

# CONNECTION

NEW ENGLAND'S JOURNAL

OF HIGHER EDUCATION AND ECONOMIC DEVELOPMENT

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## Colleges *In Their Places*

**Housing Dilemmas Confound College Towns**

**Progressive Approaches to University-Community Relations**

**Unleashing the Intellectual Power of New England Communities**

### **Also In This Issue ...**

*Clifford Adelman on How Tales from Elite  
Colleges Skew Public Perception*

*Distance Learning and New England's Forests*

*Myths about Online Colleges*

*Selected Websites*



Cover photo by Rebecca Deans.

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## EDITORIAL MEMO

University of Hartford President Walter Harrison has written a wonderfully thought-provoking short piece in the winter issue of the university's *Observer* about the bygone era when a group of Hartford corporate CEOs known as "the bishops" would meet at the Hartford Club to decide the city's civic priorities and find ways to fund them. Over the more torpid recent history of Hartford, their companies merged, folded or fled, but not before the bishops managed to nurture such critical Hartford institutions as the Wadsworth Atheneum, the University of Hartford, Hartford Hospital and Trinity College.

In this way, big corporations—though highly paternalistic and often oblivious to urban ethnic concerns—served as the bedrock of economic and civic life in communities like Hartford through the 1970s. But no longer. "The new bedrocks of our communities," Harrison concludes, "will be the large, nonprofit organizations, the hospitals and universities located there. We are not moving. We are, by our very nature, anchored in and devoted to our communities; and as our economy shifts, we are increasingly the stable economic support our communities need."

But engage academics in a discussion of what shape this support might take, and the conversation will invariably circle back to "core mission." Above all, one will say earnestly, colleges contribute to their communities by preparing students for work and life. Problem is, while a lot of institutions were pursuing that noble goal behind their ivy walls, adjacent neighborhoods were becoming blighted and, in some cases, deadly. When those conditions began to scare off prospective students, modern-day bishops at Trinity College in Hartford and Clark University in Worcester, to name two famous examples, launched multimillion-dollar neighborhood revitalization projects.

Other New England colleges and universities are more quietly mobilizing their intellectual resources and public service-minded students to help their host communities improve K-12 education, untangle health-care issues and bolster economic development. Their contributions to the community run the gamut from progressive experiments, like the recent joint initiative by Springfield Technical Community College and Springfield College to train students in physical and occupational therapy while providing rehab services to Greater Springfield residents whose insurance benefits have run out, to no-brainers like Harvard's recent announcement that it will now afford Cambridge residents free admission to its world-class art museums. Campuses also face a host of more mundane but vexing town-gown challenges such as how to responsibly house students in the community—one focus of this issue of CONNECTION.

To be sure, one barrier to becoming good neighbors is the system of rewards in higher education. Professors need to do research and outreach to earn promotion and tenure. But work in the local community tends not to count for much. One Yale administrator recently conceded that most faculty would rather focus their outreach on New York City, or Sri Lanka for that matter, than on the mean streets of New Haven's Hill neighborhood.

Other challenges loom. How, for example, will the burgeoning field of distance learning alter the relationship between town and gown? Bristol Community College, for one, has capitalized on technology to reach underserved local audiences with a Web-based, one-credit course on the history of Southern New England, particularly Fall River. But newer, totally virtual colleges are not anchored anywhere, and some have worked hard to elude regulatory oversight, let alone community obligations.

At the barest level, failure to live up to Harrison's vision will cost institutions goodwill and perhaps their cherished tax exemptions. Aloof colleges will be put in their places as it were. May this issue help them out.

*John O. Harney is executive editor of CONNECTION.*

## Bridgework

Hampshire College is located about 10 miles from the industrial city of Holyoke, Mass. But in many ways, the college, where one junior runs a software development business in his free time, and the hardscrabble city are on opposite sides of the so-called Digital Divide. Now, Hampshire is among a growing number of New England higher education institutions launching new programs to bridge that divide separating those with Internet access and skills from those without.

With a two-year, \$80,000 grant from WorldCom, Hampshire faculty and students are helping young people in Holyoke create their own news journal on the World Wide Web, and in the process, mentoring them in journalism, community leadership, entrepreneurship, digital photography and website design. The news journal will promote community involvement, highlight ongoing community revitalization efforts and offer a showcase for youth artwork and writing.

The project also will familiarize Holyoke youth with a range of important job skills and potential career paths, and will acquaint Hampshire students with both the challenges and the potential of urban communities struggling to overcome the Digital Divide. (A hard copy of the digital newsletter will be produced to reach the many Holyoke residents who don't own computers and to motivate them to visit neighborhood libraries and community centers and use the Internet—maybe for the first time.)

Under other WorldCom grants, Quinnipiac University is helping sixth-graders in Hamden, Conn., videotape interviews with residents of a local nursing home and use the interviews to develop a website, while Brown students are helping the local Mount Hope Learning Center create a public history initiative and develop neighborhood-specific content for the Web.

More recently, the University of Massachusetts Boston has received more than \$1 million from the Corporation for National Service

to help people in Boston access the Internet. And with millions of Americans getting health and medical information online, the National Cancer Institute has begun funding initiatives such as a Yale Cancer Center program providing computer access and training to low-income families at New Haven Head Start facilities. Parents who complete the course will receive free Internet-ready computers.

Several New England universities are also confronting another digital chasm—the lack of minority and female involvement in technology development. The new Institute for African-American ECulture at Northeastern University, in collaboration with Boston University, has received \$3.2 million from the National Science Foundation to study and promote African-American involvement in developing new technologies. The Radcliffe Public Policy Institute, meanwhile, has been awarded a three-year,

\$624,803 grant from the National Science Foundation to work with the Massachusetts Software and Internet Council on a study of factors affecting the attraction and retention of women to the burgeoning IT field.

## Lapped

In October, the Massachusetts Board of Higher Education approved a plan requiring all public college and university students to own laptop computers and providing vouchers for low-income students to buy them.

The three-year plan calls for spending \$54 million to subsidize the laptops, \$27 million to train faculty in instructional technology and \$42 million to upgrade campus facilities for Internet connections. State officials estimated that after the first three years, the state would spend about \$62 million annually to buy 25,000 laptops and provide vouchers to 18,000 students.

## Snippets

“Prior to Ed Reform, there were two state-imposed requirements to get a high school diploma in the state of Massachusetts—one year of American history and four years of gym.”

—*Massachusetts state Senate President Thomas Birmingham referring to the state's 1993 Education Reform Act at a May 2000 MassINC conference on the controversial Massachusetts Comprehensive Assessment System (MCAS) test, which grew out of the legislation.*

“MCAS encompasses the types of skills—especially writing and analytical thinking—that colleges like to see in entering freshmen.”

—*Mass Insight Education in a March 2000 report titled “MCAS and the College-Bound Student.”*

“The MCAS test is difficult not because it is intellectually rigorous or valuable, but because it is long, tedious and filled with ambiguities and trivia.”

—*Massachusetts Coalition for Authentic Reform in Education (CARE) responding to November 2000 release of MCAS test scores.*

“High-stakes testing often harms students' daily experience of learning, displaces more thoughtful and creative curriculum, diminishes the emotional well-being of educators and children, and unfairly damages the life-chances of members of vulnerable groups.”

—*From a resolution passed by the National Council of Teachers of English in November 2000.*

\* \* \* \*

“I don't think education should be considered a market good any more than health care should be. ... Do we want our higher education system to be as screwed up as our health-care system?”

—*Former Massachusetts Gov. Michael S. Dukakis speaking at a December 2000 conference on “Higher Education and New England's Future,” sponsored by the Education Commission of the States, The Futures Project at Brown University and the New England Board of Higher Education.*



**Keene's Sense of Safety**

By creating a realistic substitute for on-street driving, "simulation" helps experienced drivers safely practice driving in hazardous situations. This driving simulator is being installed in Keene State College's new Safety Simulation Center.

The center will also house a confined-space lab for simulating entrance into manholes and mines and a ventilation lab to provide practical training in welding and chemical hood ventilation. More than 200 Keene State students major in safety studies.

**The Old Tuition Story**

Tuition and mandatory fees continued their upward climb in academic year 2000-01, according to the College Board's annual tuition study released in the fall. Six New England colleges and universities are among the nation's 10 most expensive private institutions; two New England universities—the University of Vermont and the University of New Hampshire—are among the nation's 10 most expensive public campuses, charging state residents \$8,288 and \$7,395, respectively.

	Average Tuition/Fees	One-Year Change
U.S. 4-Year Publics	\$3,510	+4%
U.S. 4-Year Privates	\$16,332	+5%
U.S. 2-Year Publics	\$1,705	+3%
U.S. 2-Year Privates	\$7,458	+7%

**Needless Incentives?**

New England's public colleges and universities want valedictorians and salutatorians, and they'll pay to get them. The State of Connecticut wants information technology majors, and it too will pay to get them. But higher education experts who gathered at a recent conference on "Higher Education and New England's Future," sponsored by the Education Commission of the States, the Futures Project at Brown University and the New England Board of Higher Education, say the "merit aid" used to lure top students is exacerbating inequities.

"Valedictorians at the University of Rhode Island get full freight,

while Rhode Island's poor kids get inadequate aid," observed Robert J. McKenna, president of the Rhode Island Independent Higher Education Association.

Now, Rhode Island College has announced it will offer merit-based Presidential Scholarships worth at least \$2,000 per year for freshmen and transfer students, beginning in fall 2001. The renewable scholarships will be available to incoming freshmen who rank in the top 30 percent of their high school class and receive combined SAT scores of at least 1050; transfer students must have a grade point average of at least 3.5. The state earmarked \$200,000 for the scholarships in the first year and pledged to increase the amount by \$200,000 in each of the next three years.

"It's one thing for institutions to offer targeted merit aid programs for mission fulfillment," noted A. Clayton

Spencer, associate vice president for higher education policy at Harvard University. "But now the state and federal governments have piled on merit aid too," she said, warning that merit-based tax credit schemes could grow faster than need-based Pell Grants.

\* \* \* \*

Yale University, meanwhile, has extended its longstanding need-blind admissions policy to foreign students for the first time. Yale joins Harvard in admitting foreign students without regard to financial need and pledging to provide sufficient need-based financial aid to cover the cost of attending.

**Diverse Boards**

New England's prestigious colleges and universities offer a mixed bag when it comes to appointing black trustees, according to a new survey

**Tightwads**

What do charities and public higher education have in common? They are two things New Englanders generally do not spend their money on. The six states capture remarkably similar, bottom-of-the-barrel rankings in both generosity, as measured by *Catalogue of Philanthropy* founder George McCully's *Generosity Index*, and in support of public higher education, as measured in terms of state tax funds appropriated to public higher education per \$1,000 of income. McCully's index compares a state's wealth with its charitable giving.

	Generosity	Public Support of Higher Ed
Connecticut	45th	45th
Maine	29th	35th
Massachusetts	50th	48th
New Hampshire	49th	50th
Rhode Island	46th	44th
Vermont	30th	49th

by the *Journal of Blacks in Higher Education*.

Of the 813 trustees of America's 25 highest-ranking liberal arts colleges, 76 or 9 percent are black. Wesleyan University leads the group with six black trustees, accounting for 20 percent of the 30-member board. Amherst College is second with blacks accounting for 19 percent of trustees. But Middlebury, Connecticut and Colby colleges are among the six major U.S. liberal arts colleges with just one black trustee each.

Among the 1,277 trustees of the nation's 27 "highest-ranking universities," 83 or 7 percent are black. Cornell University leads the nation with seven black trustees; Brown University has six, tied for second with Notre Dame and Johns Hopkins. Brown, Harvard and Yale are among the 10 high-ranking universities where blacks make up at least 10 percent of trustees.

### Comings and Goings

Former Smith College President

**Ruth J. Simmons** was named president of Brown University, becoming the first woman and first African-American to lead an Ivy League institution. ...

**Wilfredo Nieves**, former vice president for academic affairs at Baltimore City Community College, was appointed president of Middlesex Community College of Connecticut, replacing

**Sharon Hart** who became president of North Dakota State College of Science.

... Former St. Anselm College President **Joachim Froehlich**, who served most recently as president of Loras College in Iowa, was named president of the

College of Our Lady of the Elms, replacing **Sr. Kathleen Keating** who will retire in July 2001. ... University of

Massachusetts Amherst Chancellor **David K. Scott** announced he would

step down in June 2001 after eight years as president. ... Johnson State College President **Robert Hahn**

announced he would retire in June

after 10 years. ... Connecticut College Provost and Dean of the Faculty

**David K. Lewis** was appointed acting president, replacing **Claire L.**

**Gaudiani** who announced she would retire in June after 12 years as president. ... **Geoffrey Gamble** stepped

down as University of Vermont provost to become president of Montana State University. ... Former

Dartmouth College President **James O. Freedman** was elected president

of the Cambridge, Mass.-based American Academy of Arts & Sciences. ... American Council on

Education President **Stanley O.**

**Ikenberry** announced he would retire in June after five years, to return to the faculty of the University of Illinois at Urbana-Champaign. ...

**Mary Anne Schmitt**, former chief operating officer of New American Schools, became president of the 10-year-old, nonprofit school reform outfit, replacing **Donald M. Feuerstein**.

# Good Neighbors?

## From Soaring Rents to Sour Relations, Housing Dilemmas Confound New England College Towns

N. SEAN BOWDITCH

**D**ozens of *Free Pizza Delivery!* fliers and copies of *Just Rentals* swirl like tumbleweeds outside the entrance to the Asian Sunrise Market in Boston's Allston-Brighton section. Around the corner on Linden Street, the guitar strains of REM blare from an open window; Budweiser cans litter a grassless lawn. College students lounge in groups on front stoops.

ON SATURDAY NIGHT, they will pack Harpers Ferry to hear live blues. After 2 a.m., when the bars close, the walls of Allston-Brighton's neat, single-family homes and triple-deckers will vibrate to the bassline of all-night keg parties. By morning, longtime neighborhood residents and new immigrants from Southeast Asia and Russia will curse their common threat: the annual onslaught of house-partying, non-voting, rent-swelling college students.

For years, civic leaders have talked up the overwhelmingly positive impact of New England's 280 colleges and universities and their 800,000 students. But across the region, the effects of colleges on housing are increasingly problematic, and keg parties are the least of the problem.

APARTMENT FOR RENT  
2 Bedroom, Shiny hardwood floors with Be  
NATURAL woodwork, Eat-in-kitchen, Dinn  
Many New Updates Refrigerator, windows, E  
GAS furnace—very efficient—old more. City ve  
high a top Mission Hill, in one of BOSTON'S  
neighborhoods, owner occupied two-family, ca  
Quiet; close to HARVARD Medical / Longwood  
hospital area; near all public transportat  
must see, don't miss!! \$1400. a month  
Be Gas and Electric not included. Only M/F  
responsible need apply / work on application

HAVE YOU SUFFERED A TRAUMATIC

ROOM FOR RENT

ROOM FOR RENT—\$275 Mo. +

Jamaica Plain—large room in quiet sunny apt. two blocks from  
Green St. V. on street parking. Available January 1st. 10  
entire, quiet adult. Vegetarian preferred. Call before 10pm.  
No drugs, no smoking. Early start only.

The issues are myriad. Despite evidence that living on campus provides more opportunities for students to interact with peers and faculty members and take part in extracurricular activities, large numbers of students—either by choice or due to lack of dorm space—seek out scarce housing in the community.

Of Boston's 135,000 undergraduate and graduate students, fewer than 29,000 live in campus housing according to the Boston Redevelopment Authority. The others, many bankrolled by their parents, are willing to pay more for relatively low-quality apartments, thus putting upward pressure on rents. The average monthly rent of a two-bedroom apartment in Boston rose by 7 percent from 1998 to 2000, to near \$1,600, according to the city's Department of Neighborhood Development. That's about \$450 per month higher than the maximum allowed under the federal Section 8 program for low-income renters.

With Boston's housing vacancy rate at a slender 3 percent, the flood of student renters leaves low-income families with few places to live. And as more non-resident, and thus non-voting students move into an area, neighborhoods lose political leverage. (Ever hear of college students pressuring a city councilor to fill potholes?)

Ironically, recent college graduates hoping to work in Boston find they are unable to do so because of the lack of affordable housing. In fact, nearly eight in 10 New Englanders surveyed by the John W. McCormack Institute of Public Affairs at the University of Massachusetts Boston cited housing costs as a major obstacle to regional economic growth.



PHOTO BY REBECCA DEANS.

## Coming Back

In New Haven, Conn., Yale University officials remind visiting luminaries to stay with university-provided escorts as they walk from business meeting to evening cocktail reception. The same urban problems—namely, crime and drugs—that make Yale so security-conscious, have pushed many families out of New Haven. Nearly 8,000 residents, representing 6 percent of the population, have left in the past decade, leaving behind bankrupt businesses and shuttered brownstones. The city's chief housing problem is characterized oxymoronically as “undercrowding.”

Similar problems have plagued Hartford, where Trinity College has captured national attention with its \$175 million revitalization of the once-decaying neighborhood adjacent to its campus. Working with area banks and state and city agencies, Trinity has provided low-interest mortgages to encourage home ownership, developed housing rehabilitation projects and supported new housing construction. “We recognize that Trinity is an institution in a living community,” Trinity President Evan Dobbelle recently told a Hartford conference on university/community relations. “As such, we have a duty and a responsibility as well as the moral authority to make a difference in the health of that community.”

In Worcester, Mass., the neighborhood around Clark University was losing population so fast that the local Catholic church reportedly experienced a 50 percent drop in collections. Clark forged a partnership with the community to form the Main South Community Development Corp.—another national model. The collaborative has spearheaded several housing projects including the renovation of 170 affordable housing units and 14 triple-decker residences in the Main South neighborhood. A Clark homebuyer incentive program provides housing grants to staff members who buy in the neighborhood. And in a striking show of good faith, Clark converted one of the neighborhood's rescued Victorian homes into its president's residence.

Even in less-populated sections of New England, housing issues are a point of contention between universities and communities. Explosive enrollment growth at the University of Vermont during the 1970s and '80s created enormous pressure on the city of Burlington's infrastructure and services, and relations with the city became, in the words of Mayor Peter Clavelle, “tense and acrimonious.” Similar frustrations exist in Amherst, Mass., where town officials say the University of Massachusetts enjoys a sort of “academic privilege.” Because UMass is a state-run entity, it is exempt from local zoning controls.

## Selling Campus Life

Community activists blame the colleges for Boston's student housing problems. They say colleges prefer to use their available land and money to build additional academic and cultural facilities, and that college officials, in fact, view student housing as an economic burden to be foisted onto the community.

