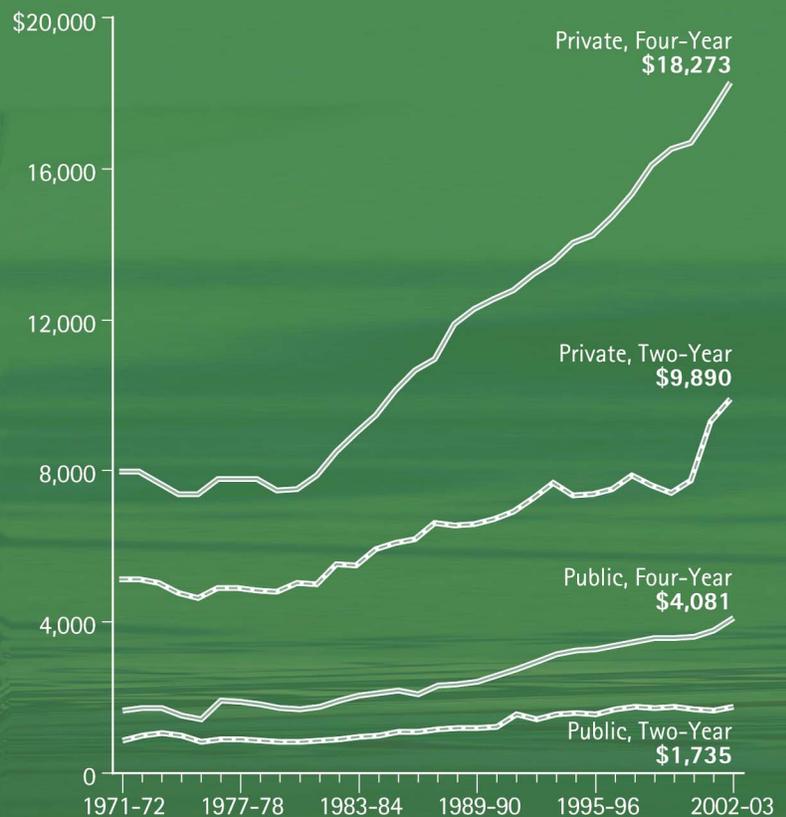


Congressionally Mandated Studies of College Costs and Prices



Average Tuition and Fee Charges (Enrollment-Weighted),
in Constant (2002) Dollars: 1971-72 to 2002-03



SOURCE: *Trends in College Pricing 2002*. Copyright © 2002 by College Entrance Examination Board. Reproduced with permission. All rights reserved. www.collegeboard.com.

Cost

The amount institutions spend to provide education and related educational services to students (measured through expenditures; see below).

Price

In general, price is the amount students and their families are charged and what they pay for educational services. There are different types of prices depending on what is included; see sticker price, total price of attendance, and net price below.

Sticker price

The tuition and fees that institutions charge (the published price).

"Average" tuition

All institutions charge different categories of students slightly different levels of tuition and fees. Students pay different fees in addition to tuition charges. Fees are direct charges assessed for services such as laboratory expenses, health services, exercise facilities, and art studios. The distinction between "tuition" and "fees" is particularly difficult to track in public institutions. At the same time, many students receive tuition "discounts" in the form of institutional aid, which means that the net tuition is frequently lower than the "sticker" price or full tuition charge.

Price of attendance

The tuition and fees (sticker price) that institutions charge students plus other expenses related to their education. These expenses may include housing (room and board if the student lives on campus, or rent or related housing costs if the student does not live on campus), books, and transportation. This term is often referred to as the "cost of attendance."

Net price

The amount students and their families pay after financial aid is subtracted from the total price of attendance.

Revenues

The current-fund revenue institutions receive can be categorized according to source—for example, tuition and fees; earnings from endowment; government (state, federal and local) appropriations; government grants and contracts; private gifts, grants, and contracts; sales of educational services, such as bookstores, dormitories, or auxiliary enterprises; and other revenue such as hospital revenue and independent operations. Educational and general (E&G) revenue represents a part of total current-fund revenue.

