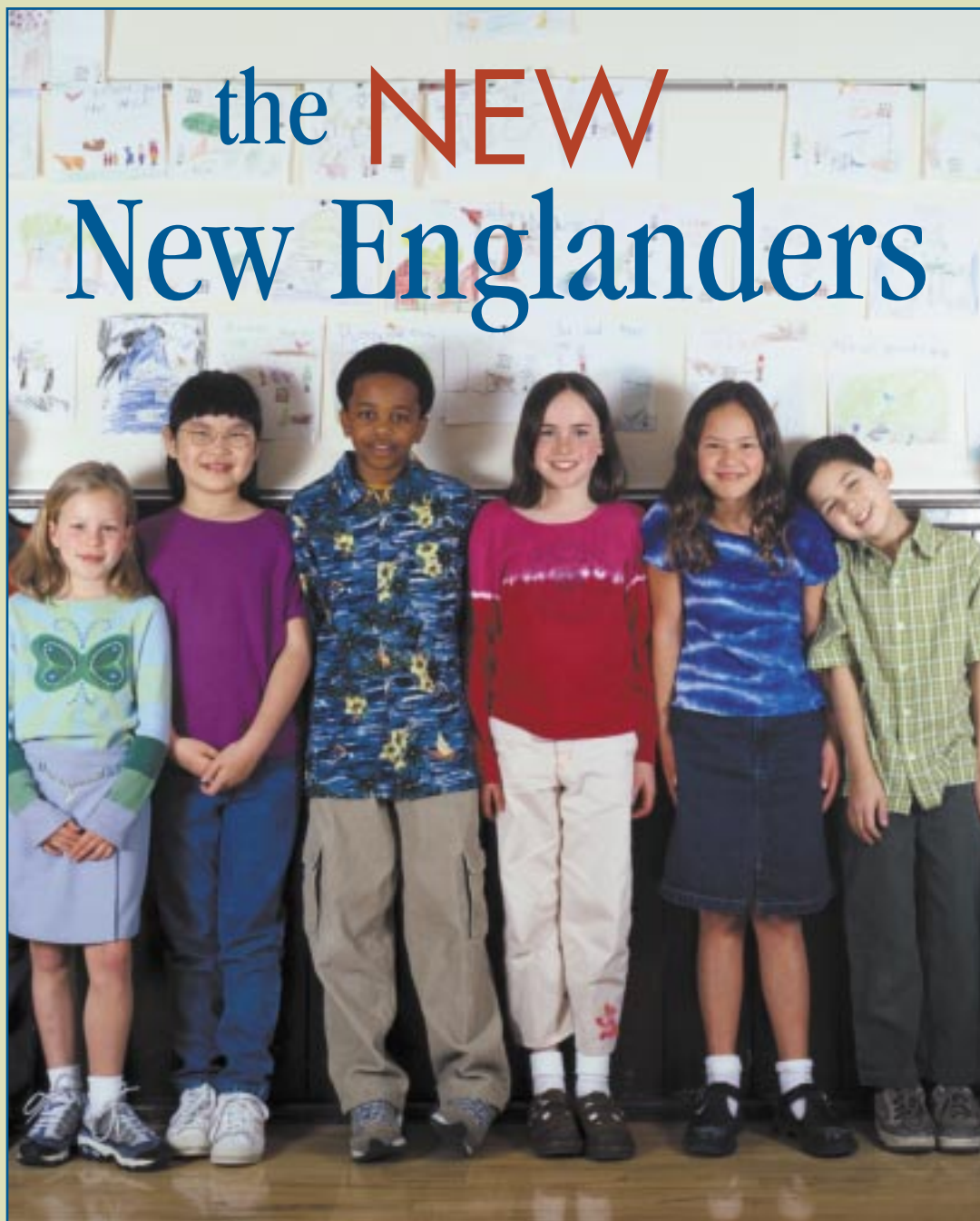


CONNECTION

THE JOURNAL OF THE NEW ENGLAND BOARD OF HIGHER EDUCATION



VOLUME XVII

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