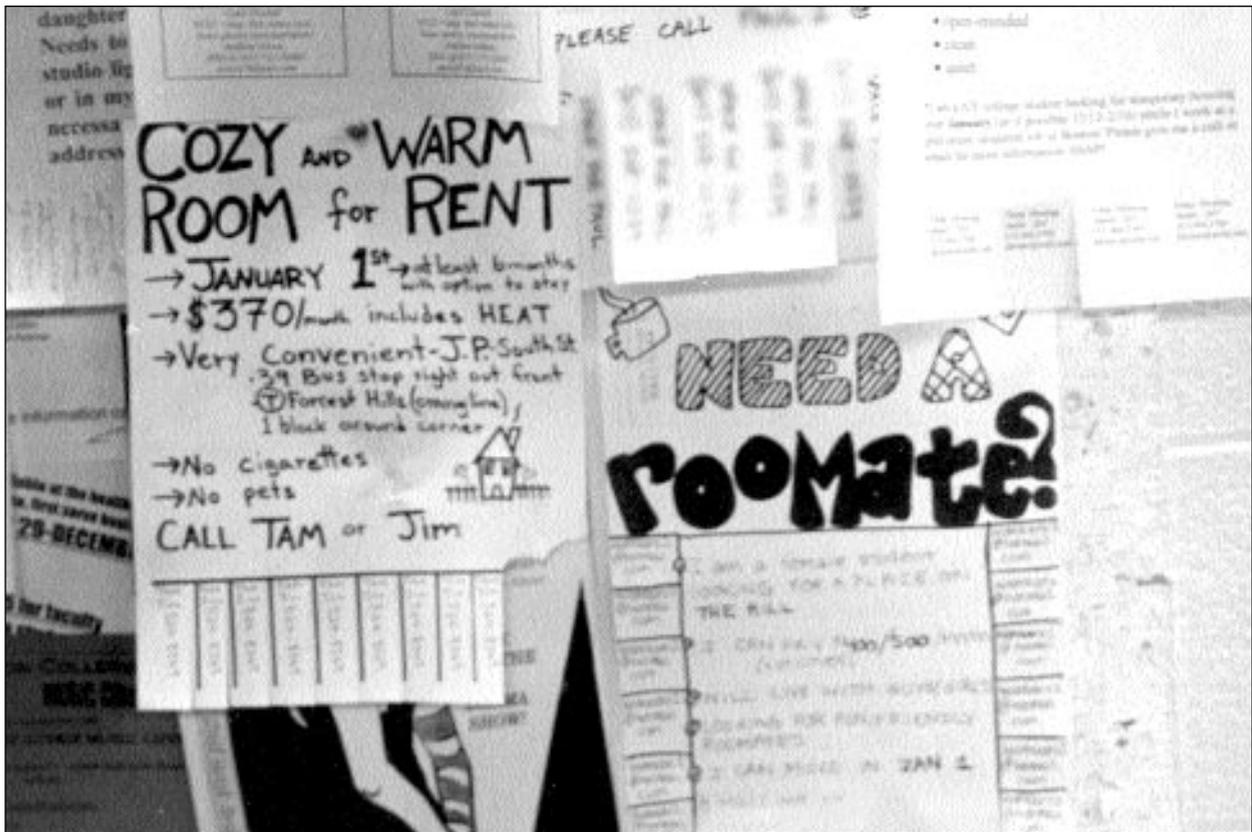


PHOTO BY REBECCA DEANS.

**EVEN HISTORICALLY ALL-COMMUTER, COMMUNITY COLLEGES  
ARE TRYING TO CAPTURE THE RECRUITING POWER OF ON-CAMPUS LIVING.**

But some evidence suggests otherwise. *The Wall Street Journal* recently swooned over the wave of new superdorms—complete with maid service, cell phone stores, miniature golf and beauty salons—being built by Boston University and other institutions to woo prospective student-consumers. Sasaki Associates, the Watertown, Mass.- and San Francisco-based architecture firm, is among those pushing quality student housing as a tool to recruit increasingly sophisticated freshmen and retain upperclassmen. “Students who have never shared a bedroom at home, who expect a high degree of technological connectivity, who are interested in living in a community of similarly focused classmates, or who are seeking a high level of convenience are unlikely to be satisfied by traditional dormitories,” writes Sasaki Principal John Coons.

Indeed, New England colleges and universities are on a dorm-building binge. The University of Connecticut began construction in November of an \$18.5 million residence hall that will accommodate 450 students; Assumption College completed construction this summer of two apartment-style residence halls; the University of Southern Maine next fall will open a new 224-room dorm; the University of Rhode Island is in the midst of a \$64 million initiative to upgrade 14 dorms over the next eight years; Plymouth State College is spending more than a half-million dollars

to upgrade one dorm. Even historically all-commuter, community colleges are trying to capture the recruiting power of on-campus living. Mount Wachusett Community College in Gardner, Mass., now offers students the opportunity to live in dorms at nearby Fitchburg State College.

Boston campuses have boosted the number of beds by 59 percent since 1990—not enough, say activists in Allston-Brighton and other Boston neighborhoods with large student populations. Boston College houses a respectable 76 percent of its 9,000 undergraduates and plans to house an additional 10 percent over the next five years, according to Paul White, BC’s associate vice president of state and community affairs. But activists say the college should do more to repatriate the more than 2,000 undergraduates (and 4,700 graduate students) now living off campus.

Boston University houses 75 percent of its 13,600 undergraduates on campus, and a new \$83 million dorm opened in September providing an additional 817 beds. But students who opt out of BU’s housing system in their sophomore year—perhaps in search of cheaper housing a few blocks away or to escape strict campus rules—have no way back in.

Northeastern University recently opened two dorms with more than 1,000 beds and is rehabilitating a 625-unit complex for students as well as neighborhood



residents. But in what the *Boston Globe* termed an “admissions snafu” (and Northeastern called a “spike” in yield rates) nearly 25 percent more students than were predicted accepted offers to attend the university in fall 2000. The unexpected crush of 600 extra freshmen plunged scores of upperclassmen into the already-tight housing market of the nearby Fenway neighborhood, where the *Globe* reported that rents rose by a staggering 15 percent last year.

Across the river in Cambridge, Harvard University houses 98 percent of its undergraduates, but just over 30 percent of its graduate students. Cambridge Mayor Anthony Galluccio has been pushing Harvard to create graduate student housing with a low-income component for Cambridge residents. “Why can’t graduate students live with families of lesser incomes?” Galluccio recently asked policymakers gathered at a Boston conference sponsored by the Massachusetts Institute for a New Commonwealth, adding, “We are who we are due in large part to the universities. But the neighborhoods of this city are not suburbs of the universities.”

Not that Harvard has ignored housing issues. The university’s Joint Center for Housing Studies helps leaders in government, business and the nonprofit sectors formulate effective housing policies. And a new \$21 million university initiative provides low-interest loans to Boston and Cambridge nonprofit organizations to expand affordable housing.

*continued on page 18*

# Dorm City

## College Students Put Pressure on Boston’s Housing Market

SHIRLEY KRESSEL

**B**oston’s critical housing shortage and soaring rents are exacerbated by the housing policies of the city’s renowned higher education institutions. Thirty-five colleges and universities call Boston home; more than 90,500 of their 135,000 students live in the city, constituting about 15 percent of Boston’s population. Though these institutions bring valuable intellectual and cultural vibrancy to the city, the impact of this added housing pressure on Boston’s neighborhoods is a significant issue in town-gown relations.

In 1990, only 21 percent of college students residing in Boston were housed in dorms, leaving 67,000 students living in neighborhood housing stock. More than half of these students were concentrated in three neighborhoods: the working- and middle-class areas of Fenway/Kenmore and Allston-Brighton and the more upscale Back Bay/Beacon Hill. In those neighborhoods, students constituted large percentages of the total population (63 percent in Fenway/Kenmore, 27 percent in Allston-Brighton, and 26 percent in Back Bay/Beacon Hill) and significant proportions of people living in neighborhood housing (29 percent in Fenway/Kenmore, 22 percent in Allston-Brighton, and 17 percent in Back Bay/Beacon Hill). Students also accounted for about 12 percent of the population in central Boston, Jamaica Plain and the South End.

By January 2000, with rents rising and community pressure building, Boston colleges accelerated their construction of dormitory beds; the total number rose by 10,500 or 59 percent to 28,500, while enrollment grew by 4,480 or 3.4 percent.

Unfortunately, some of these beds were built on land that could have been used for neighborhood housing. For example, Northeastern University’s Davenport Commons project was built on urban renewal parcels on which residents who had been displaced decades earlier hoped to rebuild. The university obtained the land from the Boston Redevelopment Authority after much community protest, and built units for 625 students, along with 60 units for neighborhood residents. Despite the

IN A GRADUAL PROCESS OF DISPLACEMENT WITHOUT  
GENTRIFICATION, PRICES AND QUALITY OF LIFE PROGRESS  
INVERSELY AS THE NATURE OF NEIGHBORHOOD LIFE CHANGES.

small victory for community housing, this dorm-to-housing ratio will never rebuild the neighborhood. Colleges have also annexed many neighborhood buildings for dormitory use, or, like Harvard University, have been acquiring large tracts of private and public land for academic expansion, reducing land available for the community. The very concept of a “core campus” is now ambiguous, and campus boundaries can scarcely be drawn when city-required Institutional Master Plans are prepared.

At last count, nearly 107,000 students in Boston’s colleges still live in off-campus housing, 62,000 in Boston, and 45,000 in nearby suburbs. Even assuming that three students lived in each unit, college students would occupy more than 20,000 of Boston’s 250,000 housing units. Meanwhile, overall housing in the city has increased by fewer than 5,000 units in the past decade.

In the areas of highest student concentration, the imbalance damages the neighborhood fabric. The issue here is not students behaving badly, but the actual occupancy of scarce neighborhood housing stock. Thousands of students take up apartments and houses in a city with an estimated shortfall of 40,000 housing units. Landlords buy spacious houses suitable for families, then chop them up, sometimes irreversibly, into student cubbies. Students group up and, wielding their parents’ money, bid rents beyond the reach of working-class (and even middle-class) families. In a gradual process of displacement without gentrification, prices and quality of life progress inversely as the nature of neighborhood life changes. A once-diverse commercial spectrum narrows to a pizza-beer-futon mix; in summer, it’s a ghost town that threatens small businesses.

The exodus of neighborhood residents, meanwhile, breaks up stable communities where families had lived together for generations. The infrastructure of community withers as churches, schools and civic associations lose membership. Ultimately, the neighborhood

loses political power as active voters leave, and local officials figure they can neglect residents’ needs with impunity.

**T**his situation is an enormous problem from the neighborhood perspective, but city governments and colleges share an interest in continuing the current pattern.

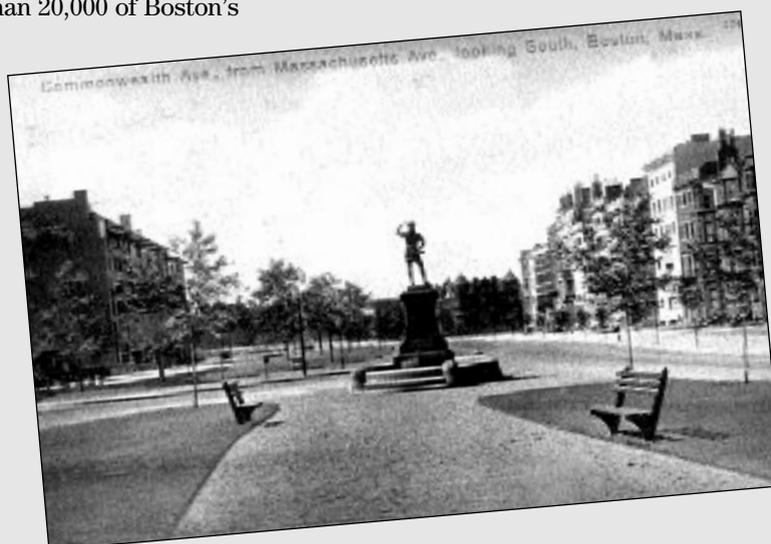
For colleges, student housing is an economic burden; schools prefer to use precious campus land for development that more directly promotes their core mission. They bank land in surface parking lots and

inexpensive, often “temporary” buildings. As they expand, they use it for building academic facilities and prestigious cultural and athletic venues, which are more likely than dorms to attract large donors and research money. Moreover, student beds can be located anywhere, with the burdens of providing

mundane services and

policing and dealing with occupancy fluctuations, which may lead to underutilization or shortages, all shifted to municipal government. (It’s an analogue of cities and suburbs. Cities want to have gleaming office towers and cultural centers and entertainment zones and commercial emporia, which generate money and prestige, but they are happy to let the suburbs carry the housing, with all its concomitant demand for schools and trash pick-up. In fact, they effectively force housing out by creating far more favorable regulatory and financial incentives in town for “economic development” and “world-class” icons.)

Many colleges have policies encouraging or requiring students to live off campus. Some deliberately maintain a dormitory shortfall; many price housing uncompetitively with neighborhood housing stock, requiring off-campus living by junior or senior year. (One college awards its limited campus housing to the



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best students, an obvious negative for neighborhoods who get the others.) These policies not only preserve campus land for the “highest and best use,” but provide planning flexibility for schools to adjust their enrollment to suit economic and demographic shifts. Neighborhood housing is thus used to buffer these contingencies.

From the city administration’s perspective, on the other hand, students are ideal citizens: temporary denizens who demand few city services and don’t meddle in local political affairs. Students spend money, then leave. They are essentially long-term tourists—a near-perfect “virtual population” for public officials trying to minimize their public service burden and maximize local spending.

Ironically, residents in the most heavily student-occupied areas now resist new housing construction, fearing it will just bring in more students and further inflate rents. In any case, the most afflicted Boston neighborhoods are older downtown areas that are relatively built out, so that the imbalance is even more difficult to rectify with new housing.

**W**e must be particularly wary of simple solutions. For example, dorm-building followed by enrollment increases, as we have seen at several colleges, will never help achieve an appropriate student-neighborhood balance.

Also inappropriate are town-gown “partnerships” wherein colleges become Community Development Corporations using neighborhood (often public) land and other public subsidies to build dormitories combined with neighborhood housing. Nonprofit institutions already receive tax, zoning and other benefits such as low-interest loans; it is important to devote those privileges fully to new neighborhood housing and not to allow institutions to double-dip while producing a token amount of housing packaged into a larger dormitory project.

There are problems, too, when colleges “give back” to urban communities by rehabilitating neglected commercial and residential buildings in the name of neighborhood “revitalization.” These efforts generally provide housing for faculty, and make the school appear safer and more appealing to prospective students and staff who fear “inner city” neighborhoods.

However, the effect is likely to be gentrification of the immediate “buffer zone,” displacing local residents but not addressing the underlying economic problems of disinvested neighborhoods. Such University Districts, like Business Improvement Districts (BIDs), tend to privatize community planning, absolve publicly accountable municipal governments of their service responsibilities and ultimately diminish the community’s capacity for self-determination by increasing dependence on the beneficence of their institutional sponsors. Colleges have professional staff and resources to devote to these planning activities; neighborhoods have only lay volunteers to guard community interests. And just as a BID is in fact a District formed to Improve Business, rather than a District to be Improved by Businesses, a “U-District,” when interests conflict, will choose to improve the U.

Nor does the answer lie in various “community benefit” proposals, such as making monetary contributions for each off-campus student to an affordable housing trust, funding of community amenities such as parks, donations of college scholarships, grade-school sponsorships and other public education functions or sponsorship of neighborhood planning processes or other public services. These benefits create counterproductive incentives for municipalities to accommodate college plans over neighborhood needs, and erode municipal responsibility for public services. And they usually are expected to serve as bargaining chips for colleges whose plans are resisted by the neighborhood.

Most commonly, colleges offer to create long-term plans to gradually increase the proportion of students housed on campus. But over the decade or more that it may take institutions to carry out these plans, urban neighborhoods can suffer irreversible damage. For example, Boston University, the largest in the city with over 30,000 students, recently announced the opening of a new dormitory complex, which would free up an estimated 300 apartments in Allston-Brighton. BU now houses 75 percent of its undergraduates on campus—a goal the school set for itself in 1986. This still leaves 3,400 BU undergraduates and thousands of its graduate students to seek apartments in the neighborhoods. Even if all the colleges in Boston set an overall goal of 85 percent on-campus housing, some 10,000 students would remain in local housing, occupying thousands of apartments concentrated in a few neighborhoods.

And expanding enrollments and rising proportions of boarding versus commuting students make even this target elusive.

The city uses colleges as economic and cultural engines, but if we continue to accommodate college housing policies, we will lose vested, cohesive neighborhoods of people who make it a living city.

Colleges, in turn, use the city as an extended campus, constantly expanding geographically and operationally. But if students and college infrastructure continue to dilute neighborhoods, the balance will “tip,” and the resulting “college town,” less richly complex and diverse, will be less attractive in recruiting future students and faculty.

These complementary economic strategies—college land-banking and city “resi-temps”—will be costly in the end. Already, students cannot find affordable housing here when they graduate and join the workforce. For colleges, this is a sad loss of their graduate community, and a recruiting problem as well. The city loses an invaluable asset: its educated labor force.

**T**o solve the problem, the city should require colleges to provide on-campus housing at least for undergraduates (graduate student housing needs a more detailed analysis) before other institutional buildings are permitted. And schools should commit to full on-campus housing before enrollments are increased.

Colleges that don’t have enough land to build more student housing should limit their non-commuter enrollment, just as other types of developers must limit their program to match their resources. There must be a concerted effort among all the schools, so no single institution need fear “unilateral disengagement” that would merely give up to others the available housing resources.

Colleges as well as neighborhoods will benefit from playing by such rules. Students living within their academic community will enjoy the out-of-class learning and socializing that is the most lasting educational experience. And campus extracurricular activities will find a new population of participants and audience.

Colleges and communities each have to be responsible parties in maintaining the delicate balance of their differing needs. They depend on each other, and, like members of any ecological system, must learn to support each other as they grow.

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*Shirley Kressel, a landscape architect and urban designer, is president and co-founder of the Alliance of Boston Neighborhoods.*

## New England College Towns

About two-thirds of New England's 795,000 full- and part-time undergraduate and graduate students attend college within the borders of the following cities and towns:

CITY	NUMBER OF INSTITUTIONS	TOTAL ENROLLMENT
Boston, Mass.	42	136,900
Cambridge, Mass.	6	46,930
Providence, R.I.	6	36,200
New Haven, Conn.	4	29,780
Amherst, Mass.	3	27,890
Worcester, Mass.	8	24,840
Storrs, Conn.	1	22,240
Warwick, R.I.	2	18,210
Springfield, Mass.	5	17,880
Manchester, N.H.	6	17,080
Lowell, Mass.	2	15,040
Kingston, R.I.	1	14,580
Durham, N.H.	1	13,230
Burlington, Vt.	4	13,040
Portland, Maine	4	12,560
New Britain, Conn.	1	11,900
Fairfield, Conn.	2	10,700
Waltham, Mass.	2	10,240
Orono, Maine	1	9,950
Medford, Mass.	1	9,190
Bridgewater, Mass.	1	8,960
West Hartford, Conn.	2	8,620
Hartford, Conn.	5	8,150

*Source: New England Board of Higher Education; unpublished FACTS 2001 survey data.*

## Hillside Living

Vermonters love Burlington because it's so close to Vermont. The point of the old joke, of course, is that the cosmopolitan little city on Lake Champlain has very *un-Vermont* qualities and now, due to the University of Vermont's growth, a very *un-Vermont* problem: lack of space. At a New England Board of Higher Education (NEBHE) conference on campus housing issues, Mayor Clavelle described how UVM's growth affected the city: "Residential streets became parking lots, neighborhoods became extensions of campus housing and student behavior eroded quality of life."