Expenditures

Institutions expend current funds in discrete functional areas, which are categorized in operating budget categories such as direct instruction; research; public service; academic support; student services; institutional support; operation and maintenance of plant; and scholarships and fellowships. Educational and general (E&G) expenditures are a portion of total current-fund expenditures.

General subsidy

The general subsidy is the difference between the average price charged to students and the average cost, per student, to the institution of providing an education. Because institutions receive revenue from both tuition and nontuition sources, students—regardless of whether they attend public or private colleges or universities, or whether they receive financial aid—typically receive a general subsidy. This general subsidy does not include the additional subsidies that some students receive from institutional scholarships and other types of financial aid. Institutional decisions about tuition levels also are decisions about setting the level of the general subsidy.

CONGRESSIONALLY MANDATED STUDIES OF COLLEGE COSTS AND PRICES



In its 1998 Amendments to the Higher Education Act, Congress directed the Commissioner of Education Statistics to conduct a study of higher education **costs paid by institutions** and **prices paid by students** and their families for a postsecondary education. (For full law, see: <http://www.ed.gov/legislation/HEA/sec101C.html>)

Section 131 of the 1998 amendments also required that the National Center for Education Statistics (NCES) standardize definitions, redesign data systems to improve timeliness and usefulness, and provide consumer information to students and their families about college prices and student financial aid.

(see IPEDS "COOL" on back page)

The congressionally mandated study was influenced by the work and report of the National Commission on the Cost of Higher Education, *Straight Talk About College Costs and Prices*, which was delivered to Congress in 1998 after an intensive 6-month study of the trends and causes of tuition increases.

The Commission distinguished between prices and costs, and found that prices (**what students pay**) had been increasing faster than inflation in both the public and private not-for-profit sectors. Costs (**what institutions spend**) were also increasing, but at a slower rate than prices.

Due to time constraints and lack of available data, the Commission was unable to determine definitively the cause or causes for price increases; it recommended further study of costs and prices and of the relationship between increased costs for institutions and increased prices for students and parents.

This overview presents the findings of three studies commissioned by the National Center for Education Statistics as part of its report to Congress: *Study of College Costs and Prices, 1988-89 to 1997-98*; *What Students Pay for College: Changes in Net Price of College Attendance Between 1992-93 and 1999-2000*; and *A Study of Higher Education Instructional Expenditures: The Delaware Study of Instructional Costs and Productivity*.

The *Study of College Costs and Prices* examines the relationship between costs and prices and attempts to determine the extent to which spending (expenditure) patterns contribute to tuition increases in higher education. As part of this study, papers were commissioned from experts in higher education finance and economics to provide congressional policymakers with a broad range of views of the higher education research community.

(see pages 4 and 5)

The first study showed a weak relationship between price and cost, in line with the findings of the cost commission. Accordingly, NCES further commissioned two follow-up studies. The first study, *What Students Pay for College*, examines how increases in financial aid have helped students and their families meet the growing price of a postsecondary education. This "net price" study examines the relationship between price and various forms of student financial aid in order to consider "affordability" for low- and middle-income students.

(see page 6)

The second study, *A Study of Higher Education Instructional Expenditures*, focuses exclusively on instructional costs, which, on average, account for 80 percent of institutional expenditures. The study examines direct instructional expenditures within the disciplinary mix of an institution and for academic disciplines across institutional types.

(see page 7)

STUDY OF COLLEGE COSTS AND PRICES, 1988-89 TO 1997-98

VOLUME 1

Relationship of Price and Cost

This study analyzes trends in college costs, prices, and revenues between 1988-89 and 1997-98. College prices are the tuition and fees that institutions charge for a college education, whereas costs are the fiscal resources expended by institutions to provide that education.