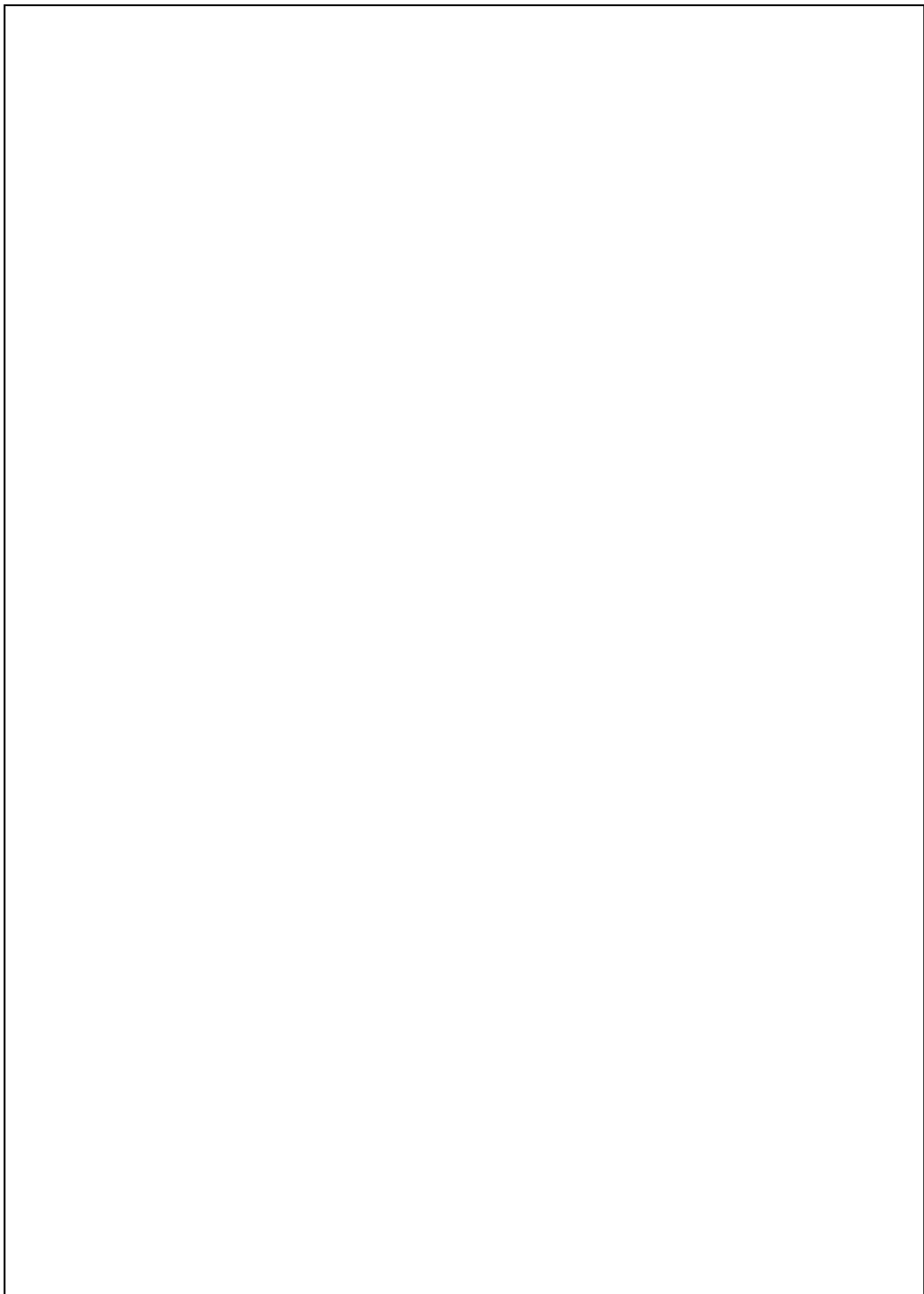
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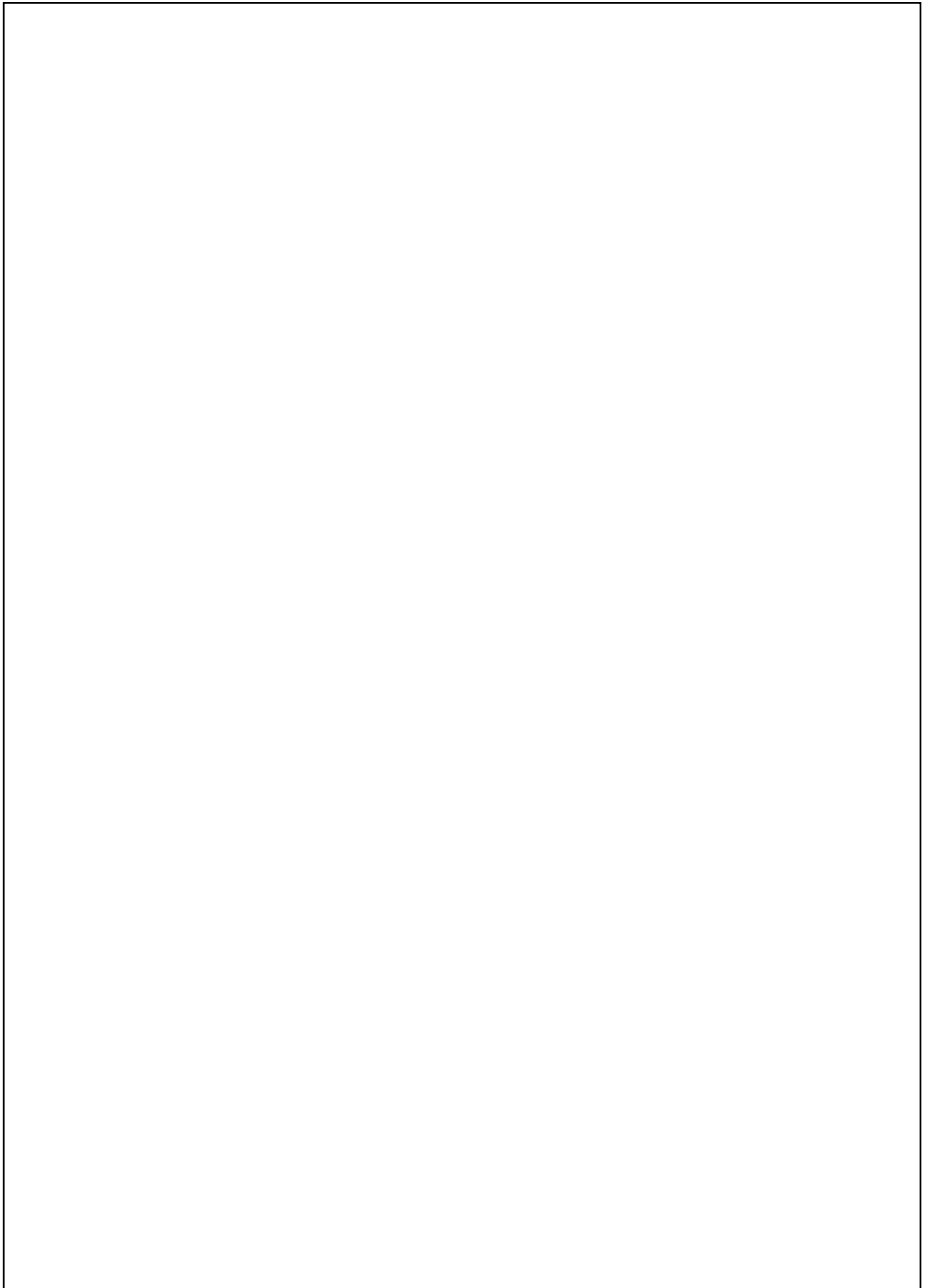
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