In 1998, UVM hired a local real estate firm to study the impact of students on the rental market in Burlington. The study concluded that 2,566 students from UVM, plus a few hundred from St. Michael's and Champlain colleges and the now-defunct Trinity College, lived in Burlington. Of the 8,100 rental units in the city, 1,150 or 16 percent of the total were occupied by students. Though students have begun to seek housing farther out in Chittenden County, more than 50 percent of those who live off campus reside in Burlington's Hill district known for its significant collection of Italianate, Queen Anne and Colonial Revival style homes built by Burlington industrialists more than a century ago. As in Boston, students tend to live in large groups, occupying fully 31 percent of Burlington's three-bedroom units, 48 percent of four-bedroom units and more than 80 percent of five- or more bedroom units.

The study also shows that, between 1993 and 1998, student demand for housing on the Hill increased rental prices by as much as 20 percent and forced the vacancy rate below 1 percent, compared with 8 percent nationally. One newspaper noted that Burlington landlords routinely receive 50 or more inquiries when an apartment opens up, and often get more than the rent they are asking for.

Some Burlington leaders are eyeing the recently closed Trinity campus as a potential source of much-needed student housing, but UVM, focused on adding apartment-style housing for upperclassmen, has passed on an opportunity to reuse the run-down Trinity dorms. Meanwhile, the seriousness of Burlington's housing crisis has led to unprecedented collaboration between UVM and city officials. "Town-Gown relations in Burlington are not all rosy," Clavelle noted at the NEBHE conference. "But they're better than they've ever been."

## Ivory Tower?

New Haven's housing issues stem from urban decline. Yale, with its \$6.6 billion endowment, has been an island unto itself. Students live behind venerable campus gates, and faculty and staff travel to the city for work then return home to leafy suburbs. But that's

changing. Yale's extraordinarily community service-minded students staff neighborhood programs, help out in city classrooms and conduct research on issues such as home ownership. And the university's six-year-old homebuyer program offers faculty and staff \$25,000 over 10 years, plus a \$5,000 bonus, to help them buy homes in New Haven and live in the city. That, on top of the city's depressed real estate values—the Yale administration newspaper recently listed a seven-room Victorian with 2.5 baths, leaded glass doors, deck, balcony, and a two-car garage for \$179,000—is bringing people back to the city. Nearly 300 Yale employees have taken advantage of the homebuyer program since its inception.

Since 1996, Yale's overall purchases in New Haven—not just real estate—have increased by 23 percent. Yale has tried particularly hard to breathe life into the city's impoverished Hill and Dwight neighborhoods. The university has contributed \$150,000 to the Hill Housing Revitalization project, which aims to rehabilitate 65 housing units for low- and middle-income families. Yale also provides Hill residents with job training programs at the Yale Psychiatric Institute and has equipped the Hill police substations with computers. Most recently, the university committed \$2.4 million—matched by \$10 million from local businesses—to fund a new project focusing on home ownership, job training and the improvement of schools in the Hill neighborhood.

Yale is not the only college tackling housing woes in the Hill. Six graduate students from Southern Connecticut State College recently won a \$5,000 prize from Chase Manhattan Bank for their proposed intergenerational housing project designed for New Haven families in which grandparents are raising their grandchildren. Developed in collaboration with the nonprofit Casa Otoñal Housing Corp. of New Haven, the 35-unit project will be only the second of its type in the country.

Whether revitalizing whole neighborhoods or simply making good-faith efforts to house more students on campus, New England campuses from New Haven to Boston to Burlington are paying increased attention to the critical issue of housing. Through a range of collaborative initiatives, colleges are encouraging faculty and staff to live in the community, promoting community service and educating off-campus students in the art of being good neighbors. What's at stake? Just whether the institution on the hill and its students will be viewed as an occupying army or as a resource for community-building.

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*N. Sean Bowditch served as the fall 2000 NEBHE/CONNECTION intern. He also worked as a fall 2000 newsroom intern at WBUR Radio, Boston's National Public Radio station.*

# Progressive Approaches to University-Community Relations

## The Town-Gown Story in Burlington

PETER CLAVELLE

**T**he City of Burlington (population 40,000) is home to the University of Vermont, Champlain College and Burlington College. UVM alone enrolls some 7,300 undergraduate students and almost 9,000 students overall. With the university just a half-mile up the hill from the city center, Burlington's urban amenities—its arts and culture, restaurants, coffee houses and retail outlets—are within easy reach of the campus. UVM students have a significant, positive impact on our local economy. At the same time, students have had a profound effect on rental housing availability, rent levels and noise in the neighborhoods adjacent to downtown and the university.

City concerns about student pressure on our rental housing market, on neighborhoods, and on traffic and parking congestion peaked in the late 1980s as UVM's enrollment grew dramatically. Burlington attempted to encourage and cajole the university into mitigating

some of the impacts of its burgeoning student body—without success. When UVM submitted its application for a new microbiology building, the city finally had the leverage it needed to get the attention of the institution on the hill. The Burlington Zoning Board conditioned its 1989 approval of the new building on UVM's providing additional on-campus student housing and parking. By March 1990, the city and the university had entered into an agreement to address a range of housing, parking and traffic issues.

As part of that agreement, UVM began requiring sophomores to join freshmen in living on-campus, and established programs to address the impact

of students on neighborhood quality of life. UVM also increased its on-campus parking, implemented an extensive campus-area transportation system and involved the medical center and other local colleges in ongoing transportation planning and management. In addition, the university contributed significantly to the widening and reconstruction of Main Street, the major gateway to the city and the campus.

UVM also agreed in 1990 to provide on-campus housing for an additional 850 students. Over the years that followed, however, some at UVM began to argue that declining undergraduate enrollment prevented the university from achieving a net increase in the on-campus student population. It is worth noting that, when the 1990 agreement was signed, Burlington's rental housing vacancy rate was about 5 percent; today that rate is less than one quarter of 1 percent. The effect of students in tightening this market was clearly documented in a 1998 study commissioned jointly by the city and the university, and the issue became an increasing source of tension.

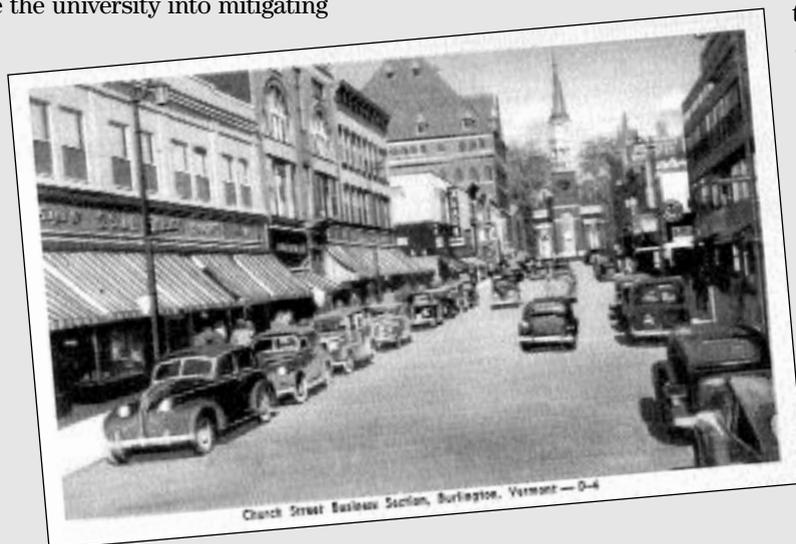
While UVM-city relations have been at times contentious, we've made progress in the recent past. Last year, UVM, under President Judith Ramaley, reached

an agreement with the city that addresses the three most difficult challenges affecting town-gown relations: on-campus housing, off-campus student behavior and UVM's land-use policies.

The university agreed to build on-campus housing for an additional 400 students over and above the

number now residing on

campus. These units, which will be ready for occupancy no later than the fall of 2003, will provide some relief for low- and moderate-income renters, as well as for homeowners who have long complained about the presence of large numbers of students living in homes intended for families. UVM plans to form a partnership with private developers to create apartment-style housing, which will appeal to today's college students.



UVM AGREED NOT TO ACQUIRE PROPERTY THAT LIES OUTSIDE ITS CORE ACADEMIC  
AND RESIDENTIAL CAMPUSES. THE CITY PASSED A ZONING AMENDMENT  
ALLOWING THE UNIVERSITY TO DEVELOP ITS CORE CAMPUS AT A HIGHER DENSITY  
AND AT GREATER LOT COVERAGE THAN PREVIOUSLY PERMITTED.

In a major change of policy, UVM also agreed to cooperate with the city in dealing with off-campus misconduct by UVM students. The city is establishing protocols to inform UVM of such misconduct. In response to certain violations, UVM will take disciplinary action, and will report annually to the city its responses to off-campus violations of local and state laws. This policy change will be a major deterrent against excessive noise, under-age drinking, public urination and other disturbances that are tearing at the fabric of our downtown neighborhoods.

In response to concerns raised about the university expanding into neighboring residential areas, UVM agreed not to acquire property that lies outside its core academic and residential campuses. At the same time, the city passed a zoning amendment allowing the university to develop its core campus at a higher density and at greater lot coverage than previously permitted.

In addition to these legal agreements, we've maintained and expanded partnerships that address problems at their roots. The Good Neighbor Program, administered jointly by UVM's Office of Government Relations and by the Off-Campus Student Organization, has made strides in enhancing communication among students and their neighbors. Each autumn, program volunteers distribute booklets detailing the rights and responsibilities of students living off campus. During the academic year, the program provides a hotline and conducts outreach to ease neighborhood tensions.

The city's Community Support Program began as a collaborative initiative between UVM and the Burlington Police Department aimed at mediating conflict in neighborhoods with high student populations. The program quickly evolved into a resource for resolving disputes citywide.

We've started to tackle the problem of binge drinking by students and other community members through a university-community partnership funded by the Robert Wood Johnson Foundation. This partnership has provided information to students, as well as training for the management and staff of local liquor establishments. The project's educational efforts, in conjunction with coordinated enforcement by Burlington Police and State Liquor Control Inspectors, have begun to make a difference. Downtown rates of various crimes associated with intoxication have plummeted over the last year.

Concurrent with our progress in mitigating negative impacts of a sizable population of students on city neigh-

borhoods, we've taken other significant steps toward town-gown collaboration in a variety of areas.

The city and the university have collaborated on the Lake Champlain Basin Science Center. Opened in 1995, this waterfront-based center aims at educating residents and visitors of all ages about the history, culture and ecology of the Lake Champlain Basin. UVM's new Rubenstein Ecosystem Science Laboratory is an integral part of the center.

And this past summer, when Burlington's Committee on Temporary Shelter asked for help housing as many as 20 homeless families, UVM made an otherwise vacant dormitory available.

In 1998, the university applied for and was awarded \$400,000 in funding from the U.S. Department of Housing and Urban Development's Office of University Partnerships to establish the Community Outreach Partnership Center (COPC). The purpose statement of the UVM/Burlington COPC is worth quoting here: "To create effective, reciprocal, sustainable partnerships within UVM and among UVM, the City of Burlington, and residents and organizations of the Old North End (and in surrounding low-income areas). The overall goal, in nurturing such partnerships, is to further the Old North End's physical, economic, social and political development, while advancing the university's mission of service, education and research."

Leveraging more than \$1 million in total staff and service contributions from the university, the city and local nonprofit organizations, COPC funding is supporting efforts to develop community leaders, increase employment and income and promote fair and affordable housing. Ramaley has written that COPC offers the university "a unique opportunity to redefine our working relationship with the City of Burlington." I believe that COPC has already begun to have that effect. We're forging new working partnerships, not just between the administrations of the university and the city, but by involving citizens, businesses, nonprofit and service organizations—our entire community—in the process.

In little more than a decade, town-gown relations in Burlington have been transformed from a contentious standstill to dynamic collaboration. Burlington and UVM still have a way to go. But we've begun to recognize—and to put into practice the recognition—that we'll only get there together.

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*Peter Clavelle is serving his fifth term as mayor of Burlington, Vt.*



PHOTO BY CHRISTOPHER GILLOOLY.

# College Town Ventures

## Investors Look to Unleash the Intellectual Power of New England Communities

MATT HARRIS AND BO PEABODY

**B**rian Rigney recalls the concerns he heard most often when he was looking for early-stage financing for BlueTarp, his Portland, Maine-based Internet startup. “The VCs in Boston would ask me if Portland really was a six-hour drive,” says Rigney. “The other thing we heard, whether it was from venture capitalists in Boston or on Sand Hill Road, was: ‘Sure, we’ll fund you. But you’ll have to move.’”

RIGNEY’S ODYSSEY is typical for entrepreneurs who want to build businesses in communities that lie beyond national venture capital centers. In the spring of 2000, BlueTarp received early-stage financing from Williamstown, Mass.-based Village Ventures Inc., and from its affiliate fund in Maine. The money enabled the company to roll out its business model. BlueTarp offers a purchasing card that allows building contractors to buy materials at their local suppliers, view details of the purchases on the Internet, then download job-costing information into their accounting systems.

Two-thirds of all early-stage venture capital is invested in companies within a one-hour drive of the venture capital firm’s offices. Because early-stage venture capital investing is truly a local business, it is highly concentrated. In fact, 76 percent of all venture

capital dollars in the United States are invested in just 10 geographic markets.

The venture capital scene in New England is a microcosm of the national picture. Thanks to the fertile corridors around Routes 128 and 495, Boston ranks second among U.S. metro areas in venture capital with \$6.4 billion invested in 1999. The rest of the region neither generates nor receives nearly that level of seed funds.

### Beyond Boston

It’s no secret that a handful of major research universities around Boston have contributed significantly to the Massachusetts economy through research and development (R&D)—about \$1.1 billion worth at just 10 Boston-area colleges and universities in 1998.

The economic impact is underscored by a recent BankBoston report noting that faculty, students and graduates of the Massachusetts Institute of Technology (MIT)—which alone captured \$413 million in 1998 R&D funds—had founded Metro Boston companies with annual revenues exceeding \$50 billion.

Boston's technological power notwithstanding, R&D dollars are far more evenly distributed in New England than are venture capital dollars. Indeed, for every \$1 spent on R&D at Boston's major research universities, an additional 84 cents is spent at New England university labs outside the city. But for every

## How Village Ventures Began ...

In 1997, Matt Harris became the first fund manager for Williamstown, Mass.-based Berkshires Capital Investors (BCI).

Investors in the \$5 million fund included local individuals and institutions, as well as Williams College. Among the companies seeded by BCI are Tripod Inc. (co-founded by Village Ventures co-founder and chairman Bo Peabody and subsequently sold to Lycos Inc. for \$58 million), Employease Inc. (named one of the 100 most important private companies in the world by *Red Herring* magazine last spring), and MindBranch Inc. (Village Ventures led a group that invested \$18.5 million to acquire a controlling interest in MindBranch in August).

BCI fund I, which has had an annual rate of return greater than 60 percent, has also had a noticeable impact on the laggard northern Berkshires economy. The northern Berkshires has begun to experience a renaissance as BCI companies continue to grow and succeed. These companies now employ 750 people, 390 of whom are based in Berkshire County, including many Williams College alumni and faculty spouses. (In November 2000, Cerida Corp., a BCI investment, announced it was opening a regional office in southern Berkshire County that will create 155 jobs). The companies in BCI fund I portfolio also attracted over \$150 million follow-on financing from other investors to the Berkshires over the past three years.

Buoyed by the success of BCI, and convinced that areas with intellectual capital could support successful businesses with the proper venture capital infusion, Harris and Peabody founded Village Ventures in January 2000. The company was launched in June after it secured commitments of \$80 million from Bain Capital, Highland Capital Partners and Sandler Capital Management.

\$1 of venture capital invested in Boston, just 11 cents goes to those other promising New England communities. This imbalance provides Village Ventures with a golden opportunity.

Village Ventures has identified 50 markets that are as rich in intellectual capital as the current top 10 venture markets but 25 percent cheaper to live in. Primarily college towns or "second-tier cities," they are positioned to be the next Austins or Seattles in terms of nurturing technology companies. What they are missing, and what Village Ventures is designed to deliver, is venture capital—not simply money, mind you, but also the business savvy, experience and networking connections that venture capital firms can bring to the companies they fund.

Village Ventures is an operating company that manages a national network of early-stage venture capital funds and invests in the most promising companies emerging from those portfolios. As of November 2000, Village Ventures had 35 employees and was operating nine early-stage venture capital funds in seven states. The firm has six funds in New England, which are located in Williamstown, Amherst and Worcester, Mass., Providence, R.I., Burlington, Vt., and Portland. The typical fund is \$10 million to \$15 million and is focused on early-stage investments in technology-driven companies like BlueTarp.

### Building Businesses

Early-stage venture capital investing can have an enormous impact on local economies. A 1999 study by the Arizona Venture Capital Association found that \$1 million of venture capital, over five years, will create 27 permanent jobs and generate \$6 million of revenue in the community.

Still, it's not easy to build successful, technology-driven companies in nontraditional communities. These places tend to lack fundraising expertise; early-stage investment experience; professional service providers, including technology experts, attorneys, marketers, recruiters and accountants; a network of business contacts extending beyond the particular market who can provide advice and support; and later-stage financing for successful startups. And larger funds want to invest within those 10 big VC centers.

To overcome these deficiencies, Village Ventures applies a four-step approach to building companies. The firm identifies communities with high potential for launching technology companies and recruits managers to oversee an investment fund in each market; helps its managers raise money from local limited partners and co-invests its own capital alongside its partner funds; provides both fund managers and entrepreneurs with extensive support in terms of technology, recruiting, branding, marketing, accounting and legal services; and acquires significant interests in the most promising companies emerging from the network of funds.

R&D DOLLARS ARE FAR MORE EVENLY DISTRIBUTED IN NEW ENGLAND THAN ARE VENTURE CAPITAL DOLLARS. INDEED, FOR EVERY \$1 SPENT ON R&D AT BOSTON'S MAJOR RESEARCH UNIVERSITIES, AN ADDITIONAL 84 CENTS IS SPENT AT NEW ENGLAND UNIVERSITY LABS OUTSIDE THE CITY. BUT FOR EVERY \$1 OF VENTURE CAPITAL INVESTED IN BOSTON, JUST 11 CENTS GOES TO THOSE OTHER PROMISING NEW ENGLAND COMMUNITIES.

One of the most important attributes of the Village Ventures offering is the strength of its network. The network concept overcomes the "island fever" that the lone VC or entrepreneur in a nontraditional venture market is exposed to. Not only do fund managers have easy access to consultants and support personnel at Village Ventures, they also can reach out to one another for shared experience. To increase information flow and encourage collaboration, Village Ventures is building a proprietary software package to facilitate communication within the network. Quarterly meetings for all fund managers will further strengthen the Village Ventures community.

### Boon for Berkshires

Local institutions are positioned to reap many benefits by investing in early-stage ventures. Williams College, for example, has invested \$4 million in Berkshires Capital Investors (BCI), an early-stage venture capital fund that is the prototype for the Village Ventures network of funds. Williams invested in BCI expecting both a strong return on its investment and a boost for sustainable development in the northern Berkshires.