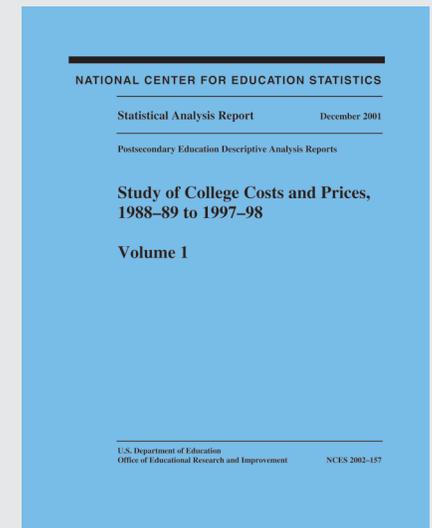
This study found no close relationship between increases in prices and costs during the 1990s for the groups studied (public 4-year institutions, public 2-year institutions, and private not-for-profit 4-year institutions).

Tuition increased faster than most expenditure categories, including instruction, which is the largest expenditure category at post-secondary institutions. Over the same period,

the proportion of revenue coming from tuition increased, while other sources of revenue experienced relative decreases (government appropriations for public institutions, endowment income and private gifts for private not-for-profit institutions).

Changing Prices at Public Institutions

The factors associated with changing prices differed for public and private not-for-profit institutions. For public 4-year institutions, state appropriations provide the largest source of educational and general (E&G) revenue, and the "external factor" of declining state appropriations is the single most important factor associated with tuition increases. Annual state appropriations decreased as a proportion of revenue for all public 4-year institutions during the period studied.



<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2002157>

Changing Prices at Private Not-for-Profit Institutions

At private not-for-profit 4-year institutions, prices were related to "internal" budget constraints—the increasing cost of institutional aid and average faculty compensation and decreasing revenues from non-tuition resources, such as endowment income.

Additionally, private colleges compete for students with comparable private institutions and operate within the context of "external" conditions, such as the availability of state aid, per capita income in the state (consumer purchasing power), and the price of attending a public institution in the same state.

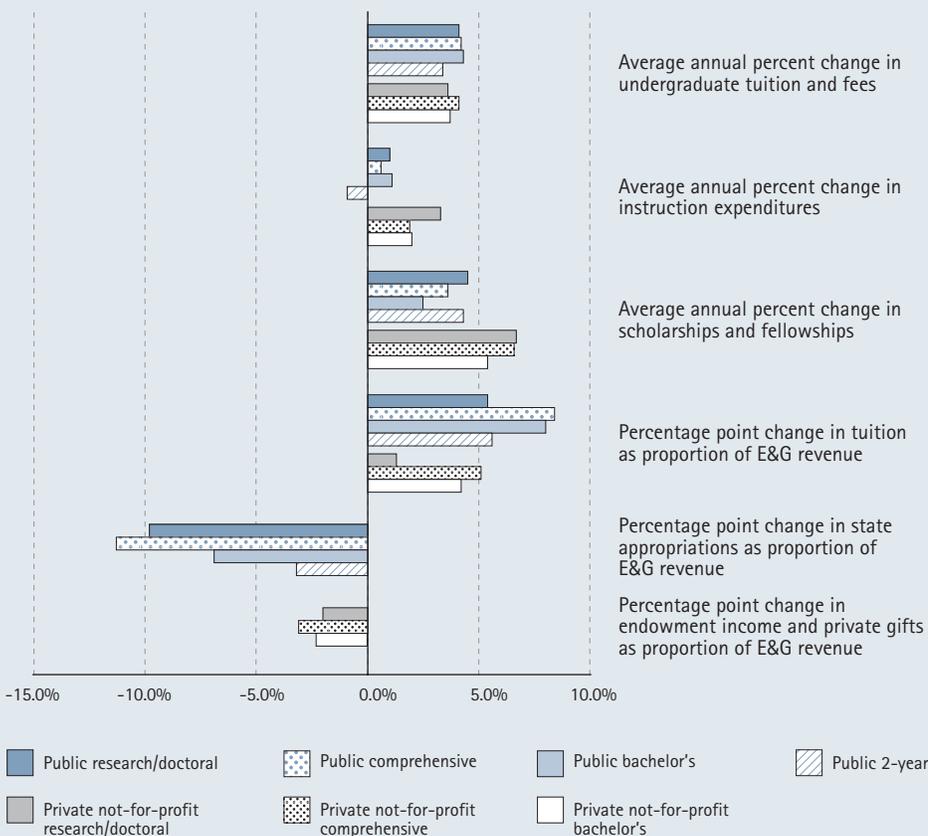
Unlike the public sector, there is no single overriding factor consistently related to tuition or price increases in the private not-for-profit sector.