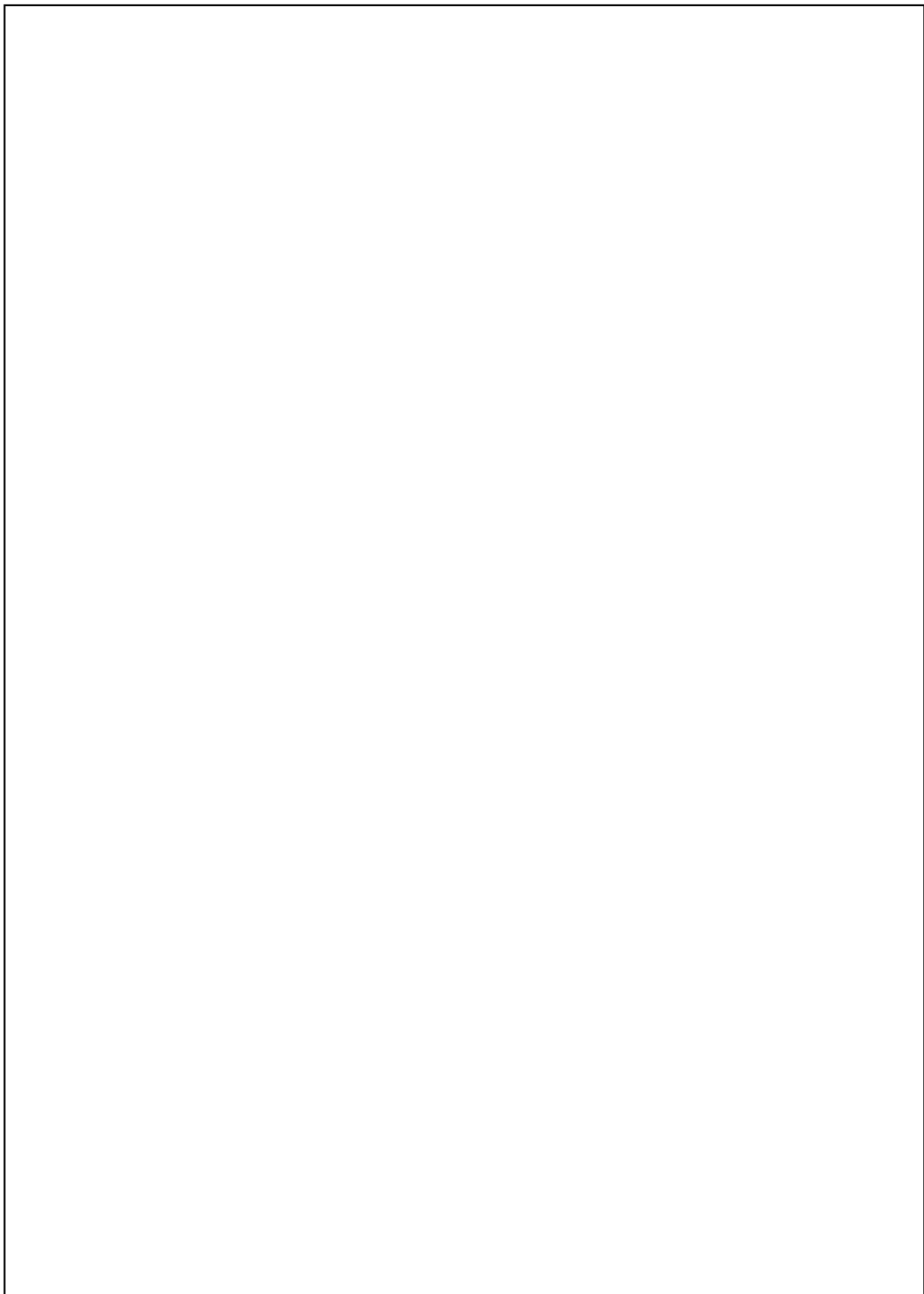
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- The Design Economy
- Turnaround Campuses