"The school has certainly seen direct financial gain from the collaboration, but there have been other important benefits as well," says Williams College Vice President of Administration Helen Ouelette. "The vitality of the local economy and the quality of life in the area, which are so important to our own vitality, are on an upswing."

Williams is connected with BCI and Village Ventures on several levels. For example, Berkshire startups are creating new professional opportunities for the spouses of Williams faculty and staff. Former Williams Professor Dick Sabot, a co-founder of eZiba.com, a website that allows consumers to purchase handcrafted artifacts from around the world, sits on the board at Village Ventures. Says Ouelette: "The success of the entrepreneurs from Williams—alumni, faculty and students—reflects favorably on the college, and a number of them have been generous in giving back to the school."

Recognizing these benefits, other colleges, including Hampshire, Middlebury and Worcester Polytechnic Institute, have committed to invest in Village Ventures affiliate funds.

Investors such as Banknorth Group have invested across multiple funds. In November, Banknorth com-

mitted \$7 million to four Village Ventures funds in New England. Banknorth not only expects high returns on its investments, but also sees a chance to invest in the communities in which it is chartered and to create greater wealth for its customers. The locally chartered banks of Banknorth stand to add to the commercial client roster of their organizations as local entrepreneurs expand their companies. This investment allows Banknorth to spread its risk across multiple funds in different markets managed by different individuals. Negotiations are underway with other banks for similar investments.

Village Ventures funds and portfolio companies are giving back to the community. Village Ventures, BCI and portfolio companies of both banded together to form the Prospect Foundation, seeded with \$1 million and pledged securities expected to yield in excess of \$10 million, to train Berkshire County youth in the skills they need to benefit from the emergence of technology industries in the area. The foundation's classes will be held at the Massachusetts Museum of Contemporary Art in North Adams, Mass.—Williamstown's gritty neighbor that was economically devastated by the loss of manufacturing jobs and is now banking on growth in the technology sector.

As the Village Ventures network expands into new communities, it is attracting a number of highly qualified fund managers, many of whom have learned their craft in urban areas and now seek to live and work in communities where they see a better quality of life. The Village Ventures fund in Nashville is managed by Tuff Yen, a veteran venture capitalist from Silicon Valley who moved to Tennessee when his wife took a teaching position at Vanderbilt University. By aligning itself with fund managers like Yen, Village Ventures is attempting to unleash the intellectual capital of its target markets. In doing so, the firm hopes to encourage sustainable business development and a brighter economic future for many places heretofore bypassed by the technology revolution, while it generates outstanding returns for its investors.

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*Matt Harris and Bo Peabody are co-founders of Village Ventures Inc. Kevin McCormack and Wilmot Harkey of Village Ventures assisted with this article.*



# Putting on the Glitz

## How Tales from a Few Elite Institutions Form America's Impressions about Higher Education

CLIFFORD ADELMAN

If you think our country understands its higher education system well, think again: what happens in America's most elite institutions of higher education is what creates the body of public knowledge and attitude by which the 95 percent of us who live at less rarefied altitudes are judged. Those who live at the top, grown comfortable by long exposure to the climate, come to assume that the rise they stand upon is Mount Sinai. They cannot and do not see below, cannot and do not imagine how the rest of the world lives. Unfamiliarity breeds an odd sort of contempt, and lapses in integrity inevitably follow when the rules at the top (which are different) are threatened. As F. Scott Fitzgerald observed, "the rich are not like you or me." The same can be said of the glitz of academe.

We're all unintentional collaborators in this because we have made stardom the national currency. We worship at the altars of *People* magazine, where nobody looks like anyone you know. At the temple of the Final Four, where nobody moves like anyone you know. Glitz is hot; the rest of us are not. A research proposal from a distinguished professor at an elite institution carries a halo effect even in front of the toughest academic review panels. The experts ought to know better, but something tugs at them

from behind a cultural screen. It may be natural for humans to live through the perfections of the few, and to distance themselves from radical imperfections. But this cathexis is too easy an excuse.

Consider three headline-type stories that serve as filters of public knowledge about the state of higher education. In each case, our heads and eyes are raised to worship at the tablets at the top of Mount Sinai. We see nothing else and, more seriously, we know nothing else.

In each case, my more earthly information is drawn from the national college transcript samples in the longitudinal studies of the U.S. Department of Education. Transcripts contain the footprints in the forest: they don't lie, they don't exaggerate, and they don't forget.

**Grade Inflation.** *Consider the past 30 years in U.S. higher education. Have grades risen, remained stable, or declined?*

Whatever grade inflation is, it exists, right? How do we know? Of

every three stories that appear in the general and trade press on this issue, two are centered on institutions such as Princeton and Amherst. It turns out that a higher percentage of grades awarded in courses at these Midas-touch schools are “As” than was the case 10 or 15 or 20 years ago. That means rampant inflation in the judgment of student performance throughout American higher education, right? Even if less than 2 percent of undergraduates and about 5 percent of bachelor’s recipients attend such institutions, three anecdotes from the top make a national trend.

But what is the real story?

In the ideal determination of “inflation,” we encounter one of the following phenomena, either in isolation or combination. 1) The price of a given product or commodity or service of constant composition or characteristics (anything from shampoo to root-canals) rises faster than our income does. 2) The price of a given product or commodity or service remains stable while the perceived or measured quality of the product, commodity or service declines. 3) The price of a given product or commodity rises faster than does the perceived or measured quality of the same product or commodity; or, the price rises while the quality falls. 4) The price of a given product or commodity declines, but at a slower rate than either a decline in our income or a decline in perceived or measured quality.

Price is a judgment, analogous to a grade. And these are what one might call “commodity views” of inflation, which is what the general public everywhere understands. If the judgment of student performance met any of the criteria for “inflation” as we think of it in the dailiness of our lives, then it might be a matter worth noting. But in order to prove that something analogous to inflation exists in the judgment of student performance, one would require the same type of assessments with the same prompts based on the same material judged by panels observing the same criteria (and with a proven high rate of inter-rater reliability)—all at two or more points in time.

Obviously, this situation does not exist in higher education. If we are teaching the same material and giving the same tests—with the same criteria for judgment—that we gave 20 years ago, then we are not fulfilling the principal purposes for which students come to us or the expectations that communities and economies have of us. Furthermore, there are no uniform commodities in higher education, and new fields with corresponding constitutive models of assessment are constantly arising—as they should, and as we expect in a universe in which knowledge does not sit still long enough to be measured.

The case for grade inflation in U.S. higher education that is played out in the media is not based on anything you or I would regard as inflation. Rather, it is a story of the distribution of traditional letter grades without any reference to either the methods or criteria by which the grades were assigned or of the subjects in which they were given. No one asks whether all those “As” were given in Recreation or Chemistry.

As for the incontrovertible evidence from the footprints in the forest, both the distribution of traditional letter grades and GPAs have exhibited a stable-to-declining trend in the period 1972 to 1993. Anyone who picks a date earlier than 1972 for the reference point: a) does not have the data (we didn’t collect it) and b) willingly brings the distortions of the Vietnam War period into the picture. Stable-to-declining grades during a period of massification of the higher education system in this country is a matter of common sense. It’s what one would expect; and it’s what we got.

**DISTRIBUTION OF UNDERGRADUATE LETTER GRADES IN TWO COHORTS**

	1972-1984	1982-1993
As	27.3	25.2%
Bs	31.2	31.9
Cs	21.9	22.2
Ds	5.4	6.0
Fs/Penalties	3.8	4.5
Pass/Credit	6.4	2.9
Withdraw/Repeat	4.0	7.3

**UNDERGRADUATE GRADE POINT AVERAGES IN TWO COHORTS**

	1972-1984	1982-1993	Effect Size
All	2.71	2.65	-.09
Men	2.61	2.60	-.02
Women	2.81	2.70	-.17
Less than Bachelor's	2.48	2.48	.00
Bachelor's or more	2.94	2.88	-.12

*Note: Universe consists of all students who earned more than 10 undergraduate credits.*

The situation is analogous to what happened in the Boston Marathon when the rules changed, and the pool expanded by lottery. The size of the field is nearly double what it was when my friends and I stood along Beacon Street near Washington Square in Brookline, with oranges and water and applause for those who made it that far. What do you think has happened to the mean time of completion of the race? To the standard deviation of that time? The answers are just as common-sensical as those about grading and student performance in a system of higher education that has expanded by 40 percent since the early 1970s.

The truly disturbing story about grading is something I call the WIR Index, that is, the proportion of grades that indicate no-penalty Withdrawals, Incompletes and Repeats. The higher the WIR Index, the longer it takes students to earn degrees—if they earn them at all—and the greater the cost to both public subsidies for higher education and general access and quality. In the period 1972-1982, approximately 4 percent of all grades were WIR. In the period 1982-1993, we were at 7 percent. The final tally for the period since 1993 won’t be in until the spring, but based on what I’ve seen of the national sample of transcripts we are currently coding, I will wager 10 percent. This is outright wastage, and is a far more weighty issue than the distribution of traditional letter grades. Think of it as 10 percent of your tuition bill and a 10 percent



reduction in available class seats at most of the places where America goes to college. This is a very serious issue that we don't see because a grade inflation story based on "As" at Princeton and Amherst hides it.

**Graduation Rates.** Consider the past 30 years in U.S. higher education, and all traditional-age students who attended a four-year college at some time in their undergraduate careers. Did the proportion of this group who earned a bachelor's degree by age 30 rise, remain stable or decline? Think carefully about who constitutes the denominator, for it is the only denominator that counts.

In national policy, we have canonized the issue of graduation rates in something called the "Student Right-to-Know" Act. Every institution of higher education must report publicly the proportion of admitted students who graduate within x-number of years. If the proportion is low, it is implied, the school is bad, and students interested in earning a degree should go elsewhere, right? Such legislated consensus is the measure of dubiously successful propaganda in democratic societies.

Whose graduation rates were so miserable that they spawned the Student Right-to-Know Act? Male varsity football and basketball players at NCAA Division 1 institutions. As originally drafted by two former basketball players and Rhodes scholars who happened to be in Congress at the time, Sen. Bill Bradley and Rep. Tom McMillan, this legislation was originally entitled the Student Athlete

Right-to-Know Act until some brave soul pointed out that athletes were not the only people who went to college. Glitz on a different toe. This is a case in which public perception and knowledge of a routine measurement in higher education was first determined on the sports pages of your *Daily Planet*, and then moved to the editorial pages.

Glitz on a different toe. In fact, extreme glitz. Only 4 percent of U.S. college students, men and women, played varsity anything at the time this act became law in 1990. Of that group, less than half played football or basketball. Of that group, in turn, less than one-quarter played at NCAA Division 1 schools. The national legislation, then, was based on the putative behavior of less than 0.5 percent of all undergraduates, and since women were not included in the propaganda, the percentage was lower than that. It's an awfully small tail to wag a very big dog.

Why putative? The graduation rates used to stimulate the legislation were defined by the NCAA to measure the share of students earning bachelor's degrees within six academic years of first enrolling in college. Moreover, the measurement would count graduation only from the institution first entered by the student. It is a rare person who does not see problems with these boundaries, and the national transcript samples certainly reinforce our skepticism. The mean elapsed time-to-degree for bachelor's recipients was 4.5 calendar years in the 1970s, with a standard deviation of 1.6. Translation: for traditional-age students who earned bach-

elor's degrees by age 30 (the censoring age of the U.S. Department of Education's longitudinal studies) roughly 85 percent did so within 6.1 calendar years (about 6.75 *academic* years) of entering college. In the 1980s, the mean elapsed time-to-degree increased to 4.8 calendar years, with the same standard deviation of 1.6. In either case, and with very rough figures, a 6-academic year censor puts about 25 percent of bachelor's degree recipients on the far side of the moon. That is, they don't show up as finishing degrees at all.

In the 1972-1984 period, it turns out that varsity athletes in *major* sports who earned degrees took longer than others to do so. This is another matter of common-sense empiricism. After all, we are supporting many of these students to entertain us, and to spend a considerable amount of their time in college preparing for the entertainment, traveling to various sites for the entertainment and executing same. Credit loads are inevitably lighter—and in more ways than one. Entertainment time is not study time. No wonder it takes them longer to finish degrees.

In the 1982-1993 period, something else happened, perhaps as the result of media glare on the glitz: varsity athletes in *major* sports took no longer than non-varsity athletes to complete degrees, whereas varsity athletes in *minor* sports finished college more expeditiously: 4.8 calendar years, roughly, for the first two groups, 4.5 calendar years for the varsity athletes in minor sports. Common sense again: the minor sports include—gasp!—women, who finish degrees faster than men no matter what the question. And women's participation in varsity sports, spurred by enforcement of Title IX regulations as well as profound social change in the 1980s, rose significantly.

The glitz orientation hides more significant information.

But, you say, those data are about time-to-degree; what about the proportion of varsity athletes who actually complete degrees. If one employs a

10- or 12-year censor on degree completion, the graduation rates of varsity football and basketball players don't look that much different from those of everybody else. In fact, they are higher than those of non-athletes, and have been so since the 1970s:

**LONG-TERM BACHELOR'S DEGREE COMPLETION RATES FOR VARSITY ATHLETES VS. OTHERS**

	1972-84 Cohort	1982-93 Cohort
Major Sports	69.3	68.0
Minor Sports	71.5	72.5
Non-Varsity	64.7	66.6

*Note: Universe consists of all students who earned more than 10 credits from four-year colleges.*

Impossible, you say! Of course you would say that. The only story you have heard about the graduation rates of varsity athletes comes from the Sweet Sixteen.

Furthermore, the transcript account is a *system* story, not an institutional story. It allows people to finish school at an institution other than the one at which they began. It follows *students*, not institutions. If the student is the unit of analysis, it turns out, the institution is irrelevant—well, peripheral. Consider the following data from the transcript-based histories of the period 1982-1993:

Fully 54 percent of undergraduates attended more than one school by age 30; and half of this population crossed state lines in the process; 30 percent of undergraduates attended more than two schools; 58 percent of those who received bachelor's degrees attended more than one school in the process (this population includes community college transfers); and 16 percent of those who attended only four-year colleges and earned bachelor's degrees by age 30 completed the degree in an institution other than the one in which they started out.

There are many other aspects to this configuration of student behaviors. The point is that we live in an age of multi-institutional attendance,

one in which student loyalties to institutions are not as binding as they were 30 years ago. Given federal policy since 1972, when we put the principal mechanisms of paying for higher education into the hands of students, and not institutions, we turned students into consumers. We are a learning society, and the more options for learning we provide, the more likely are students to accept the offer.

The assumptions of the Student-Right-to-Know Act fly in the face of these realities. They were anachronistic in their own time, let alone ours. Every college, community college, and trade school in the country had to hire people to do nothing else but compute annual SRK data for the Department of Education (which, it should be noted, did not ask for this legislation in the first place). And the process of negotiating the regulations and formulas under which the data would be reported consumed thousands of hours of both government, organizational and institutional time.



The cost is reflected in tuition bills. Again, we lose by putting on the glitz.

**The Culture Wars.** Consider the total universe of credits earned by bachelor's degree recipients. Which six courses account for the highest percentages of those earned credits?

Our undergraduates are no longer required to study, learn or know anything about Western civilization. Instead, they can study all kinds of bizarre, contrarian and frivolous material to satisfy requirements for degrees. Certainly, then, the end of civilization is nigh! How do we know this? We saw it first in a cleverly marketed volume published in 1987, Alan Bloom's *The Closing of the American Mind*, basically a collection of anecdotes from what Bloom called "serious universities," and on which he meditated in a dark collection of diatribes. Serious universities. Places like Berkeley and Chicago. America's editors loved this show: if Mount Sinai draws the crowds, a debunking of Mount Sinai will always play well, too. There are two kinds of stories in *People* magazine, and one of them is the dark side of glitz. We also learned about the skewing of the curricular compass in higher education from a former National Endowment for the Humanities chair who told us, with shock and outrage, that it was possible for Harvard students to fulfill distribution requirements with a course entitled, "Tuberculosis, 1842-1952," presumably offering biostatistics wrapped around a case study. That's hardly a harbinger of the decline of civilization as we know it!

Where do such ideas originate? From the catalogues of elite colleges—what Boston University Chancellor John Silber called higher education's most significant contribution to American fiction—and from stories drawn from a smattering of classrooms at the same schools.

My point here is what we do *not* know because public opinion is based on the experience of elite institutions. For no matter what those catalogues say, it is students' choice of courses in all our institutions that creates an

*empirical* core curriculum. The most revealing route to appreciation of that curriculum is through the lens of credit ratios. Using this model, all credits that a cohort of students earns add up to 100 percent. If we take each of 1,000 course categories and ask its share of the total credits earned, then display the 20-25 courses with the highest percentage of credits, we have a *de facto* core curriculum. Given 1,000 course categories, for any one category to register even 0.5 percent of *all* credits earned by a cohort of students is to claim a large share of generational academic time.

A simple way to look at this phenomenon is to consider only students who have earned bachelor's degrees, therefore accumulated at least 120 credits. What do we see? First, the core's share of total academic time remained in the 31 percent range. Second, there are no garbage courses in the top 25.

The top six are English comp, introductory economics, calculus, general chemistry, general psych, introductory accounting and general biology. If one continued the list, there would be no doubt that the top 25 became less cultural and more quantitative in the 1980s and early '90s: we lost in literature and the arts, and gained in mathematics and business. Generally speaking, the major Western languages and the history surveys (U.S. and world) held their ground. Seven courses fell out of the top 25 between the two cohorts, but they did not fall far. The aggregate for music performance courses fell to 26th place in the High School & Beyond sample, art history courses to 27th, general literature to 28th, student teaching to 29th, and organic chemistry to 30th, for example. Not only were these seven replaced by college-level mathematics and computer programming, but categories such as introductory and advanced accounting and statistics moved up in ranking, reflecting increased emphasis on numeracy.

Do you hear this from any of the critics or defenders of the catalogue-based images of higher education that

are flashed through the Culture Wars? Of course not! Little of it takes place in what Bloom called "serious universities." But do the top 25 change by selectivity of the bachelor's degree-granting institution? Certainly, particularly as most engineering majors are found in selective and highly selective schools, and most education and allied health majors in non-selective colleges. Do the top 25 lists differ by gender and race? More by gender, and that's not surprising. By race/ethnicity, not radically. The core-of-the-core remains among all categories of students: English composition, college-level mathematics, basic lab science, history, Spanish.

More specifically, white, black, and Latino college graduates share 23 of the 25 empirical core curriculum courses in common. Asian-American students share 20 of the 25 courses in common with their peers. Of the five unique to Asian-Americans, four are driven by the fact that this group is overrepresented among engineering majors. Of the courses not held in common, three are subject to cultural content designation: African-American studies for black students, advanced Spanish and Spanish literature courses for Latino students, and art history for Asian-American students. The first two of these are common-sensical; the third may be idiosyncratic to its cohort.

The polemics of faculty senate arguments that spill over onto the op-ed pages leave the impression that students are overloaded with pop culture, ethnic studies and victimology courses instead of Shakespeare. Actually, as we have observed of the empirical core, if students are on overload with anything, it's business and mathematics. But let us illustrate some of the boundaries that empirical transcript data establish for these arguments.