Instruction Costs and Institutional Aid

Spending for instruction—which on average constitutes the largest proportion of total expenditures—generally increased at a slower rate than tuition, or even decreased. For both public and private institutions, institutional aid was one of the fastest growing expenditure categories.

While the study found no strong relationship between most types of financial aid and changes in tuition, institutional aid was positively related to tuition increases at both public and private comprehensive institutions.

Percent change in various financial indicators, by type of institution



NOTES: Changes are from 1988-89 to 1995-96 for private not-for-profit institutions and from 1988-89 to 1997-98 for public institutions. Undergraduate tuition is in-state tuition for full-time, full-year students. E&G signifies educational and general revenue or expenditures. All changes were calculated using constant 1999 dollars.

SOURCE: U.S. Department of Education. National Center for Education Statistics. *Study of College Costs and Prices, 1988-89 to 1997-98, Volume 1*, figures 3 and 4, pp. vii-viii.

STUDY OF COLLEGE COSTS AND PRICES, 1988-89 TO 1997-98
VOLUME 2: COMMISSIONED PAPERS

NCES commissioned seven papers by nationally recognized researchers and higher education policy analysts to provide an analytical framework for the study of college costs and prices. The following quotations are drawn from these papers.

"In sharp contrast to business firms, colleges operate both as commercial firms, selling their product for a price, and as charities, giving it away for social purposes. That a college is simultaneously [like] a church and a car dealer significantly affects the way policies work..."

Gordon C. Winston
 Professor and Director of Williams Project on the Economics of Higher Education
 Williams College

"Revenue theory of costs:... 'Each institution raises all the money it can. Each institution spends all it raises.'"

Howard Bowen
The Costs of Higher Education: How Much Do Colleges and Universities Spend per Student and How Much Should They Spend? (Quoted in the Dennis Jones paper)

"[The] major influence for public institutions... is [the] pattern of state appropriations."

"For public institutions...tuition increases tend to be the revenue source of last resort—as long as state appropriations are healthy, tuition increases tend to be minimalized."

"Public sector tuitions in turn affect the market within which private institutions compete for students. Since both public and private institutions draw most of their students from the surrounding geographic area, the competitive environments for private institutions are often affected by the funding decisions of... states."

"It is only [at] the most tuition-dependent private institutions that prices and cost behaviors are closely linked... It is important to recognize the direction of causality—the cost patterns emerge after the revenue constraints are established."

"Pricing is less a function of institutional costs than it is of revenue streams from other

sources. Market conditions...dictate sticker prices and the level of price discounting..."

Dennis Jones
 President, National Center for Higher Education Management Systems

"In the public sector, tuition charges are politically determined prices that often bear little, if any, direct relationship to economic costs. State officials determine how the costs of higher education should be divided among students and the general taxpayer... [T]here has been a steady shift in the last 20 years away from the taxpayer and toward the student."

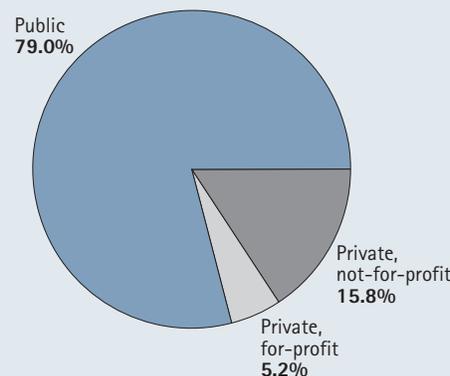
"Our language often confuses the discussion, because when the public rails against increases in college costs, more precisely they are railing against increases in college prices... The result may be confusion between a shift in burden vs. an increase in college prices."