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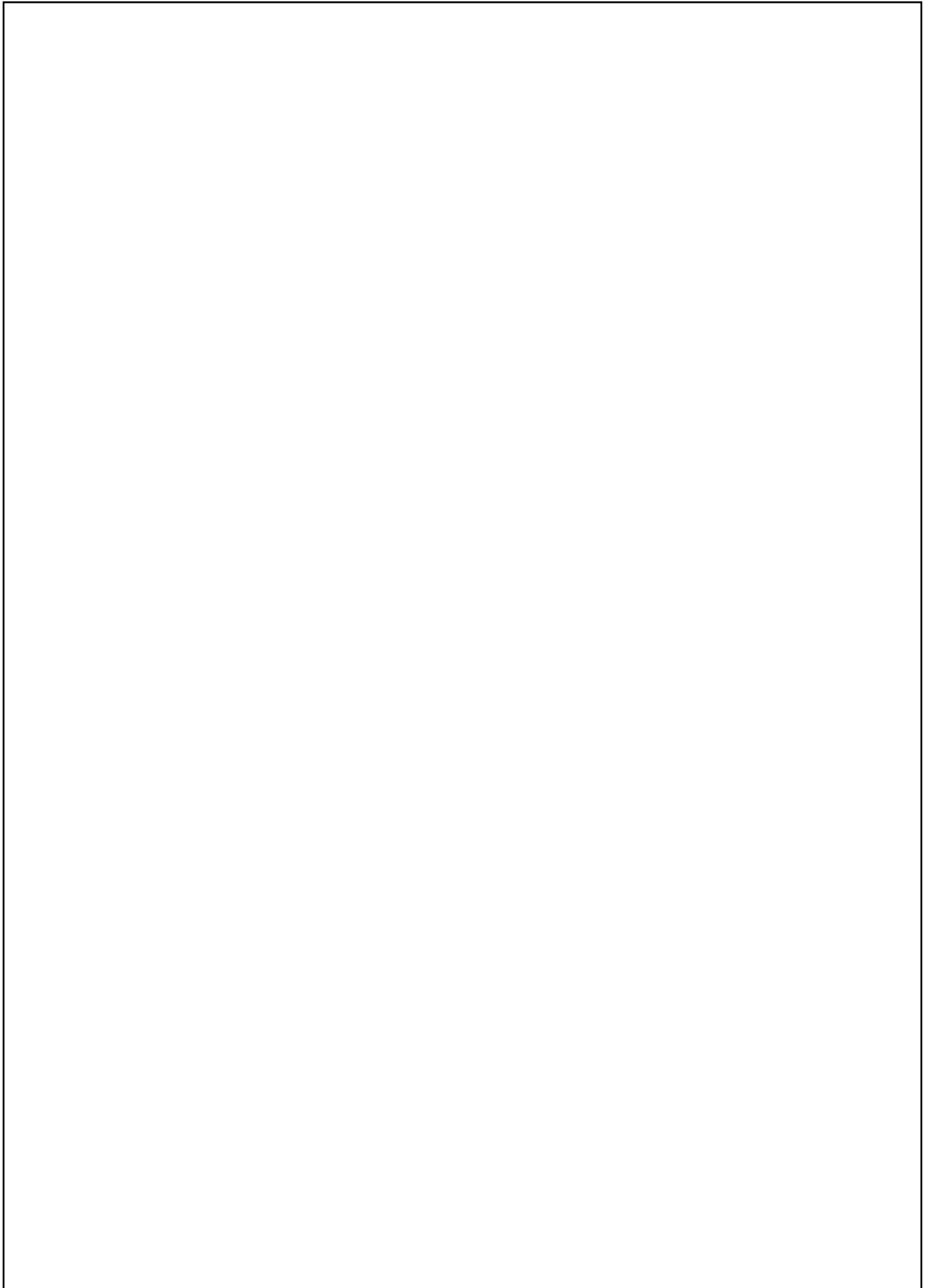
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CONNECTION