The table below, based on the percentage of students who completed courses (not credit ratios), zeros in on some of the contentious course categories and contrasts them with both the truly dominant curriculum and selected outposts.

### PARTICIPATION RATE FOR ALL STUDENTS WHO EARNED MORE THAN 10 CREDITS

	1972-84 Cohort	1982-93 Cohort
Accounting: Intro	20.7%	30.2%
Business Law	15.8	21.7
Management: Intro	13.7	20.1
Anthropology:		
General	10.7	7.0
Cultural	7.5	6.3
Physical	2.5	1.8
Ethics (Philosophy)	6.6	8.6
Shakespeare	3.8	3.6
Spanish:		
Intro & Intermediate	12.3	13.3
Aerobics, Jogging, etc.	9.8	9.1
African-American History	1.4	0.7
African-American Literature	0.9	0.7
Sociology of Race	3.1	2.1
Science Fiction, Fantasy	1.1	1.3
Literature & Film	0.5	1.0
Pop/Rock Music	0.6	1.3

*Note: Participation rates for all students who earned more than 10 credits in any combination of institution.*

The premier outpost is the category of aerobics, jogging and bodybuilding. The participation rate in this category dwarfs the rates of participation in any of the course categories for ethnic studies or popular culture. Furthermore, student participation rate in aerobics virtually doubled between the cohorts to roughly one out of five undergraduates. That is more than 20 times the participation rate in African-American history or literature, and nearly 20 times the participation rate in the various popular culture course categories that most set the critics of the academy aglow with St. Elmo's fire.

In the interests of full disclosure, some of these comparisons are somewhat deceiving. I am classifying material based on the myriad course titles reflected in nearly 1 million entries on the national transcript samples. In courses that cannot be classified with distinct cultural labels, e.g. Introduction to Poetry, Heroes

and Heroism, Social Theory, Political Behavior, U.S. Intellectual History, only the syllabus can tell the story of the changing canon (if, in fact, the canon has changed). Both Shakespeare and rap can be taught in Introduction to Poetry. We have no systematic way of painting a national portrait of the content of such courses, particularly when over 2,000 institutions (and an indeterminable number of faculty) are represented.

But if we have no systematic way of determining the content of courses with generalized titles, neither do critics. The complaints we hear, or the counter-claims we read, are based on anecdotal, fragmentary mythology.

It turns out—and you will never learn this from those carping about class discussions at “serious universities”—that we can move beyond the few anecdotes and consult national faculty surveys that include questions relevant to the Culture Wars.

The surveys are conducted by the Cooperative Institutional Research Project at the University of California at Los Angeles. The data are proprietary, but I asked William Korn of UCLA the following question:

*In 1989, 1995 and 1998, you asked faculty whether they included material on race/ethnicity in most or all of their courses. What percentage did so by broad disciplinary area and in each of those surveys?*

The most significant increases in the inclusion of such material, it turns out, occurred between 1989-1995. Since then, the trend lines have flattened. The highest percentages occur where one would expect, but the proportions are hardly overwhelming. In 1998, 36 percent of humanities faculty, 28 percent of social sciences faculty, and 20 percent of education faculty reported including material on race/ethnicity in most or all of their courses. No one else came close to even those modest numbers.

Indeed, there are areas in which there is definite deficit in attention to race/ethnicity issues, even by the most neutral of Culture War standards, e.g., health sciences & services, business, fine & performing arts and education.



As Margaret Matlock at the University of Michigan has observed, we cannot deliver quality health care unless our future health service professionals understand culturally seated concepts of wellness, disease and health.

Summary: there is rich knowledge to be had about the stuff of higher education—what students study, what they learn and what they bring to the economy and society. This knowledge should dominate the public information flow. But it doesn't. It doesn't

THE MESSAGE THAT  
DOMINATES THE MEDIA  
IS THAT IF YOU ATTEND  
ONE OF OUR MIDAS TOUCH  
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HAVE A WONDERFUL LIFE,  
AND IF YOU DON'T, YOU WON'T.

because: a) stories emanating from elite institutions carry a magnetism for those who control the flow of information; b) both sides of the Culture Wars have raised anecdote to the level of highest authority; and c) to both sides of the Culture Wars, culture is all that should matter to students, colleges and communities. The word “purblind” too easily comes to mind.

**What's It All About?** In every society, some people live extraordinary lives. They have talents, skills and determination. They possess innate beauty or acquired knowledge or high tolerance for risk. They will succeed

in ways that society regards as beyond the norm. The public information flow places these extraordinary people before us so regularly that we come to assume, against our better judgment and common sense, that their talents, skills, beauty and determination are, in fact, norms. To the extent to which we canonize those norms as cultural ideals and judge ourselves, our families, our friends, students, colleagues and institutions by those norms, we face enormous risks, because the public and public policymakers will impose those norms and judge us by them. It is a situation fraught with extreme social and economic tension and inevitable disappointment.

Our national perception of affirmative action, for example, is drawn from both litigation involving law and medical schools (hence, with students who are already at the right tail of attainment in our education system) and from William Bowen and Derek Bok's 1998 account of the benefits of affirmative action for African-Americans at 28 selective institutions in *The Shape of the River*. I reviewed Bowen and Bok's book in the Jan./Feb. 1999 issue of *University Business* magazine under the title, “The Rest of the River.” That title alone reveals how my analysis dovetails with my premise about “Putting on the Glitz.” After all, 85 percent of minority students—along with 85 percent of everybody else—will never attend the kind of schools that served Bowen and Bok's analysis. Stanford is not about to double the size of its entering freshman classes and fill its

seats with minority students, and Princeton is not about to start accepting 100 community college transfer students every year (which would triple or quadruple the Latino presence at that institution). There is inevitable disappointment if the message that dominates the media is that if you attend one of our Midas Touch institutions, you will have a wonderful life, and if you don't, you won't. To say the least, this is neither a wise nor kind message, particularly for minority students. If we are truly committed to the advancement of minority populations in this country, we've got to work hard with the rest of the river.

I started reflecting on this after an appearance on "20-20" in 1992. The Education Department had published a monograph of mine entitled *Women at Thirtysomething: Paradoxes of Attainment*. A felicitous title: the study was published the week they took "Thirtysomething" off the air. The monograph used the grandmother of the Education Department's longitudinal studies to demonstrate exactly

what the title says: despite their stunning success in education, women continue to experience what I called "the anvil of the labor market."

Despite higher graduation rates, higher GPAs (and in individual courses, including Calculus), faster times-to-degree, etc., women's achievement was rarely rewarded in any sphere of occupational life.

The producer of the "20-20" segment came to my office with a camera crew and taped for about three hours, during which I used the sound-bite, "we're talking about glass walls more than glass ceilings," and hoped that the segment would include the testimony of three or four typical working women in their thirties to demonstrate just how the whole unfortunate employment and earnings game was playing out at the time. Instead, the producers chose two women at the pinnacle of elite professions (medicine and law), graduates of elite universities (Stanford and Penn), and making six-figure salaries with a first digit greater than one. The glass walls were

never mentioned. The only glass ceiling that made it to your living room at the time was the ceiling to the penthouse.

But you and I do not live in the penthouse. It is off limits not only to us, but to most of our colleagues, neighbors, children and students. So resist—indeed ignore—accounts of higher education that originate in the penthouse and that are controlled by those who live at such rarefied altitudes. We will know more, and more truthfully, and know how to address our problems better by avoiding the temptation to put on the glitz.

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*Clifford Adelman is a senior research analyst with the U.S. Department of Education. This article is adapted from remarks Adelman delivered in November 2000 as part of the University of New Hampshire's Saul O Sidore Memorial Lectures sponsored by the Sidore Foundation and the UNH Center for the Humanities. His remarks do not reflect the opinions or policies of the U.S. Department of Education.*



# Of Pines and Pixels

## Distance Learning and Forestry in New England

CHARLES H.W. FOSTER  
AND EDMUND T. CRANCH

In December 1999, a unique educational initiative came into being, the product of collaboration between the New England Governors' Conference, the Cambridge, Mass.-based Lincoln Institute of Land Policy and the U.S. Forest Service. Called ENFOR for "environmental forestry," the project's intent has been to explore whether distance learning via home computer could be used to improve management of New England's 700,000 privately owned, nonindustrial forestlands. Private owners of all kinds control 96 percent of the region's total forest resource.

Although all six New England states have active forestry assistance and incentive programs, most are aimed at owners of more than 10 acres of forestland, since these larger tracts seem to lend themselves more readily to professional management.

The target of the ENFOR initiative has been small forests, especially those located in New England's urbanizing areas. Small forests—nine acres or less—represent two-thirds of New England's privately owned, nonindustrial forestlands. Though they are growing steadily in number due to fragmentation from development and turnover in ownership, these small woodlands tend to fall between the cracks of conventional assistance programs.

Urban emigres, often the owners of forestland more by the accident of a real estate transaction than by deliberate intent, need special services to compensate for their fundamental lack of awareness of forests and forestry. On the most practical level, the urban landowners may be unaware, for example, that they could qualify for a substantial reduction in local property taxes if they commit to long-term, professional planning and management of the forest property. These forestland owners, many of them young, relatively affluent and technologically savvy, appear well-suited for learning at home via computer.

With an advisory board that is a virtual *Who's Who* of New England forestry and educational leadership, ENFOR began assembling an accurate profile of the region's nonindustrial private forestland owners. From this profile, ENFOR learned that the owners of small forest tracts have diverse backgrounds, occupations and interests. They are likely to be in middle- to upper-income brackets and they own forestland simply because it is part of their home. Aesthetics and recreation, rather than income, seem to be their prime motivations.

Meanwhile, census data suggest that more than one in three U.S. households had a computer at home as of October 1997, and the proportion has presumably grown significantly since then.

### Surveying the Land

With the help of cooperating forestry organizations and agencies in the six New England states, ENFOR in the spring of 2000 began canvassing forest landowners to determine their interest in distance learning services. Nearly 10 percent of the 6,000 owners surveyed responded. Respondents seemed hungry for information on all eight of the topics ENFOR asked about: forest improvement, ecology, wildlife, water, recreation, income, protection for the future and available programs. Two out of three respondents said they would be willing to pay for such services. Four out of five reported having already done some forest management or "woodscaping" (aesthetic improvement) on their property. All in all, the results suggested that these landown-

ers would promptly put into practice advice obtained by computer.

ENFOR next asked its Internet advisor, James N. Levitt of Harvard's Kennedy School of Government, to arrange for a survey of existing forestry distance learning sites both in New England and elsewhere. Of 66 sites examined in the United States and Canada, 31 offered either online courses for credit or courses with online components relating to forestry or forest environment. Two Northeast course sites—the University of Moncton's NTIC program and the University of Maine's Yankee Woodlot program—seemed relevant to ENFOR's aims and objectives, but both programs are oriented primarily toward *rural* landowners.

### Planting a Seed

With these findings in hand—and the support of several regional organizations and institutions—ENFOR in May 2000 convened a New England colloquy on distance learning and the forest environment. Participants included forestry officials, forestry

educators and woodland owners from each of the New England states. The consensus was that ENFOR should move swiftly to develop and try out one or more forest environment distance learning courses.

With help from Brian Donahue, a Brandeis University environmental historian and founder of Land's Sake, a Weston, Mass.-based agricultural and forest management nonprofit, ENFOR created an introductory forest environment course for the home computer. Framed as a simulated, half-hour walk through a suburban New England woodlot, the course emphasizes the need to fully understand forest processes and linkages, and encourages active, private stewardship by the landowner. The course is expected to be offered to the public early next year, first through the Lincoln Institute's Lincoln Education On-line (LEO) and later via a network of cooperating websites throughout New England.

A second, more advanced course, Working With Your Woodland, is being developed by Charles Thompson of the New England Forestry Foundation

in cooperation with ENFOR. The course will provide interested landowners with additional opportunities to learn about forest principles and practices and to locate sources of technical and financial assistance to support their own management activities.

An important related initiative took shape in May 2000. With encouragement from ENFOR, Vermont Extension Forester Thom McEvoy developed a proposal for a \$2.3 million regional center for developing, forest environment courses. The state foresters of New England and others are now actively seeking public and private funds to create this first-of-a-kind course development facility to be located at the University of Vermont.

McEvoy envisions courses and services that are easy to use, amenable to either broadband or conventional Internet access, coupled with streaming audio and video and capable of archiving information specific to a particular woodland site. So an individual woodland owner, like the owner of shares in a mutual fund,

would be able to assemble a "portfolio" of information on soils, water, vegetation and wildlife specific to the individual forest property that could then serve as an ecological umbrella for the landowner's future activities as a citizen-scientist land manager.

Course topics may be tailored to individual needs and accessed at the owner's convenience. Further, the center will host expert chat sessions, offer quarterly video conferencing opportunities and thereby strive to build a sense of community among forests and forest owners.

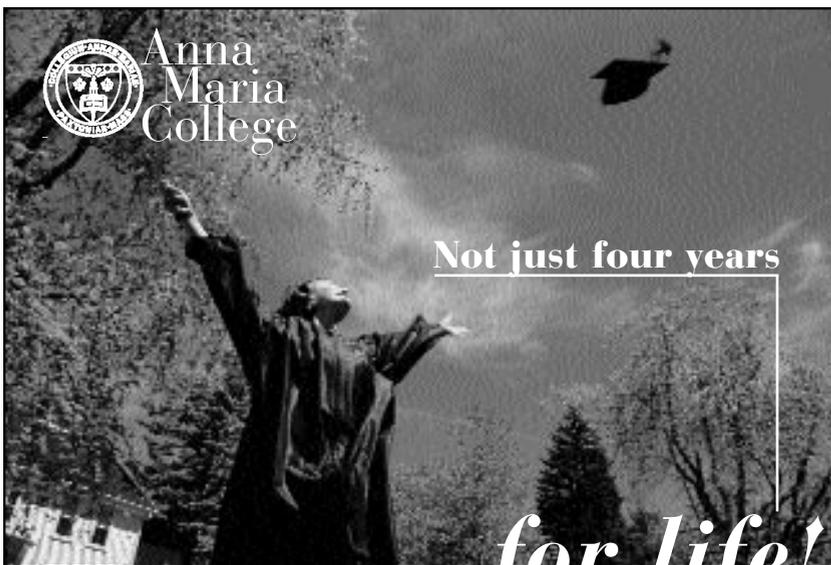
Online topics will range from conventional biological, ecological and management functions of the forest to practical information on master planning, laws, contracts, taxation, harvesting and estate planning. In keeping the broad view of the forest as both a physical and a cultural environment, courses also will be offered in forest history, forest policy, folklore, literature, art and music.

ENFOR provides an emerging model of how technology-assisted collaborative programs can reach con-

stituencies who traditionally have not accessed formal professional degree programs. Moreover, thanks to the miracle of modern computers, forests and their products can now be measured, monitored, marked, managed and marketed with a precision unimaginable merely decades ago. And with the help of new distance learning techniques, the owners of these lands may soon constitute an interlinked network of forest-wise citizens equipped to handle the looming decisions that will determine the future of New England's important forest heritage.

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**Charles H.W. Foster** is chair of ENFOR. He is an adjunct lecturer at Harvard University's John F. Kennedy School of Government, former dean of the Yale University School of Forestry & Environmental Studies and former Massachusetts secretary of environmental affairs. **Edmund T. Cranch** is an ENFOR board member, president emeritus of Worcester Polytechnic Institute and former dean of engineering at Cornell University.



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# Seven Myths about Online Colleges: A View from Inside

ROBERT V. ANTONUCCI

In the 21st century, the Internet can offer an expansion in access to education comparable to that made possible by the land-grant colleges of the 19th century and the financial aid programs of the 20th century. Universities and colleges recognize this, which is why so many of them are moving online: Merrill Lynch estimates that the market for online higher education in the United States will grow from \$1.2 billion in 1999 to \$7 billion in 2003.

Still, the Internet's ascendancy in higher education has generated as much controversy as enthusiasm. And it has spawned myths. Most of these myths revolve around the purported inadequacies of online learning, the limits imposed by for-profit ventures and the damage that virtual colleges will do to their traditional counterparts.

## **Myth #1: Virtual colleges will harm bricks and mortar schools.**

Rather than falling behind, traditional colleges are leading the charge online: about half of all colleges now offer their students online alternatives, and that number is likely to grow sharply in coming years. In fact, some online-only colleges could fall by the wayside, much in the way that "pure play" online retailers are failing as established businesses open virtual storefronts.

Online colleges actually are more likely to complement, rather than compete with, traditional universities. Online colleges typically draw older students who already have decided not to attend traditional schools

because of job or family responsibilities, lack of access to a nearby college or disability.

By providing these "nontraditional" students with access to higher education, online institutions will expand the pool of students pursuing degrees, some of whom will opt for traditional schools after beginning college online. Online universities will provide additional opportunity and flexibility for members of the academic community. And as more students pursue postsecondary degrees, higher education generally will benefit from the widened public support for learning.

## **Myth #2: Online colleges lack libraries and other resources.**

The charge is that online colleges, because they exist essentially in cyberspace, cannot offer students the same level of services and resources as colleges with a full complement of offices, libraries and other facilities. But the services that colleges offer—counseling, academic advising, career guidance, skills assessment and learning assistance—can be provided just as easily via the Internet. In fact,

online students fare better than their offline counterparts who may stand in long lines to register for courses or buy textbooks.

Moreover, resources such as libraries and databases can be stored and delivered online. Harcourt Higher Education sells textbooks online and has created one of the largest online reference libraries in the world. Books that are not available online are provided under a lending agreement with Endicott College in Beverly, Mass.



## **Myth #3: The lack of a classroom compromises learning.**

It's not classrooms that matter in learning but the interactivity that classrooms promote. It is challenging, but not impossible, to simulate that classroom experience online through e-mail, instant messaging, discussion groups, chat rooms and other methods.

Online collaboration can replicate some of the stimulation students get from working on group projects. To meet the challenge of teaching health care online, Harcourt created "Middleboro," a virtual community in which students assume the roles of health-care providers and policymakers. The community has all the elements of a rural health system—including its own hospital, nursing



home, community health centers and public health department—and all the problems and conflicts too. The course presents public health issues and policy options, and students debate the course of action for the community based on its needs and political and geographic conditions.

“Middleboro” offers a paradigmatic change in learning, in which students learn by doing in an online environment. It provides a model for collaborative online learning, and its early success shows how the lack of classrooms won’t matter as a new generation of students who grew up with the Internet become comfortable with online exchanges.



#### **Myth #4: Teachers give students less attention online.**

Critics of distance learning contend that, without classrooms and offices, instructors at online colleges will pay less attention to students. But teaching and learning don’t take place only in class or during office hours. In fact, online learning will likely demand *more* instructional time and commitment than do conventional colleges. Courses designed for delivery online require considerable instructor involvement to simulate the interactivity of a classroom. Teachers will have to devote time to e-mails, monitoring of discussion groups and other contact with students.

Early experience at Harcourt has shown that teachers who undergo three weeks’ training in online teaching skills spend almost 50 percent more time working with their students than do instructors at offline schools. At the same time, the online instructors spend fewer hours commuting, serving on committees and pursuing research.

#### **Myth #5: Online courses lack rigor.**

Creating courses for online use is highly demanding. It requires an understanding of how online instruction differs from offline learning, the technical expertise to translate material online in an appropriate form and the ability to create the necessary interactivity.