"...The public rarely sees or understands the cuts in appropriations, but they quickly see and respond to the resulting tuition increases. State politicians [do not] explain the shift in support from the general taxpayer to the student."

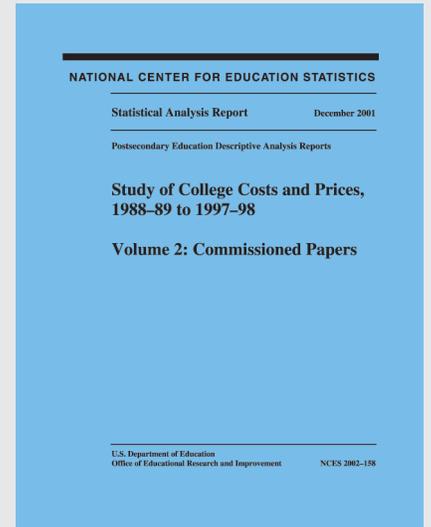
David Breneman
 University Professor and Dean,
 Curry School of Education
 University of Virginia

"An exclusive focus on sticker prices misses much of the action in higher education pricing."

Percentage distribution of undergraduates: 1999-2000



SOURCE: U.S. Department of Education. National Center for Education Statistics, *Profile of Undergraduates in U.S. Postsecondary Institutions: 1999-2000*.



<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2002158R>

ing. The net prices faced by students are, on average, substantially below the sticker price. Gauging affordability of higher education without attending to the discounts provided by institutions and the aid provided through [state and federal] government can be quite misleading... Far too much discussion of cost and price issues in higher education ignores [the] simple but important...fact that most people don't pay the sticker price..."

"In public higher education...the issue is much less one of rising costs than of a shifting of costs from one set of payers to another. The burden has been shifting from taxpayers to families."

Michael McPherson
 President, Macalester College

Morton Owen Schapiro
 President, Williams College

"...What most parents have in mind when they give vent to 'college cost anxiety'...is the cost that will drive student indebtedness. Much of this cost, such as room, board, transportation, entertainment, costs of books and computers, is out of the control of either the institution or the state or federal government."

"...Student charges at public institutions, enrolling nearly 80 percent of those attending, are determined by political decisions... In the tax-supported public sector...these costs are legitimately a public policy issue."

D. Bruce Johnstone
 University of Buffalo
 The State University of New York
 Formerly President of the SUNY System

WHAT STUDENTS PAY FOR COLLEGE: CHANGES IN NET PRICE OF COLLEGE ATTENDANCE BETWEEN 1992-93 AND 1999-2000

Over the last two decades, college tuition has increased at a faster rate than both the Consumer Price Index (CPI) and median household income. Adjusted for inflation, tuition more than doubled at public and private not-for-profit 4-year colleges and universities. During the same period, median household income grew 27 percent.

Again, cost is the amount an institution expends to educate a student. Price of attendance is the amount a student and his or her family pays to attend that institution, and includes students' living expenses, in addition to tuition and fees.

Net price is what students and their families pay after subtracting financial aid awards: grants (federal, state, institutional, and other) and loans (both subsidized and unsub-

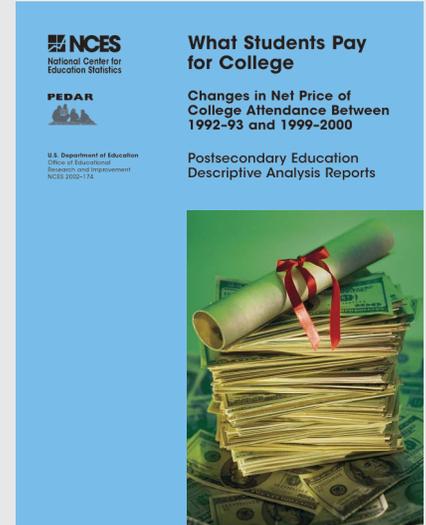
sidized). This study considered several categories of net price and net cost, including the following:

Net Price With Grant Aid: Price Minus All Grant Aid

Combined grant aid—state, federal, and institutional—was sufficient to offset increases in price of attendance for low-income undergraduates, those students who had the highest need and were least able to afford to pay for an increase in total price (see graph below).