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There are two Big Stories in New England Demography. One is that the six-state region is the slowest-growing in America, thanks to an aging white population and, in spots, the out-migration of educated young people—the so-called “brain drain.” This poses obvious dangers for the regional labor force, which grew hardly at all in the last decade, and for the region’s political clout, which has been waning for several decades.

In fact, with all the hand-wringing about the people New England is losing, it’s easy to overlook Big Demography Story Number Two: the people New England is gaining. These are the Somali refugees flocking to Lewiston, Maine; the Laotians of tiny Newmarket, N.H.; the Tibetans and Bosnians of Burlington, Vt.; the Dominicans, Haitians and Russians enlivening communities from Lynn, Mass., to Stamford, Conn.

True, Boston is America’s third whitest metro area, behind only Pittsburgh and Minneapolis, and the Hub and its suburbs are disturbingly segregated, according to research by the Harvard Civil Rights Project. Maine, New Hampshire and Vermont, meanwhile, are among just a dozen states nationally where 85 percent or more of school students are white.

Yet, this is not *su padre’s* New England. Dim sum is served in far-flung suburbs—and there’s a wait. Mosques and Buddhist temples dot the countryside. The region’s demography is changing profoundly. The *new* New Englanders have arrived.

Where they go from here will depend in large part on the region’s colleges and universities, many of which are just now adjusting to the *old* new demography—the phenomenon of “nontraditional” working adults, women, single parents, flooding campuses with demands for evening classes, larger parking lots and weekend services.

Now, New England’s fate is riding on the educational attainment of new populations with far more complex challenges. Will they graduate from high school, pursue higher education and contribute to the skilled workforce as an earlier generation of new populations did? Or will they be left behind—mass casualties of what Harvard Professor Gary Orfield characterizes as “a destructive set of federal, state, and local changes in higher education policy that limit the ability of minority and low-income families to go to college, damage their future and the future of their communities, and sacrifice too much of the human potential of a society where soon half of all school-age children will be non-white.”

These changes include wholesome-sounding inventions like high-stakes testing (on which students of color underperform), merit aid programs (versus aid based on financial need) and honors colleges (which shift public higher education resources away from the “regular” state higher education programs that have offered the traditional entryway for so many nontraditional students).

The good news is that with the white population shrinking, college officials have a powerful incentive to reach out to the *new* New Englanders—to revamp and recharge the mostly white admissions committees that have tended to admit students in their own image and to invest in imaginative ways to diversify the professoriate, which is now about 90 percent white.