At Harcourt, leading academics and practitioners in each field develop courses in concert with specialists who apply leading-edge research in how people learn online to the design of courses. For example, Harcourt developed business courses in cooperation with professors from Notre Dame, Carnegie Mellon, Rutgers and Clarkson. To help develop courses in information technology, we recruited chief information officers and other IT professionals from Fidelity Services, Telesuite Corp., Motorola, Mitre, NASA and PricewaterhouseCoopers. For health courses, we enlisted the help of professors of health care at the University of North Carolina, UCLA, the University of Michigan and the University of New Hampshire.

Each course undergoes rigorous, in-house peer review. Teachers have flexibility to modify course materials to reflect instructional needs. And every course is regularly reviewed and updated to ensure that its content is current.

#### **Myth #6: Online colleges are diploma mills.**

Diploma mills that award degrees while requiring little or no learning have been the bane of higher education ever since the college degree became a necessary workplace credential. Diploma mills are cropping up online as well. But there is no evidence that they are any more common online than off.

Students can protect themselves by investigating the quality of offerings at cyber-colleges and taking courses only from those that are licensed, preferably in states that have rigorous standards such as Massachusetts and California.

Reputable online colleges guard their good names jealously and encourage students who come across

diploma mills to report them to the Federal Trade Commission or state regulatory agencies. These authorities can take appropriate action against fraudulent colleges that sell worthless diplomas—whether online or offline.



#### **Myth #7: For-profit colleges sacrifice quality for profit.**

Most online-only colleges—as opposed to online divisions of traditional colleges—are for-profit entities, which makes them immediately suspect to those who fear that academic quality will be compromised in the quest for profit. Yet for-profit institutions earn profits *because* of their quality, not in spite of it, especially in highly competitive markets.

Online-only colleges earn their profits not by compromising on quality but from the savings associated with fewer administrative staff and fewer offices, dormitories and other physical facilities. By investing instead in technology, course development and a highly-trained faculty, online colleges can offer a learning experience of comparable quality at less cost, even while earning profits.

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**Robert V. Antonucci** is president of Harcourt Higher Education, a virtual college that offers degree programs and courses in business, information technology, health care and arts and sciences for adults. A division of Harcourt Inc., Harcourt Higher Education can be found online at [www.harcourthighered.com](http://www.harcourthighered.com).



PHOTO BY REBECCA DEANS.

# New England Futures

## Higher Education Prepares for Change

ELEANOR M. McMAHON

**R**ecognizing the changes occurring in American higher education, the Pew Charitable Trusts recently funded a proposal entitled the “Futures Project” to develop the policies and practices seen as essential to the effective evolution of the American system of higher education with particular emphasis on a more market-oriented and performance-oriented approach.

The proposal to Pew—prepared in large measure by Frank Newman, then president of the Education Commission of the States, and Kay McClenney, then vice president of the commission—aimed to develop new ways for academic and political leaders to prepare for a future sure to be marked by profound demographic changes, growing demand for more advanced workforce skills, rapid growth of technology and the emergence of new kinds of higher education providers including for-profit and nonprofit institutions as well as established institutions taking on new roles.

Specifically, the Futures Project aims to develop a fuller understanding of the changes occurring in higher education and institutions’ responses

to date, a clear picture of how well institutional and political leaders understand these changes and their consequences, and a statement as to what states will need from higher education over the next decade. The project also will convene political and academic leaders to focus on the nature of the problems facing higher education, policies that work and the development of regular mechanisms for ongoing planning. Finally, the project seeks to deliver new policies to govern a more complicated higher education system while preserving such essential elements as broad access.

When Newman joined Brown University’s Taubman Center for Public Policy as a visiting professor, the project went with him.

The Futures Project may learn a great deal from a study by the former California Higher Education Policy Center, now the National Center for Public Policy and Higher Education, in which detailed case studies focused on seven large and diverse higher education systems (California,

Florida, Georgia, Illinois, Michigan, New York and Texas). The National Center identified major challenges, which over the past 20 years have had serious impacts on colleges and universities.

The first challenge to higher education is to close the gap between rich and poor by ensuring that human talent is developed across socioeconomic classes.

A second challenge is the increase in enrollment as the nation's high school graduating classes grow dramatically at least through the year 2008. A third is that just as student numbers are increasing, higher education's resources are shrinking because of public resistance to tuition increases and escalating competition for federal and state funds from services such as public schools, health services, welfare and corrections. As a result, consensus on financial support has eroded. In the 1980s and '90s, the United States drifted into a policy of heavy reliance on student debt to pay for college. So while the economy demands more and better educated citizens, public policies make paying for higher education more difficult.

A fourth challenge is quality. Those who know higher education best are increasingly critical of how well it works. Public policy must include responsibility for seeing that higher education performance meets public needs and for recognizing and supporting quality assurance mechanisms.

Finally, a fifth challenge is the powerful but unpredictable impact of information technologies. Technology has already revolutionized research and has had a major impact on higher education administration.

The central question now is how technology will affect the quality and accessibility of instruction on and off campus. Technology also has stimulated greater competition in the entry of new providers of higher education and threatened the efficacy and relevance of many policies predicated upon geography, such as institutional service areas, regional accreditation and, some would suggest, state boundaries themselves.

## **New England's Response**

In New England, a number of initiatives by the New England Board of Higher Education (NEBHE) respond to the challenges identified by the National Center.

For example, by aiming to increase the participation and success of underrepresented minority students at all levels of education, the NEBHE Excellence Through Diversity initiative responds to the challenge of reducing social stratification. The program's Science, Engineering and Mathematics Support Network, which meets each year at the Massachusetts Institute of Technology, involves more than 300 minority high school and college students and more than 150 professionals from business and academia who serve as advisors and mentors to network students. This NEBHE initiative also helps students obtain summer internships at businesses, campuses and government laboratories and notifies students of fellowship competitions, conferences and other academic and career enrichment opportunities. All six New England states have established state networks serving more than 5,000 students since 1990. In addition, NEBHE has collaborated with the Western Interstate Commission on Higher Education and the Southern Regional Education Board to support a national doctoral scholars program.

As to the National Center challenge of increasing enrollments and decreasing financial resources, the NEBHE Regional Student Program (RSP) has been extraordinarily responsive. The RSP enables New England residents to pay significantly reduced tuition at out-of-state public colleges and universities within the six-state New England region if they pursue certain degree programs not offered by their home-state public institutions. Since its inception in the 1950s, the program has provided thousands of New England students with major savings on more than 150,000 annual tuition bills. In academic year 1999-2000 alone, nearly 7,500 New Englanders saved an average of \$5,000 each in tuition costs under the

RSP for a total of more than \$37 million. The RSP also saves taxpayers millions of dollars by helping the six New England states avoid costly duplication of academic programs at their public campuses. In 1999-2000, the overall benefit of the RSP to the six New England states and their residents is estimated to have exceeded \$62 million.

During academic year 1999-2000, nearly 48 percent of RSP students were enrolled at two-year institutions, while nearly 42 percent were enrolled at four-year institutions, and 10 percent were enrolled in graduate programs. Literally hundreds of programs are offered through the RSP by 78 public colleges and universities. Recent additions include a bachelor's degree program in physiology and neurobiology at the University of Connecticut, a master's program in economic and social development at the University of Massachusetts Lowell, and a doctoral program in marine biology at the University of Maine.

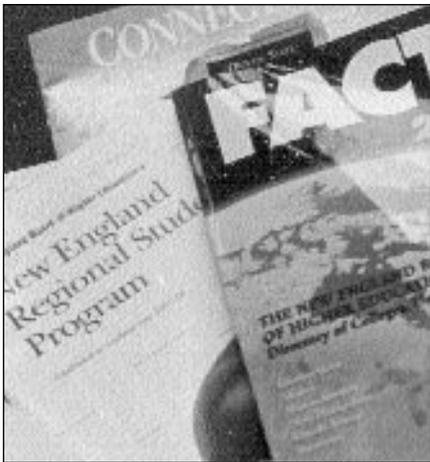
A NEBHE survey on the occasion of the program's 40th anniversary revealed that many RSP participants were first-generation college students neither of whose parents had attained a bachelor's degree. More than half of the RSP students who identified themselves as first-generation reported family incomes of \$50,000 or less. Further, many of the RSP students were pursuing college degrees to prepare them for careers in fields such as environmental science and policy, allied health and medicine, and business and engineering.

## **One Region**

In response to the challenge of new technologies, NEBHE has encouraged a regionwide perspective in the area of educational telecommunications and distance learning by sponsoring a series of conferences on topics such as higher education in the virtual era, computer-use policies in the virtual era and distance desktop learning.

NEBHE's New England Technology Education Partnership (NETEP) has examined the status of technical training programs on New England campuses and helped institutions respond to increased demand for cur-

ricula in cutting-edge fields. In 1995, NEBHE received a National Science Foundation (NSF) grant to prepare high school teachers and college faculty to introduce fiber optics technology curriculum into existing programs. Through this Fiber Optics Technology Education Project (FOTEP), principal and co-principal investigators provided technical assistance to teachers and faculty from more than 40 New England schools and colleges. FOTEP workshops brought together high school and college faculty in an effort to encourage collaboration and program articulation between the two levels.



By the end of academic year 1998, 1,844 students had attended classes that introduced fiber optics concepts. This represented an increase of 80 percent in the period 1996-1998. Over the 30 months in which the program operated, a total of 4,193 students attended classes on fiber optics concepts taught by FOTEP instructors. These programs of study have been in the general categories of electronics, telecommunications, computer and engineering technologies and physics. The FOTEP initiative laid the groundwork for NEBHE's new NSF-funded PHOTON project. In 2000, NEBHE received a three-year, \$495,000 NSF grant to provide professional development and laboratory equipment to teachers, faculty and career and guidance counselors in middle, secondary and postsecondary institutions in New England in the rapidly growing field of photonics (light) technology.

The NSF-funded AQUA initiative, which began in August 1997, provided aquaculture-related curriculum and professional development for more than 50 educators from more than 40 New England middle schools, secondary schools and postsecondary institutions. Participating institutions have received equipment to install aquaculture recirculating systems in their classrooms and the principal investigators and aquaculture specialists have been providing technical assistance to educators for the successful implementation of their aquaculture education programs.

In 1994-1995, NEBHE's Regional Telecommunications and Distance Learning Project conducted a survey indicating that collaboration on distance learning among New England colleges and universities was essentially nonexistent. However, this is changing as pressure builds to adopt modern technologies while financial constraints worsen.

Typically, collaboration between schools begins in professional disciplines such as engineering and nursing. By way of illustration, the University of Massachusetts campuses at Amherst, Lowell and Dartmouth are collaborating on bringing electrical engineering courses to UMass Boston through distance learning. A second area of collaboration is emerging between elementary schools and community colleges and between two-year community colleges and four-year colleges. Bristol Community College and Cape Cod Community College, for example, have created a local distance learning network linking them with a number of K-12 schools as well as industry. Despite these collaborative activities, New England as a region has been found to lag behind other regions in the United States in collaborative distance learning efforts.

Importantly, NEBHE also operates a variety of highly regarded programs for New England "opinion leaders" and practitioners. For example, since 1986, NEBHE has published CONNECTION, America's *only* regional journal on higher education and economic development. Read by approximately 12,000 leaders in education,

government, business and the non-profit sector, each issue of CONNECTION offers expert analysis and hard-hitting commentaries on topics such as workforce development, access to higher education, science policy, education funding, emerging industries and interstate regionalism. New England newspapers frequently reprint CONNECTION articles and report on issues advanced in the journal.

In addition, NEBHE conducts a variety of research initiatives, including an annual FACTS survey of the region's 280 colleges and universities, an annual Student Vacancy Survey and special issue-oriented research projects such as the 1999 *Future of New England Survey*, conducted in collaboration with the University of Massachusetts Boston, to illuminate New England priorities and inform regional policymaking.

NEBHE/CONNECTION conferences address a variety of topical issues. Most recently, in December, 60 New England movers and shakers gathered in Dedham, Mass., to explore trends in New England and recommend institutional and state policy responses. This unique New England regional summit was sponsored by NEBHE in cooperation with the Education Commission of the States and the Futures Project. The innovative summit format highlighted major changes impacting higher education in New England and the nation. It addressed a range of questions including: How real is the competition posed by virtual institutions? How deep an impact will new technologies have on teaching and learning? How can higher education provide all New Englanders with the skills demanded by the new economy?

These are the kinds of questions the region needs to keep on asking.

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*Eleanor M. McMahon is a distinguished professor at the Taubman Center for Public Policy and American Institutions at Brown University and a member of the Futures Project Advisory Committee. She is a former chair of the New England Board of Higher Education.*

# Regional Druggists

## Pharmacy Schools Seek Rx for Shortage

WENDY LINDSAY

It's flu season in New England and pharmacies are filling more prescriptions than ever—and with less help. The nation's third largest health profession is short about 4,500 professionals, and the shortage is expected to last for several more years. Not surprisingly, pharmacy schools are under pressure to produce more graduates.

How bad is the shortage? The *Hartford Courant* reports that some Connecticut drugstores have had to close during business hours to comply with state law prohibiting them from operating without a pharmacist on site. When drugstores are open, long waits are typical.

Prescription drug sales totaled nearly \$122 billion in 1999, up 18 percent from \$103 billion in 1998, according to the National Association of Chain Drug Stores. Prescriptions are projected to swell by 50 percent between 1999 and 2005, while the number of pharmacists grows just 6 percent from its current 129,000. Meanwhile, enrollment in pharmacy schools has been declining. The number of applicants to U.S. pharmacy schools dropped by a third from 1994 to 1999, according to a recent federal study initiated by U.S. Rep. Jim McGovern of Massachusetts.

Would-be pharmacists can choose from 82 pharmacy schools throughout the United States, which last year awarded 3,876 bachelor's degrees in pharmacy and 3,265 pharmacy doctorates. New England is home to four pharmacy colleges: two private schools, the Massachusetts College of Pharmacy and Allied Health Sciences and Northeastern University's Bouve College of Pharmacy and Health



PHOTO BY JOHN PETERSON

Sciences, and two state universities, the University of Connecticut and the University of Rhode Island.

The U.S. Department of Labor reports that the median income for pharmacists in 1998 was about \$66,000. But pharmacy is a tough field, restricted to students who are strong in science and mathematics and willing to commit to six years worth of study. (In the 1990s, pharmacy schools initiated a six-year doctor of pharmacy as the new standard, and began phasing out five-year bachelor's programs.) After earning their degrees, prospective pharmacists then must pass a state licensure exam.

At URI's pharmacy school, 2002 is the last year that students will graduate with a bachelor's in pharmacy; starting in 2004, all students will graduate with a new pharmacy doctorate. As institutions transition to doctoral programs during the next few years, they will see the number of pharmacy graduates temporarily decline. UConn's pharmacy school had no graduates this year.

But the future may be brightening for pharmacy. The Boston-based Massachusetts College of Pharmacy and Allied Health Sciences recently established a second campus in Worcester, which offers an intensive, three-year doctoral program for trans-

fer students with some college experience. And the University of New England in Biddeford, Maine, is among a handful of U.S. colleges now considering opening pharmacy schools. UConn is in the midst of building a \$61 million facility to house its pharmacy school, with expectations that the school will enroll 360 doctor of pharmacy students, 60 graduate students and employ 45 faculty members and 90 researchers. This year, UConn introduced nine-month internships for UConn's pharmacy doctoral candidates who worked in settings ranging from the Pfizer Corp. to Indian Health Services in Alaska. URI's pharmacy school offers interns clinical experience in Maine, Massachusetts, New Hampshire, Alaska and France.

"People often underestimate the career opportunities in pharmacy," says UConn pharmacy school Dean Michael Gerald. "They envision only pill counters." In fact, pharmacy-related careers encompass a wide range of jobs in regulation, administration, research and development, marketing and health services.

Which is not to say the corner druggist is not in demand. About three out of five pharmacists work in community pharmacies. "Automation is being considered as one way to address the shortage of pharmacists, but pharmacists still need to be on site to dispense medicine and to do consultations with customers," says Joan Lausier, the associate dean of URI's pharmacy school.

The cost of pursuing a pharmacy degree is considerable. Because pharmacy programs are expensive to operate, most impose a surcharge or fee over and above normal tuition. McGovern has suggested special aid programs be used to lure students into the field. Pharmacy students at both URI and UConn are charged the

undergraduate tuition rate, rather than the higher graduate rate. But UConn imposes a \$10,000 surcharge paid out during the last two years of the six-year program, and URI is considering charging a \$500 per semester fee starting in the third year.

As state universities, UConn and URI charge state residents an in-state tuition rate. Out-of-state students pay more than triple that amount, unless they are from another New England state, thanks to the New England Board of Higher Education's Regional Student Program (RSP). The program gives New England residents a tuition break when they pursue academic programs, like pharmacy, that are not offered by public institutions in their home state.

The RSP makes it possible for residents of Maine, Massachusetts, New Hampshire, and Vermont to pursue a pharmacy degree at the University of Connecticut or the University of Rhode Island while paying less than half of the regular out-of-state tuition rate. This year, RSP pharmacy students pay \$6,423 in tuition at UConn instead of the \$13,056 normally charged to out-of-state undergraduates, while RSP students at URI pay \$5,196 instead of \$11,906.

Maine, Massachusetts, New Hampshire and Vermont—which have never operated a pharmacy school as part of their public college systems—have benefited from participation in the RSP since 1957. Because the RSP provides their residents with afford-

able out-of-state study of pharmacy, the states have been able to avoid the expense of building and operating pharmacy schools in-state to meet the needs of their residents. What's that worth? At UConn, construction costs alone will amount to about \$60 million, while annual payroll will exceed \$5 million, according to Gerald. Add to that the costs of maintaining laboratories, library holdings and expensive contractual arrangements with hospitals and other clinical sites. Regional cooperation through the RSP offers some sugar to help that medicine go down.