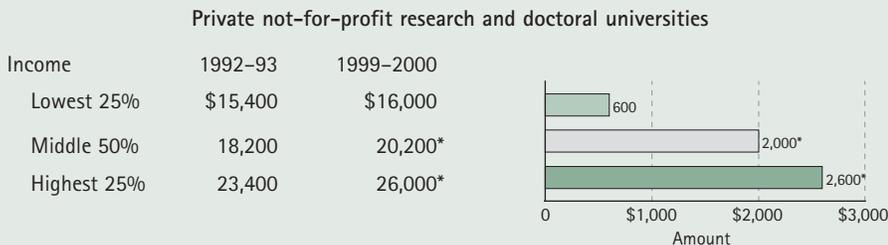
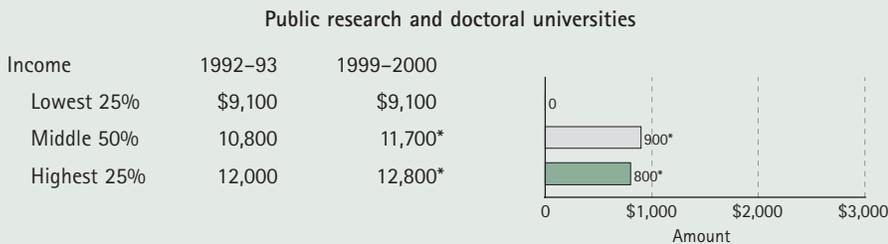
Net Price With Grant Aid and Loans: Price Minus All Grants and Loans

After grants and loans were subtracted from total price, middle-income students experienced no increase in net price across all



<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2002174>

Price of attendance minus all grant aid



*1992-93 and 1999-2000 amounts significantly different ($p < 0.05$).

SOURCE: U.S. Department of Education, National Center for Education Statistics, *What Students Pay for College: Changes in the Net Price of College Between 1992-93 and 1999-2000*, tables 7-A, 8-A, and 9, pp. 32-39 (originally published from *National Postsecondary Student Aid Study, 1992-93 [NPSAS:93] and 1999-2000 [NPSAS:2000]*).

institutions. Increased borrowing enabled low- and middle-income students to reduce the average net price they paid.

But while these students paid less out-of-pocket in 1999-2000 than in 1992-93, they increased their long-term loan indebtedness, borrowing both subsidized and unsubsidized loans.

The only group of students who paid a higher net price in 1999-2000 than in 1992-93 were undergraduates in the highest income quartile, who attended either private not-for-profit research and doctoral institutions or public 2-year colleges.

What Students Pay for College: Changes Between 1992-93 and 1999-2000

- Sticker prices increased faster than inflation
- Net price after all grants did not increase for low-income students
- Net price after all grants and loans did not go up due to a large increase in borrowing by middle-income students

A STUDY OF HIGHER EDUCATION INSTRUCTIONAL EXPENDITURES: THE DELAWARE STUDY OF INSTRUCTIONAL COSTS AND PRODUCTIVITY

The Delaware Study focuses on the instructional costs of academic disciplines, measured by the direct expense per student credit hour taught.

Weak Relationship Between Cost and Price

Analyses in this study indicate no strong relationship between cost and price. Price is largely associated with factors external to the institution, while cost is driven by internal institutional programs and priorities.

Key Findings

Two key findings emerged from the study: (1) instructional costs of an institution are determined by the disciplinary mix of that institution, and (2) costs vary across disciplines within that institution more than they do within a given discipline (e.g., chemistry) across institutions.