They should make these urgent priorities. There’s no time—and no *new* New Englanders—to waste.

John O. Harney is executive editor of CONNECTION.

Education Queens?

Before the 1996 federal legislation that ended welfare as we knew it, states could count college attendance by welfare recipients as a legitimate work activity. Students paid their own tuition, but continued to receive cash assistance while they attended classes. The Temporary Assistance for Needy Families (TANF) legislation sharply limited college opportunities for welfare recipients. The law enforced strict work requirements of 30 hours a week, allowed only vocational education to count toward the work requirements, limited the percentage of recipients who can engage in educational activities and limited the time they can spend participating in education to 12 months.

Not surprisingly, college participation by welfare recipients plummeted. Nationally, the number of recipients attending college dropped from 650,000 to 350,000 in the three years after the reform legislation, according to researchers at the City University of New York.

The welfare reform law was up for congressional reauthorization in September as CONNECTION went to press. In May, the House approved changes that would make it even tougher for TANF recipients to attend college. The House bill, similar to President Bush's proposal, would cut the maximum amount of time a TANF recipient could devote to education from the current 12 months to four months every two years. A bill approved by the Senate Finance Committee a month later was slightly more generous, expanding the definition of vocational education to include community college programs that offer credentials and job skills and allowing larger percentages of TANF recipients to pursue college courses.

The American Council on Education is among those calling for more flexibility. The Washington group recommended allowing at least two years of education or training to be counted as an approved work activity, including all higher education programs rather than just vocational training, eliminating caps on the percentage of a state's TANF recipients

who can take part in educational activities, and not counting time spent on education and training against the law's limits on lifetime and consecutive benefit eligibility. Others have called for more remedial courses, more financial aid and more access to "bureaucracy busting" staff well-versed in both college and welfare policies.

Maine offers a national model for using education to move people away from welfare. Since 1997, the state has provided TANF recipients with regular cash assistance and support while they pursue college degrees, and it has worked. Fully 23 percent of Maine workers who had left welfare as of January 2001 held college degrees, compared with just 6 percent of people who were unemployed and receiving TANF at the time, according to a study by the Maine Center for Economic Policy. And among those who had left the welfare rolls, workers with college degrees were much more likely to be offered employer-provided benefits such as health insurance.

Catholic School

Merrimack College this fall became the first college in the nation to open a "Nativity School," a breed of tuition-free

Catholic middle schools that combine education, spiritual development and a dose of discipline for "struggling but promising" students from low-income urban families.

Merrimack of North Andover, Mass., opened the new Blessed Stephen Bellesini O.S.A. Academy in nearby Lawrence in September. College officials expected the academy to begin by enrolling boys in grades 5 and 6, including a high percentage of Latinos, who make up 81 percent of public school enrollment in Lawrence, the region's poorest city. The College of the Holy Cross plans to open a similar school in Worcester by next year.

About 35 Nativity Schools have opened in the United States since 1971 when the first one was established to serve Latino boys on Manhattan's Lower East Side. The schools feature after-school and evening study programs that stretch the "school day" from as early as 7:30 a.m. to as late as 9 p.m. Weekend and summer programs are also offered.

Nativity Schools boast a student/faculty ratio of 4-to-1. All teachers are lay volunteers who commit a year or two to the school for a stipend of \$200 a month, room, board and health

Snippets

"Despite our continuing concern with the access of low-income students, the facts overwhelmingly support the idea that college remains an affordable option for most Americans."