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*Wendy Lindsay is associate director of regional services at the New England Board of Higher Education.*

## What, Health-Care Costs That Are Under Control? RSP Health Majors: 2000-01

**The New England Board of Higher Education's Regional Student Program (RSP) offers New England residents a substantial tuition break—worth \$5,000 a year on average—when they pursue majors that are not offered by their home-state public campuses. Plus, New England state governments save millions of dollars because they do not have to duplicate programs in fields such as pharmacy. Here is a sampling of health-related majors offered through the RSP...**

### Associate

Cardiovascular Technology  
 Clinical Laboratory Science  
 Complementary Health Care  
 Dental Laboratory Technology  
 Developmental Disabilities Aide  
 Diagnostic Medical Sonography  
 Drug and Alcohol Rehabilitation/  
 Substance Abuse Counselor  
 Emergency Health Care  
 Exercise Science  
 Gerontology  
 Health Science  
 Medical Assistant  
 Medical Record Technology

Mental Health  
 Myofascial Therapy  
 Nuclear Medicine Technology  
 Occupational Therapy Assistant  
 Ophthalmic Design and Dispensary  
 Ophthalmic Technician  
 Opticianry  
 Paramedic Studies  
 Pharmacy Technician  
 Physical Therapist Assistant  
 Radiation Therapy Technology  
 Respiratory Therapy and Care  
 Surgical Technology  
 Therapeutic Recreation

### Bachelor's

Community Health Education  
 Cytotechnology  
 Dental Hygiene  
 Diagnostic Genetic Sciences  
 Dietetics  
 Health Education  
 Health Management and Policy  
 Occupational Therapy  
 Pharmacy (6-year/Pharm.D)  
 Public and Community Health  
 Radiologic Technology  
 Rehabilitation Services  
 Sports Medicine  
 Therapeutic Recreation  
 Wellness and Alternative Medicine

### Master's

Allied Health  
 Applied Immunology  
 Audiology  
 Biology: Nurse Anesthesia  
 Biomedical Technologies  
 Clinical Laboratory Sciences  
 Dental Science  
 Forensic Nursing  
 Health Policy and Management  
 Health Services Administration  
 Medicinal Chemistry  
 Movement Science and Rehabilitation  
 Occupational Therapy  
 Pharmaceutical Science  
 Pharmacognosy  
 Pharmacology and Toxicology  
 Physical Therapy  
 Public Health

### Doctoral

Communication Disorders  
 Gerontology  
 Medicinal Chemistry  
 Nursing  
 Pharmaceutical Science/ Pharmaceutics  
 Pharmacognosy  
 Pharmacology and Toxicology  
 Public Health

### First-Professional

Dental Medicine  
 Medicine  
 Pharmacy

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- \_\_\_ **FACTS 1989**  
*Fall 1988, Vol. III, No. 3*
- \_\_\_ **Minority Access and Retention**  
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- \_\_\_ **Confronting Illiteracy**  
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- \_\_\_ **The Future of New England**  
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- \_\_\_ **New England's Land Grant Universities**  
*Summer/Fall 1987, Vol. II, No. 2*
- \_\_\_ **New England's Growing Ties to Canada**  
*Spring/Summer 1987, Vol. II, No. 1*
- \_\_\_ **New England in a World Economy**  
*Winter/Spring 1987, Vol. I, No. 4*
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*Fall 1986, Vol. I, No. 3*
- \_\_\_ **Is There a Student Loan Crisis?**  
*Summer 1986, Vol. I, No. 2*
- \_\_\_ **Our Evolving Technocracy**  
*Spring 1986, Vol. I, No. 1*

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# BOOKS

## Test Culture

Alan R. Earls

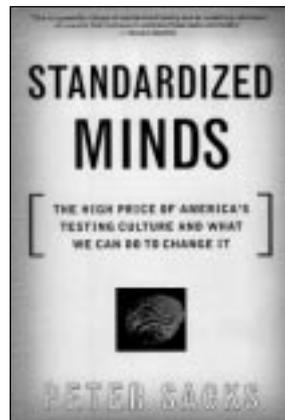
*Standardized Minds: The High Price of America's Testing Culture and What We Can Do To Change It*, Peter Sacks, Perseus Books, 2000, \$17.50

There is much to like and much that is familiar in *Standardized Minds*, a polemical swipe at just about every type of standardized test ever devised. Sacks, a self-described journalist and essayist, makes a compelling case that the history of standardized tests is one of thinly disguised efforts to legitimize elites. From the 19th century Social Darwinists to the early 20th century work of Alfred Binet (the Frenchman whose name later graced the Stanford-Binet IQ tests), the early days of testing seem, in the light of today, to be reprehensible for their narrow concept of what constitutes intelligence. Unfortunately, in the end, Sacks doesn't do enough to show that the alternatives he proposes would be fairer.

Sacks is so certain that testing is all more or less bunk that he says having parents who drive a Volvo is a better predictor of college and life success than scores on standardized tests. But observations like these offer little help in more fairly providing access to college.

Sacks marshals considerable anecdotal evidence pointing to test results that seem to be disconnected from reality. For instance, he cites the case of Nancy Schneing, a Fulbright

Scholar and experienced technical communication consultant with a doctorate in physics from MIT, who was locked out of public school teaching in Massachusetts because she failed the reading section of the controversial Massachusetts Educator Certification Test. Sacks also tells of individuals who made a success of life despite being effectively excluded from higher education by standardized tests, thereby seeming to confound the very point of such tests.



Though Sacks doesn't mention the controversial MCAS test in Massachusetts or other specific testing regimes in New England, he does examine testing problems in other test-obsessed regions. Tacoma, Wash., for instance, hired a test-happy public school superintendent and got a startling rise in test scores, the result, according to Sacks, of the all-too-common tendency to "teach to a test." Moreover, once the temporary

stimulus of achieving the target scores in the first year was removed, Tacoma scores fell.

Then, there was the so-called Lake Wobegon study, named for Garrison Keillor's fictional town where "all the kids are above average." In the late 1980s, West Virginia physician John Jacob Cannell had grown concerned about a pattern he saw among his patients: children having problems with schoolwork but managing to score well on the state's standardized tests. West Virginia was proud of the fact that its third- and fifth-graders were scoring higher than 60 percent of their peers nationwide. But other measures of achievement didn't seem to match. Relatively few West Virginia students attended or completed college and per-capita income in the state was among the lowest in the nation. Cannell grew curious and looked at the tests. He found that 32 other states administering similar tests were also claiming "above the national average" scores—a bit of fuzzy math. The study Cannell launched was followed by a more rigorous RAND analysis that found many aspects of the testing system to be troubling and pseudoscientific.

"In a very real sense, public schools playing the test-score game is something of an educational fraud hoisted [sic] on taxpayers. True and lasting achievement is not likely to budge with quick fixes," writes Sacks.

Sacks provides valuable and accessible fodder for testing opponents. The book's jacket features praise from

within the New England region included Walter M. Haney, professor and senior research associate at the Center for the Study of Testing, Boston College, which focuses on how educational standards, assessments and tests can be used more fairly, and William C. Hiss, vice president for administration services at Bates College, one of the first prestigious colleges to drop the SAT as an admissions requirement.

The author's discussion of Bates is particularly interesting. The Lewiston, Maine, college began gravitating toward an SAT-free admissions policy after growing unease over how requiring high SAT scores fit with the institution's liberal-minded goals. Admissions officers then began to notice evidence that Bates was frightening off many capable students who simply couldn't deliver a combined score of 1200 or above. Furthermore, examination of student performance after admissions revealed that testing was not predictive for between one-quarter and one-third of those actually admitted.

What ultimately killed the testing requirement at Bates, Hiss told Sacks, was the suspicion that "we were throwing young people into the arms of Kaplan or the Princeton Review."

In 1984, Bates made SAT verbal and math scores optional for applicants, though it still required some SAT subject tests—and test scores were requested after admission for research purposes. The results bore out the hopes of Hiss and others: lower-scoring students who opted out of the SAT requirement fared just as well at Bates as those with higher scores who chose to submit them as part of the application process. Based on that evidence, Bates went fully test-optional in 1990, relying exclusively on grades and other measures to determine admissions.

Many readers will applaud this book. But like the tests Sacks condemns, his effort lacks fairness—and his solution seems incomplete. His contention that other less contrived means of assessing capabilities—success in school work, on special projects

or in outside life—are inherently superior ways of assessing individual potential is not fully developed. Nor are these measures shown to be less subject to the deliberate or inadvertent "slanting" found in tests.

Sacks cites the case of a group of students who were considered marginal college material yet succeeded in winning a competition to build an energy-efficient vehicle. While the achievement is laudable, like others he cites, it may or may not reflect an understanding of principles and ideas likely to count in more advanced studies, and it may or may not reflect a mastery of a specific body of knowledge. It could equally well be an indication of pedestrian thinking pursued with great energy or even the result of serendipity.

Standardized tests may be the problem, but *Standardized Minds* is not the whole solution.

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*Alan R. Earls is a freelance writer and frequent contributor to CONNECTION.*

## Virtual Economics

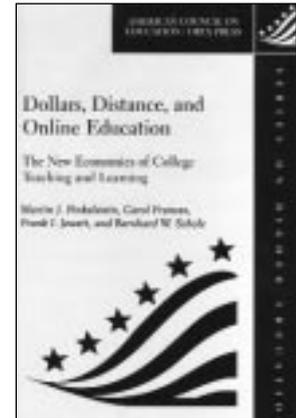
Joseph M. Cronin

*Dollars, Distance, and Online Education: The New Economics of College Teaching and Learning, Martin J. Finklestein, Carol Frances, Frank I. Jewett and Bernhard W. Scholz, The Oryx Press, 2000, \$39.95*

The December 2000 meeting of the New England Association of Schools and Colleges included a provocative panel titled: Paying for Technology: Sensible Investment or Spending Spree? That's a question governors, legislators and trustees should be asking as they consider whether online education will live up to its promise of saving hundreds of millions of dollars by avoiding new campus construction while expanding access to education for adult learners.

Unfortunately, distance education requires heavy startup investments.

This collection of 15 essays explains that most colleges lack a comprehensive technology plan, have not thought about the revised mission or new faculty roles, haven't worked out the intellectual property issues, and may not know how to contain costs while expanding productivity.



The essays on the costs of higher education technology represent a summary of progress on resolving these complex questions. The experience of Britain, Canada, Australia and the United States (but not New England) with both costs and benefits is examined. Although the revolution remains in an early stage, a few discoveries have emerged.

The worst way to proceed, the essays imply, is to add technology to conventional courses, keep the pilot project small and move very slowly—the usual approach to adopting expensive new tools. The evidence suggests that this strategy will cause faculty workloads and unit costs to increase dramatically without gaining productivity.

Economies flow from large-scale enterprises. The most dramatic decreases in costs have been achieved by the Open University of the United Kingdom and 10 other mega-universities around the world, each serving more than 100,000 students. Most of the economies of scale are achieved in the 25 most popular undergraduate courses, relying heavily on part-time instructors.

Budget analysts, whether on campus, in systems or working for elected

officials, will find the detailed case studies, cost equations, planning and accounting methodologies to be helpful. Campus academic officers also need this handbook.

The evidence to date suggests that the best tactics to produce economies in distance education are: outsourcing of software and platforms, collaboration with other colleges and universities (as in Connecticut), the unbundling of course development roles and redefinition of long-range expenditure and cost management plans. New England prides itself both on innovation and quality. All the more reason for absorbing the early lessons gleaned by technology pioneers elsewhere in the world.

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**Joseph M. Cronin** is president of *Edvisors Inc.* He is a former president of Bentley College and former secretary of educational affairs in Massachusetts. Cronin was also the founding executive director of the *International Center for Distance Learning in Boston.*

## K-12 Partnerships

Joseph M. Cronin

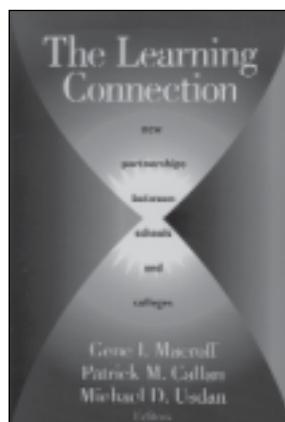
*The Learning Connection: New Partnerships Between Schools and Colleges*, Gene L. Maeroff, Patrick M. Callan and Michael D. Usdan, Teachers College Press, 2001, \$20.95

America's colleges and universities are the best in the world. Other nations send 500,000 students each year to the United States, more than 75,000 of those to New England schools. Yet our public schools have struggled to hold onto 20th place internationally, despite brave predictions a decade ago by then-President George H.W. Bush and Arkansas Gov. Bill Clinton that we might rank first by 2000. Japan, Korea, Singapore, and most Scandinavian nations beat us academically at the K-12 level.

As University of Pennsylvania Professor Ira Harkavy, director of

Penn's Center for Community Partnerships, asserts in *The Learning Connection*, "universities cannot afford to remain shores of affluence, self-importance, and horticultural beauty at the edge of seas of squalor, violence and despair."

So what have universities done to help reform schools or rebuild urban communities? This slim paperback describes efforts, most of them experimental and daring, to cross the pedagogical divide and commit higher education resources to poor schools and neighborhood renewal.



The book is skillfully edited by former *New York Times* editor Gene Maeroff, National Center for Public Policy and Higher Education President Pat Callan and former Connecticut Higher Education Commissioner Michael Usdan.

Twelve chapters by journalists at metropolitan daily newspapers recount how a dozen higher education institutions during the 1990s pledged resources to make a difference.

Examples: Twenty-two California State Universities committed to help 232 local high schools prepare students for the rigors of university studies. The University of Southern Colorado made the local school superintendent in Pueblo a university vice president to signal unity of purpose and the start of joint education ventures in the steel mill community. Penn's Center for Community Partnerships developed a model of faculty and student involvement in community problem-solving

and research that nine other universities have adopted.

The cases outlined in *The Learning Connection* range from school governance to equity initiatives to state standards, teacher development and community-building. The book features two well-known New England initiatives: Trinity College President Evan Dobbelle's marshaling of federal, foundation, city and private funds to build a Learning Corridor of schools, health facilities and youth service centers in a once dying Hartford neighborhood, and former Boston University President John Silber's bold offer to manage Chelsea, Mass., schools, resulting in seven new school buildings, expanded early childhood programs, an increase in SAT scores and student access to college. A longer book might have also included worthy New England examples from Providence, R.I., Worcester and Fitchburg, Mass., New London, Conn., and Boston.

In the 19th century, John Henry Newman urged universities to remain aloof, so scholars could criticize the imperfections of society. Today, there is strong support for the "engaged university," exemplified by the New England Board of Higher Education's 1999 *Future of New England* survey, which revealed that 86 percent of "opinion leaders" in government, business, education and the media want colleges to reach out to help improve the public schools.

In a concluding chapter, the editors suggest these fascinating examples might not be adaptable to settings where presidents are less charismatic and trustees less supportive. Shame on us in New England if we don't prove them wrong.

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**Joseph M. Cronin** is president of *Edvisors Inc.* He is a former president of Bentley College and former secretary of educational affairs in Massachusetts. Cronin was also the founding executive director of the *International Center for Distance Learning in Boston.*

**AMHERST, MASS.** — The University of Massachusetts Amherst and a group of partners including Springfield Technical Community College were awarded a two-year, \$600,000 grant from the National Science Foundation to identify technological strengths of the surrounding Pioneer Valley and develop strategies to attract new companies to the area. UMass officials noted that the project dovetails with an interstate effort to promote the Greater Hartford-Pioneer Valley area as a single market known as New England's Knowledge Corridor.

**SOUTH ROYALTON, VT.** — Vermont Law School received a three-year, \$300,000 grant from the William and Flora Hewlett Foundation of California to explore the relationship between government agencies and the businesses and citizens affected by their decisions. The program will examine constitutional or statutory prohibitions and restrictions on agencies' use of consensus processes and explore alternatives to "command and control" regulation in which legal requirements are set by federal agencies and firms are obligated to meet the standards.

**ORONO, MAINE** — Two University of Maine researchers were awarded a two-year, \$30,000 grant from the Sea Grant College Program to administer annual volunteer monitoring and technical assessment of changes at 10 Maine beaches. The grant also supports an annual State of Maine's Beaches conference to discuss the status of the beaches and ways to protect property values and recreation opportunities. Researchers hope to forge a cooperative approach to beach management between coastal communities and the state.

**BOSTON, MASS.** — Boston University's College of Communication was awarded \$1.2 million by the Knight Foundation to train editors and reporters to report on medical and scientific issues. The Science and Medical Journalism Center, set to open in fall 2001, will build on the college's master's program in science journalism. The center will also feature a visiting

scholar program, training for two international journalists each year and conferences bringing together editors and reporters with scientists, doctors and policymakers.

**DURHAM, N.H.** — The University of New Hampshire and New Hampshire Department of Health and Human Services initiated a program awarding full in-state tuition and other resources to five undergraduate social work students and three grad students who agree to work for the state Division of Children, Youth and Families one year for every year they receive the support. The state also provided UNH with funds to track the students' careers and develop a website focusing on the needs of child welfare workers.

**AMHERST, MASS.** — The University of Massachusetts Amherst was awarded a one-year, \$215,000 grant from the Nellie Mae Foundation to study how changes in education policy affect New England students, particularly minority and low-income students, as they move from K-12 through college. Using surveys and other tools, UMass researchers will study the effects of high-stakes tests such as the Massachusetts Comprehensive Assessment System exam and new curricular expectations at the K-12 level, as well as new admissions, financial aid and remedial education programs at the college level.

**NEW HAVEN, CONN.** — Yale University was awarded a four-year, \$4.6 million grant by the National Institute of Mental Health's Human Brain Project to help organize the enormous volumes of neuroscience research data being generated by scientists. As part of the project, a special database will allow researchers to deposit unpublished gene sequences and run searches to determine whether other similar sequences have been published.

**DURHAM, N.H.** — The University of New Hampshire was awarded a three-year, \$450,000 grant by the U.S. Department of Education's National Institute on Disability Rehabilitation

Research to help New England residents with spinal cord injuries make transitions back to their homes, jobs and communities. The program will provide wellness education, personalized fitness programs, accessibility training and other services for up to 80 people in Maine, Massachusetts, New Hampshire and Vermont.

**ORONO, MAINE** — Researchers from the University of Maine's Advanced Engineered Wood Composites Center were awarded a \$1.5 million grant from the Federal Highway Administration to study the effects of repeated highway loadings on the long-term durability of glue-laminated timber beams bolstered with fiber-reinforced polymer composites. Researchers will test beams under accelerated loads and various environmental conditions and refine a mathematical model to predict beam performance.

**BOSTON, MASS.** — Northeastern University and partners were awarded a five-year, \$16.2 million grant from the National Science Foundation to develop new technologies to detect and image objects and conditions underground, underwater, in manmade structures or embedded within living tissue. The research could lead to advances in medical imaging and sensors to detect underground pollution or hidden bridge damage. The Center for Subsurface Sensing and Imaging Systems brings together researchers from Northeastern, Boston University, Massachusetts General Hospital, Brigham and Women's Hospital and Woods Hole Oceanographic Institution, as well as Rensselaer Polytechnic Institute, the University of Puerto Rico at Mayaguez and Lawrence Livermore National Laboratory.

**HOLYOKE, MASS.** — A partnership between Holyoke Community College and Ukraine's Poltava Cooperative Institute was awarded a three-year, \$200,000 grant by the U.S. State Department to support one-month and full-semester exchanges between faculty and administrators of the two colleges. Drawing on the Learning Communities

model developed at Holyoke to teach seemingly disparate subjects together as a single discipline, participating faculty will restructure the Ukrainian institute's international economics and international management programs and design courses that integrate English with various business disciplines.

**WENHAM, MASS.** — Gordon College and Silliman University in the Philippines formally agreed to exchange faculty, staff, students and guest lecturers and to collaborate on course design, research initiatives and cultural programs. The two Christian colleges have already cooperated in marine biology programs with Gordon conducting field studies in the tropical waters of the Philippines.

**WATERVILLE, MAINE** — Thomas College and Boston-based Putnam Investments introduced a new work-study program and training center to be housed at Thomas College. Beginning in January, the mutual fund company will train and hire up to 45 Thomas students to work in a state-of-the-art, customer-service facility on the Thomas campus. Putnam also plans to use the facility to expand its popular program recruiting Maine residents to work from their homes using telecommunications in jobs ranging from customer service to management. Putnam began a similar relationship with Husson College last spring.