Figures A and B illustrate these key findings.

Figure A illustrates variation within a discipline across institution types. It reflects cost per credit hour taught for 5 of the 24 disciplines benchmarked in the Delaware Study. In chemistry, cost ranges from \$181 at comprehensive institutions to \$264 at research universities, an \$83 spread. The spread in

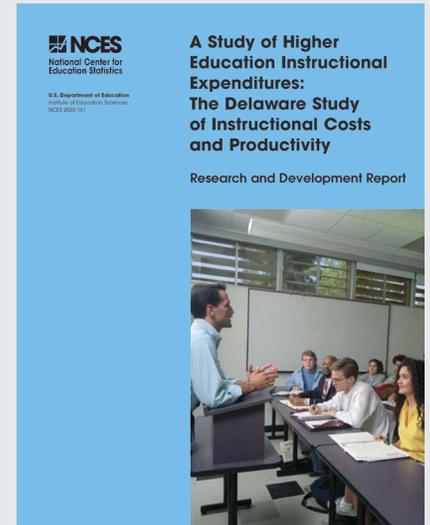
English is \$28, from a low of \$112 at comprehensive institutions to a high of \$140 at research universities. Foreign languages range from \$131 at doctoral universities to \$202 at baccalaureate colleges, a \$71 spread, while mechanical engineering ranges from \$316 at doctoral universities to \$379 at research universities, a difference of \$63.

Figure B shows considerable variation among disciplines within an institution. Using the same disciplinary examples, at a research university, the difference in cost per student credit hour taught between English and mechanical engineering is \$239; the difference between sociology and chemistry is \$140.

Price (sticker price or tuition) is a constant for all undergraduates at an institution. Chemistry and engineering majors pay the same tuition as English and sociology majors. However, the cost of delivering instruction in those disciplines varies widely.

Cost Factors

Instructional expenditures are also tied to fixed cost factors. In addition to the mix of disciplines at the institution, costs are a function of student credit hour production, department size, and tenure rate. Again, these costs vary less by discipline across

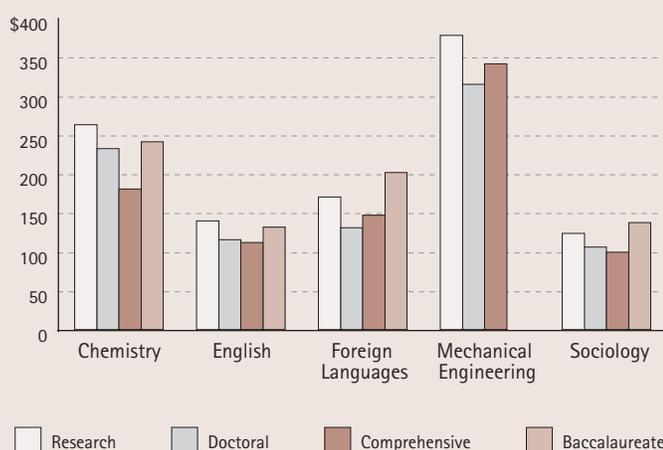


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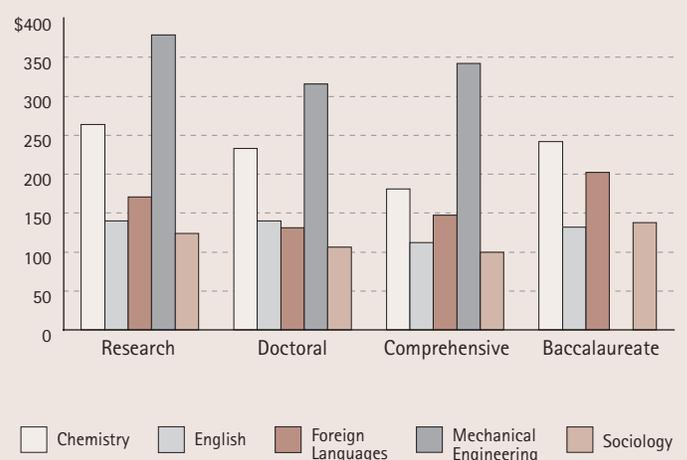
institutions than they do among disciplines within an institution.