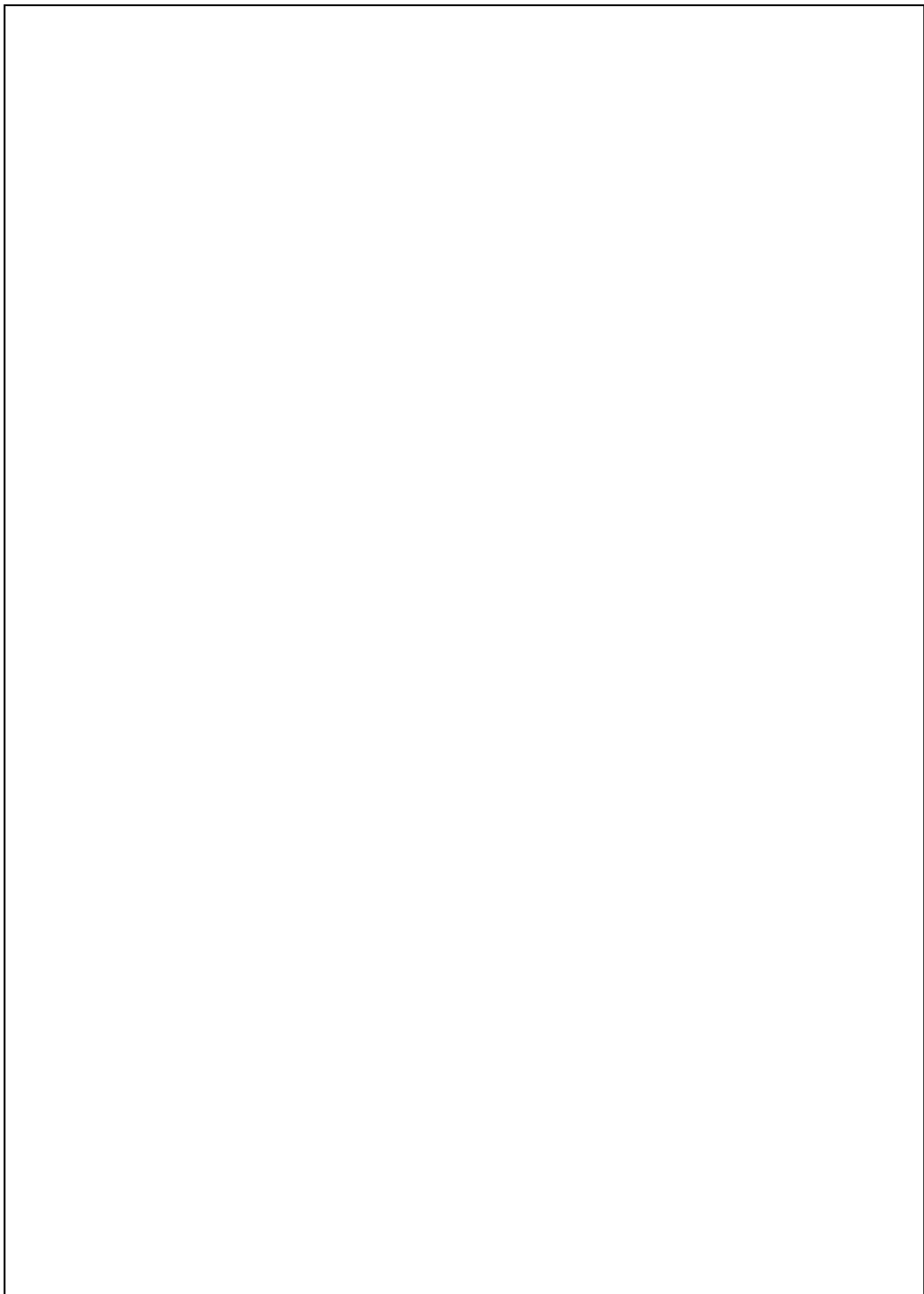
—*American Council on Education President David Ward writing in the Spring 2002 issue of the council's magazine, "The Presidency."*

"Most Americans believe that all students have the opportunity to earn a college degree through hard work in high school and college. Yet, this year alone due to record-high financial barriers, nearly one-half of all college-qualified, low- and moderate-income high school graduates—over 400,000 students fully prepared to attend a four-year college—will be unable to do so, and 170,000 of these students will attend no college at all."

—*Report of federal Advisory Committee on Student Financial Aid, June 2002.*

"When you ask young children in cities such as ours what a college is, they don't have any idea."

—*Maureen Chevrette, superintendent of schools in Central Falls, R.I., quoted in the proceedings of a spring 2002 Rhode Island Board of Governors for Higher Education conference on the future of higher education. Nine in 10 Central Falls children are poor enough to qualify for subsidized school lunches.*



insurance. Each student's family also commits two hours a month of service to the school.

Merrimack provides the space for the Bellesini Academy as well as teacher training, volunteers and consulting advice and expertise. The rest is funded by private foundations, corporations and individual donors.

Demi-Engineers

An estimated 4.7 years of coursework are crammed into the typical four-year engineering curriculum at U.S. universities. That traditional intensity discourages universities from starting up new engineering programs and turns off potential students just when the nation needs more technological savvy.

The executive director of the American Society for Engineering Education has a solution. In a Summer 2002 letter to the editor of *Issues in Science and Technology*, Frank L. Huband proposes that universities without engineering programs create a less-intense "liberal arts engineering curriculum" that stresses understanding of technology and engineering but with less emphasis on designing and creating products.