**NORTH DARTMOUTH, MASS.** — The University of Massachusetts Dartmouth and Southern New England School of Law unveiled a joint MBA/JD program allowing law students to earn a master's degree in business administration from the UMass Dartmouth business school, which is accredited by the AACSB. Students pay tuition and fees to both institutions, but the combined degree program allows some UMass courses to be taken in place of more expensive courses at the private law school and saves students one full semester of coursework.

**NEWTON, MASS.** — Lasell College was awarded a \$400,000 challenge grant from

the Kresge Foundation toward the \$2.7 million expansion and renovation of an old gymnasium and assembly hall building into a modern facility with seven high-technology classrooms, 13 faculty offices, and an atrium-style student lounge. Under terms of the grant, Lasell must raise \$1.5 million by July 1, 2001.

**NEW LONDON, N.H.** — Colby-Sawyer College received a \$1 million gift from retired Boston bank executive Harry W. Anderson to provide 20 new scholarships worth \$5,000 each. The college also received a \$1 million gift from 1948 graduate Natalie Davis Rooke and her husband Robert to buy and develop a 20-acre residential property adjacent to the campus, as well as \$1.1 million from 1941 graduate Ramona Wells Mercer and her husband William, a former trustee, to renovate the college's exercise and sports science center and create scholarships. Another \$1 million gift from a charitable remainder trust

established by Albert L. Gibney and his wife Jane will help establish an across-the-curriculum approach to speaking modeled on writing-across-the-curriculum programs. Colby-Sawyer last year adopted a plan to bolster financial aid, hire additional faculty and build new facilities as it attempts to increase enrollment from the current 850 to 1,000 by the end of the decade.

**WALTHAM, MASS.** — Brandeis University received a \$10 million gift from Seattle businessman and university trustee Samuel Stroum and his wife, Althea. Nearly half the gift will be used to endow 16 full-tuition, four-year scholarships allowing four new Waltham High School graduates to study at Brandeis each year. Stroum graduated from Waltham High in 1939. The gift will also create two endowed funds to support international business education and science and technology research.

# Online: Selected Websites

## Gender Equity

Advocates for Women in Science, Engineering & Mathematics, [www.awsem.com](http://www.awsem.com)

American Association of University Women, [www.aauw.org](http://www.aauw.org)

Association for Women in Computing, [www.awc-hq.org](http://www.awc-hq.org)

Association for Women in Mathematics, [www.awm-math.org](http://www.awm-math.org)

Association for Women in Science, [www.awis.org](http://www.awis.org)

Center for the Education of Women, [www.umich.edu/~cew](http://www.umich.edu/~cew)

Center for Women & Enterprise, [www.cweboston.org](http://www.cweboston.org)

Committee on the Status of Women in Astronomy, [www.aas.org/~cswa](http://www.aas.org/~cswa)

Equity Education Online, [www.etc.wednet.edu/equity](http://www.etc.wednet.edu/equity)

InGear: Integrating Gender Equity and Reform, [www2.gasou.edu/ingear](http://www2.gasou.edu/ingear)

Institute for Research on Women and Gender, [www.umich.edu/~irwg](http://www.umich.edu/~irwg)

Institute for Women in Technology, [www.iwt.org](http://www.iwt.org)

Institute for Women's Policy Research, [www.iwpr.org](http://www.iwpr.org)

National Association for Female Executives, [www.nafe.com](http://www.nafe.com)

New England Women Business Owners, [www.newbo.org](http://www.newbo.org)

Society of Women Engineers, [www.swe.org](http://www.swe.org)

Women in Business Connection, [www.wibconnection.org](http://www.wibconnection.org)

Women's Educational Equity Act Resource Center, [www.edc.org/WomensEquity](http://www.edc.org/WomensEquity)

## Higher Education Policy, Research, Advocacy

American Council on Education, [www.acenet.edu](http://www.acenet.edu)

Association of Independent Colleges and Universities in Massachusetts, [www.masscolleges.com](http://www.masscolleges.com)

The College Board, [www.collegeboard.org](http://www.collegeboard.org)

Connecticut Conference of Independent Colleges, [www.theccic.org](http://www.theccic.org)

Council of Graduate Schools, [www.cgsnet.org](http://www.cgsnet.org)

Council of Presidents of New England Land Grant Universities, [www.necop.org](http://www.necop.org)

The Education Resources Institute, [www.teri.org](http://www.teri.org)

Educational Testing Service, [www.ets.org](http://www.ets.org)

The Futures Project: Policy for Higher Education in a Changing World, [www.futuresproject.org](http://www.futuresproject.org)

GoTRAIN, A Guide to Vocational Training Schools, [www.gotrain.com](http://www.gotrain.com)

The Institute for Higher Education Policy, [www.ihep.com](http://www.ihep.com)

NAFSA: Association of International Educators, [www.nafsa.org](http://www.nafsa.org)

National Center for Public Policy and Higher Education, [www.highereducation.org](http://www.highereducation.org)

National Education Association, [www.nea.org](http://www.nea.org)

New England Adult Research Network, [www-unix.oit.umass.edu/~vjacoby/nearnet](http://www-unix.oit.umass.edu/~vjacoby/nearnet)

New England Association of Schools and Colleges, [www.neasc.org](http://www.neasc.org)

New England Regional Association of Language Lab Directors, [www.marlboro.edu/~neralld](http://www.marlboro.edu/~neralld)

New England Resource Center for Higher Education, [www.nerche.org](http://www.nerche.org)

New Hampshire College and University Council, [www.nhcuc.org](http://www.nhcuc.org)

Postsecondary Education Opportunity, [www.postsecondary.org](http://www.postsecondary.org)

Student Aid Alliance, [www.StudentAidAlliance.org](http://www.StudentAidAlliance.org)

U.S. Department of Education, [www.ed.gov](http://www.ed.gov)

## K-12 Policy, Research, Advocacy

Achieve, [www.achieve.org](http://www.achieve.org)

American Association of Colleges for Teacher Education, [www.aacte.org](http://www.aacte.org)

American Association of School Administrators, [www.aasa.org](http://www.aasa.org)

American Federation of Teachers, [www.aft.org](http://www.aft.org)

Association for Supervision and Curriculum Development, [www.ascd.org](http://www.ascd.org)

Council of Chief State School Officers, [www.ccsso.org](http://www.ccsso.org)

Council of the Great City Schools, [www.cgcs.org](http://www.cgcs.org)

Education Commission of the States, [www.ecs.org](http://www.ecs.org)

Education Development Center, [www.edc.org](http://www.edc.org)

The Education Trust, [www.edtrust.org](http://www.edtrust.org)

Eisenhower National Clearinghouse for Mathematics and Science Education, [www.enc.org](http://www.enc.org)

Institute for Educational Leadership, [www.iel.org](http://www.iel.org)

International Society for Technology in Education, [www.iste.org](http://www.iste.org)

Learning First Alliance, [www.learningfirst.org](http://www.learningfirst.org)

National Association of State Boards of Education, [www.nasbe.org](http://www.nasbe.org)

National Board for Professional Teaching Standards, [www.nbpts.org](http://www.nbpts.org)

National Center on Education and the Economy, [www.ncee.org](http://www.ncee.org)

National Council for Accreditation of Teacher Education, [www.ncate.org](http://www.ncate.org)

National Education Goals Panel, [www.negp.gov](http://www.negp.gov)

National Parent Teacher Association, [www.pta.org](http://www.pta.org)

National Research Council, [www.nas.edunrc](http://www.nas.edunrc)

National School Boards Association, [www.nsba.org](http://www.nsba.org)

New American Schools, [www.newamericanschools.org](http://www.newamericanschools.org)

Northeast and Island Regional Education Laboratory, [www.lab.brown.edu](http://www.lab.brown.edu)

Parents for Public Schools, [www.parents4publicschools.com](http://www.parents4publicschools.com)

Public Education Network, [www.publiceducation.org](http://www.publiceducation.org)

## New England Regional Organizations

Federal Reserve Bank of Boston, [www.bos.frb.org](http://www.bos.frb.org)

New England Board of Higher Education, [www.nebhe.org](http://www.nebhe.org) or [www.newenglandonline.com](http://www.newenglandonline.com)

New England Canada Business Council, [www.bridgew.edu/hecbc](http://www.bridgew.edu/hecbc)

The New England Council, [www.newenglandcouncil.com](http://www.newenglandcouncil.com)

New England Economic Project, [www.neepecon.org](http://www.neepecon.org)

New England Governors' Conference, [www.tiac.net/users/negc/](http://www.tiac.net/users/negc/)

New England Museum Association, [www.nemanet.org](http://www.nemanet.org)

New England Newspaper Association, [www.nenews.org](http://www.nenews.org)

New England Press Association, [www.nepa.org](http://www.nepa.org)

Northeast-Midwest Institute,  
[www.nemw.org](http://www.nemw.org)

Smaller Business Association of New  
England, [www.sbane.org](http://www.sbane.org)

U.S. Bureau of Labor Statistics-Region 1,  
[www.bls.gov/ro1home](http://www.bls.gov/ro1home)

## Philanthropy

Associated Grantmakers,  
[www.agmconnect.org](http://www.agmconnect.org)

The Catalogue for Philanthropy,  
[www.catphilanthropy.org](http://www.catphilanthropy.org)

The Center for Effective Philanthropy,  
[www.effectivephilanthropy.com](http://www.effectivephilanthropy.com)

The Chronicle of Philanthropy,  
[www.philanthropy.com](http://www.philanthropy.com)

The Council of Foundations,  
[www.cof.org](http://www.cof.org)

Forum of Regional Associations of  
Grantmakers, [www.rag.org](http://www.rag.org)

The Hauser Center for Nonprofit  
Organizations (Harvard University),  
[www.ksghauser.harvard.edu](http://www.ksghauser.harvard.edu)

Independent Sector, [www.indepsec.org](http://www.indepsec.org)

More than Money,  
[www.MorethanMoney.org](http://www.MorethanMoney.org)

The Philanthropic Initiative,  
[www.tpi.org](http://www.tpi.org)

Social Welfare Research Institute  
(Boston College),  
[www.bc.edu/bc\\_org/avp/gsas/swri](http://www.bc.edu/bc_org/avp/gsas/swri)

The Lincoln Filene Center (Tufts  
University), [ase.tufts.edu/lfc](http://ase.tufts.edu/lfc)

## Publishers

American Council on Education/Oryx  
Press, [www.oryxpress.com](http://www.oryxpress.com)

Association of American University  
Presses, [aaup.uchicago.edu](http://aaup.uchicago.edu)

Brookings Institution Press,  
[www.brookings.edu](http://www.brookings.edu)

Harvard University Press,  
[www.hup.harvard.edu](http://www.hup.harvard.edu)

The MIT Press, [mitpress.mit.edu](http://mitpress.mit.edu)

Northeastern University Press,  
[www.neu.edu/nupress](http://www.neu.edu/nupress)

Teachers College Press,  
[www.teacherscollegepress.com](http://www.teacherscollegepress.com)

University of Massachusetts Press,  
[www.umass.edu/umpress](http://www.umass.edu/umpress)

University Press of New England,  
[www.dartmouth.edu/acad-inst/upne](http://www.dartmouth.edu/acad-inst/upne)

Yale University Press,  
[www.yale.edu/yup](http://www.yale.edu/yup)

## State Economic Development Agencies

Connecticut Department of Economic  
and Community Development,  
[www.state.ct.us/ecc](http://www.state.ct.us/ecc)

Maine Department of Economic and  
Community Development,  
[www.econdevmaine.com](http://www.econdevmaine.com)

Massachusetts Department of Economic  
Development, [www.state.ma.us/econ](http://www.state.ma.us/econ)

New Hampshire Department of  
Resources and Economic Development,  
<http://ded.state.nh.us>

Rhode Island Economic Development  
Corp., [www.riedc.com](http://www.riedc.com)

Vermont Department of Economic  
Development, [www.det.state.vt.us](http://www.det.state.vt.us)

## State Higher Education Agencies

Connecticut Department of  
Higher Education,  
[www.ctdhe.org](http://www.ctdhe.org)

Maine Department of Education,  
[www.state.me.us/education](http://www.state.me.us/education)

Massachusetts Board of Higher  
Education, [www.mass.edu](http://www.mass.edu)

New Hampshire Postsecondary  
Education Commission,  
[www.state.nh.us/postsecondary](http://www.state.nh.us/postsecondary)

Rhode Island Office of Higher  
Education, [www.uri.edu/ribog](http://www.uri.edu/ribog)

Vermont Department of Education,  
[www.state.vt.us/educ](http://www.state.vt.us/educ)

## Student Aid

American Student Assistance,  
[www.amsa.com](http://www.amsa.com)

College is Possible Campaign,  
[www.collegeispossible.org](http://www.collegeispossible.org)

College Savings Plans Network,  
[www.collegesavings.org](http://www.collegesavings.org)

Fastweb, [www.fastweb.com](http://www.fastweb.com)

Finance Authority of Maine,  
[www.famemaine.com](http://www.famemaine.com)

The Financial Aid Counselor,  
[www.findaid.com](http://www.findaid.com)

Higher Education Information Center,  
[www.edinfo.org](http://www.edinfo.org)

Maine Education Services,  
[www.mesfoundation.com](http://www.mesfoundation.com)

Nellie Mae, [www.nelliemae.com](http://www.nelliemae.com)

New England Dollars for Scholars,  
[www.dollarsforscholarsne.org](http://www.dollarsforscholarsne.org)

New Hampshire Higher Education  
Assistance Foundation, [www.nhheaf.org](http://www.nhheaf.org)

The SmartStudent Guide to  
Financial Aid, [www.finaid.org](http://www.finaid.org)  
Student Loan Marketing Assn.,  
[www.salliemae.com](http://www.salliemae.com)

Vermont Student Assistance  
Corporation, [www.vsac.org](http://www.vsac.org)

## Technology Organizations

The American Indian Science &  
Engineering Society, [www.aises.org](http://www.aises.org)

American Society for Engineering  
Education, [www.asee.org](http://www.asee.org)

CorpTech, [www.corptech.com](http://www.corptech.com)

Institute of Electrical and Electronics  
Engineers, [www.ieee.org](http://www.ieee.org)

Maine Science and Technology  
Foundation, [www.mainscience.org](http://www.mainscience.org)

Massachusetts Technology  
Collaborative, [www.mtpc.org](http://www.mtpc.org)

Massachusetts Telecom Council,  
[www.masstel.org](http://www.masstel.org)

National Action Council for Minorities  
in Engineering, [www.nacme.org](http://www.nacme.org)

National Consortium for Graduate  
Degrees for Minorities in Engineering  
and Science, [www.nd.edu/~gem](http://www.nd.edu/~gem)

National Research Council,  
[www.nas.edu/nrc](http://www.nas.edu/nrc)

National Society of Black Engineers,  
[www.nsbe.org](http://www.nsbe.org)

Northeast Center for  
Telecommunications Technologies,  
[www.nctt.org](http://www.nctt.org)

Society for the Advancement of  
Chicanos and Native Americans in  
Science, [www.sacnas.org](http://www.sacnas.org)

United States Telecom Association,  
[www.usta.org](http://www.usta.org)

## Other

Campus Compact, [www.compact.org](http://www.compact.org)

CampusTours.Com,  
[www.campustours.com](http://www.campustours.com)

Campus Visit, [www.campusvisit.com](http://www.campusvisit.com)

Corporation for Enterprise  
Development, [www.cfed.org](http://www.cfed.org)

Council of State Governments,  
[www.csg.org](http://www.csg.org)

Electronic Policy Network,  
[www.epn.org](http://www.epn.org)

Institute for Global Communications,  
[www.igc.org](http://www.igc.org)

Job Openings in Higher Education,  
[www.gslis.utexas.edu/~acadres/jobs](http://www.gslis.utexas.edu/~acadres/jobs)

Nellie Mae Foundation,  
[www.nelliemae.foundation.org](http://www.nelliemae.foundation.org)

- Percentage of college graduates under age 30 who say being a teacher provides a more important benefit to society than their own job does: **80%**
- Percentage who say teachers are seriously underpaid: **78%**
- Percentage of students who believe it is an instructor's responsibility to keep them attentive in class: **53%**
- Rank of suicide among leading causes of death for American college students: **2**
- Chance an American thinks newspapers should not be allowed to report or publish without government approval: **1 in 5**
- Percentage of rural New Hampshire students who are white: **99%**
- Increase in Hispanic enrollment in rural New Hampshire schools, 1994-97: **53%**
- Increase in real median wages in Maine between 1979 and 1989: **11%**
- Increase between 1989 and 1999: **2%**
- Percentage of high school graduates from high-income families who immediately enroll in college: **77%**
- Percentage of high school graduates from low-income families who do: **46%**
- Percentage of white high school graduates who immediately enroll: **69%**
- Percentage of African-American high school graduates who do: **62%**
- Percentage of Hispanic high school graduates who do: **47%**
- Average annual income of Connecticut residents with high school diplomas: **\$21,680**
- Average annual income of Connecticut residents with bachelor's degrees: **\$40,695**
- Percentage of U.S. college students who will study abroad at some time before completing their studies: **3%**
- Percentage of U.S. executives who say email, videoconferencing and other technologies have decreased the amount of business traveling they do: **63%**
- Percentage of U.S. executives who say they are working more hours today than five years ago: **68%**
- Percentage of U.S. schools that have some type of connection to the Internet: **95%**
- Percentage of U.S. schools that did in 1994: **35%**
- Percentage of undergraduates at private U.S. universities who use the Internet once a day: **77%**
- Percentage of undergraduates at public U.S. universities who do: **60%**
- Average number of desktop computers serviced by a single technical support staff member at private U.S. universities: **8**
- Average number serviced by a single technical support staff member at public community colleges: **52**
- Pounds of computer equipment scrapped and recycled annually by Harvard University per individual Harvard student and employee: **5**
- Pounds of salt donated to Johnson & Wales University by Morton Salt: **4,735**
- Percentage of Massachusetts Institute of Technology graduates who live in Massachusetts: **21%**
- Percentage of Worcester Polytechnic Institute graduates who do: **59%**
- Of New England's 25 highest-paid athletes, number who went to college in New England: **1**
- Number of U.S. universities in the midst of capital campaigns to raise \$1 billion or more: **17**
- Number in New England: **1**

**Sources:** 1,2 Public Agenda; 3 Michael Delucchi, assistant professor of sociology, Bridgewater State College; 4 American Foundation for Suicide Prevention (Accidents rank No. 1.); 5 The Freedom Forum; 6,7 The Rural School and Community Trust; 8,9 Maine Center for Economic Policy; 10,11,12,13,14 U.S. Department of Education; 15,16 Connecticut Conference of Independent Colleges; 17 American Council on Education; 18,19 Accountemps; 20,21 White House; 22,23,24,25 National Education Association; 26 Harvard University; 27 Johnson & Wales University; 28,29 Mass Insight Corp.; 30 NEBHE analysis of *Boston Business Journal* data (Eric Williams of the Boston Celtics went to Providence College); 31,32 *Chronicle of Higher Education* (The Massachusetts Institute of Technology is in the midst of a \$1.5 billion campaign.)