opportunity. But Congress recently repealed these programs, though higher education faces 2.6 million additional enrollments by 2015.⁵¹

CONCLUSION

The federal government and higher education remain inextricably linked. Federal support helped to create the best research universities in the world. It also helped to create the world's largest system of higher education an example of how an open and diverse system provides opportunities to a high percentage of students able to benefit from advanced education. These outcomes did not result from a federal master plan or strategy; instead, they emerged from many large and small federal decisions that created the right environment and resources.

These same federal decisions create a risk for higher education. The cumulative impact of these decisions, and of decisions yet to come, might stifle the freedom and autonomy of higher education, thus rendering our colleges and universities unable to serve the country or the world effectively. Is this risk imminent or hypothetical? Future public policy debates will address the many links between the federal government and higher education, but this question must remain at the forefront of all debates.

NOTES

¹ Nearly half of students enrolled in higher education in 1947 were veterans on the G.I. Bill. See Mettler, 2002, 351.

² U.S. Department of Education, 2002a, table 170, p. 204.

³ U.S. Department of Education, 2002b, 46.

⁴ The College Board, 2001, 6.

⁵ The Institute for Higher Education Policy, 1998, 13-22.

⁶ Johnson, 1965, 1102.

7 Nixon, 1970, 276.

⁸ On the amounts of aid available to an individual student under each program as well as the loan repayment options, see U.S. Department of Education, 2002c.

⁹ U.S. Department of Education, 2001, 55-58.

¹⁰ American Council on Education, 2001; King and Bannon, 2002.

¹¹ Advisory Committee on Student Financial Assistance, 2002, 18.

¹² The College Board, 2001, 6.

¹³ This calculation is based on total revenue received by public and private institutions of higher education of \$300 billion and an estimated average tax rate of 18 percent.

¹⁴ Colombo, 1993.

¹⁵ U.S. Department of Education, 2002a, Table 171, p. 205.

¹⁶ Healy, 2000, A36.

¹⁷ Budget of the United States Government, Fiscal Year 2003, Table 6-5, p. 111.

¹⁸ Council for Aid to Education, 2002.

¹⁹ "All Institutions Ranked...," 2002, 44-48.

²⁰ Asher, 1999, D8.

²¹ Budget of the United States Government Fiscal Year 2002, Table 6-5, p. 110.

²² Conklin, 1998, vii (emphasis in the original).

²³ See Wolanin, 2001 and U.S. General Accounting Office, 2002.

²⁴ Intersociety Working Group, 2002, Table I-8, p. 62.

²⁵ "Top Institutions..." 2002, A24.

²⁶ Ibid. and Geiger, 1992, 7.

²⁷ The federal system of copyright and patent protections is derived from this clause. Emphasis added.

²⁸ Roco, 2002.

²⁹ Southwick, 2000, A38.

³⁰ Intersociety Working Group, 2002, 62.

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- ³¹ Ibid., p 31.
- ³² Brainard, 2002, A20.
- ³³ See Greenberg, 1999.
- ³⁴ Congressional Quarterly, 1981, 747.
- ³⁵ Blumenstyk, 2002, A27-28.
- ³⁶ Shoichet, 2002.
- ³⁷ O'Brien and Zudak, 1998, 10.
- ³⁸ U.S. Department of Education, 2002a, Table 207, p. 241.

³⁹ Ibid., Table 184, p. 219, and U.S. Department of Education, 1995, Table 180, p. 189.

⁴⁰ U.S. Department of Education, 2002a, Table 263, p. 322.

⁴¹ American Youth Policy Forum and Center on Education Policy, 2002, 36.

42 Ibid., 38.

⁴³ Rudenstine, 1996, 1.

⁴⁴ U.S. Department of Education, 2002a, Table 304, p. 348.

⁴⁵ American Youth Policy Forum and Center on Education Policy, 2002, 52.

⁴⁶ See Jarrow, 1997.

⁴⁷ See Kaplin and Lee, 1995, chapters 3 and 7.

⁴⁸ This oft-told story appears in Johnson, 2001, chapter 2, and in Internet Society, May/June 1997.

⁴⁹ Institute of International Education, 2001.

- ⁵⁰ Margulies, 2002, A24.
- ⁵¹ Carnevale and Fry, 2000, 8.

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