Economies of scale have the greatest impact on instructional costs. The more student credit hours taught per faculty member, the lower the unit cost. Increasing the size of that faculty without a corresponding increase in student credit hour production increases instructional expense. Increasing the proportion of tenured faculty—that cadre of faculty that is better compensated and that have reduced teaching loads—will also increase instructional expense. Finally, the study found that introducing or increasing the level of graduate instruction and programs raised instructional costs.

**Figure A. Direct expense per student credit hour taught:
Institution type within discipline, academic year 2001**



**Figure B. Direct expense per student credit hour taught:
Discipline within institution type, academic year 2001**



IPEDS COLLEGE OPPORTUNITIES ON-LINE (IPEDS "COOL")

At the right is a sample page on the IPEDS "COOL" web site. Students and their families can access roughly 7,000 postsecondary institutions that participate in Title IV federal student aid programs. IPEDS "COOL" includes 2- and 4-year public and private not-for-profit institutions as well as trade schools and technical schools.

General Information

Students and families can search the IPEDS "COOL" site by location (e.g., by the number of miles from home or by state), by program, or by degrees or professional certificates offered.

Pricing

Information on prices includes tuition and average expenses for the past three academic years, for both students living at home or residing on the college campus (i.e., price of attendance).

Web Links

The IPEDS "COOL" site provides links to federal student aid programs and applications, and to other information about the institution collected by the U.S. Department of Education.

IPEDS COOL Institution Detail - Microsoft Internet Explorer
 Address: http://nces.ed.gov/ipeds/cool/InstDetail.asp?UNITID=110662

site index | ED.gov | **NCES** National Center for Education Statistics | Search NCES | Go

IPEDS College Opportunities On-Line

[Home](#) | [Search](#) | [Search Results](#)

UNIVERSITY OF CALIFORNIA-LOS ANGELES IPEDS ID: 110662

General information

UNIVERSITY OF CALIFORNIA-LOS ANGELES
 405 HILGARD AVE
 LOS ANGELES, CA 90095

General information (310) 825-4321
 Financial aid office (310) 206-0400
 Admissions office (310) 825-3101

For more information about this institution, visit www.ucla.edu

Type of institution: Public, 4-year or above

Federal Aid: Institution has a Program Participation Agreement with the US Department of Education for eligible students to receive Pell Grants and other federal aid (e.g., Direct Loans).

Degrees offered: First-professional, Doctor's, Master's, Bachelor's

Certificates offered: First-professional, Post-Master's, Postbaccalaureate

Carnegie classification: Doctoral/Research Universities--Extensive - These institutions typically offer a wide range of baccalaureate programs, and they are committed to graduate education through the doctorate. They award 50 or more doctoral degrees per year across at least 15 disciplines

2002-03 Undergraduate application fee: \$40

Academic year prices for full-time, first-time undergraduate students

	2002-03	2001-02	2000-01
Tuition & fees			
In-state	\$4,225	\$4,235	\$3,701
Out-of-state	\$16,604	\$15,309	\$14,315
Books and supplies	\$1,290	\$1,262	\$1,116
On-campus			
Room and board	\$9,480	\$8,991	\$8,565
Other expenses	\$2,156	\$2,070	\$2,250
Off-campus			
Room and board	\$7,773	\$7,599	\$7,008
Other expenses	\$3,047	\$2,940	\$2,622
Off-campus with family			
Other expenses	\$3,431	\$3,315	\$3,030

[Enrollment](#) | [Awards / Degrees Conferred](#) | [Financial Aid](#) | [Accreditation](#)
[Campus Crime Statistics \(USDOE Office of Postsecondary Education\)](#)

<http://nces.ed.gov/ipeds/cool/>