The curriculum could be geared to students interested in technical sales or leadership of technology corporations. But Huband notes that his strategy "also would provide a pool of 'almost engineers' who could, within a year or so, become full-fledged engineers."

Defaming Clark Kerr

Few figures in the recent history of higher education are more revered, and even fewer more quoted, than former University of California President Clark Kerr. It turns out Kerr's reputation survived despite an FBI-led smear campaign that helped then-California Gov. Ronald Reagan get him fired.

After a 17-year battle under the Freedom of Information Act, the *San Francisco Chronicle* recently published revelations that the FBI leaked false information about Kerr to the university's Board of Regents, the White House and Reagan, who railed against Kerr's handling of student

protests during the gubernatorial campaign of 1966. The Board of Regents fired Kerr in 1967 at the first board meeting Reagan attended as governor.

J. Edgar Hoover's FBI had been watching Kerr long before the student protests. In the early 1950s, Kerr

defended California professors who refused to sign loyalty oaths. That won him respect from colleagues and paranoid attention from FBI field agents who suggested the "liberal" in the educational field "could not be trusted at the helm of the world's

Small But Fast

Which are New England's fastest-growing small companies? The following are plucked from the Fortune Small Business 100, a ranking of America's fastest-growing small firms (annual revenue under \$200 million) in terms of earnings growth, revenue growth and stock performance over the past three years. ...

New England Rank	U.S. Rank	Company	Headquarters	Type of Business
1	1	NYFIX	Stamford, Conn.	Software for financial services industry
2	11	Zoll Medical	Burlington, Mass.	Cardiac care equipment
3	19	Green Mountain Coffee	Waterbury, Vt.	Coffee roaster and distributor
4	49	Dianon Systems	Stratford, Conn.	Medical diagnostics
5	58	Mercury Computer Systems	Chelmsford, Mass.	Signal processors for defense and medical industries
	67	Boston Private Financial	Boston, Mass.	Money management.
7	71	Aware	Bedford, Mass.	Digital subscriber line (DSL) technology
8	75	Forrester Research	Cambridge, Mass.	Internet consultant
9	78	Factset Research Systems	Greenwich, Conn.	Financial data
10	90	Capital Crossing Bank	Boston, Mass.	Buys and services loans

largest research university, itself a major defense contractor, at the height of the Cold War.

In the late 1950s, Hoover was enraged by an essay question on the university’s English aptitude test that asked high school applicants: “What are the dangers to a democracy of a national police organization, like the FBI, which operates secretly and is unresponsive to public criticism?”

U.S. Sen. Dianne Feinstein of California is among those who worry that today’s FBI could engage in similar shenanigans. Feinstein has suggested that the FBI stonewalled the Freedom of Information Act request. The revelations led her to write to current FBI Director Robert Mueller: “If there are things we need to do to tighten safeguards or to prevent a return to past misdeeds, we must do them now.”

.....
Comings and Goings

Mary K. Grant, former chief academic officer and deputy CEO of UMassOnline, the University of Massachusetts systemwide distance learning program, became president of the Massachusetts College of Liberal Arts, replacing **Thomas D. Aceto**, who retired in August 2002 after 11 years in charge of the college formerly called North Adams State College. Grant graduate from North Adams in 1983. ... **John Silber** became interim president of Boston University, replacing **Jon Westling**, who resigned after six years in charge. Silber was president of BU for 25 years before making way for Westling in 1996 and becoming chancellor. ...

Peter S. Temes, former president of the Great Books Foundation was named president of Antioch New England Graduate School, replacing Interim President **Steven Guerriero**, the chair of the Keene, N.H., college’s Department of Organization & Management. ... **Alan C. Eckbreth**, a United Technologies Corp. manager and engineer, became vice president and dean of Rensselaer at Hartford, the top position at the Connecticut-based graduate center operated by Rensselaer Polytechnic Institute.



Eleanor McMahon: Education Pioneer

ROBERT A. WEYGAND

The history of American education is rich with great icons from Horace Mann through Clark Kerr and Bart Giamatti. They established important principles, set standards or forced changes that transformed our system of education. Then, for each of us, there are great individuals, teachers and mentors who left an indelible impression on us personally. Eleanor McMahon was one of those rare and talented individuals who did both. Eleanor passed away this summer after dedicating 52 years to the field of education and public policy.

Eleanor was also a pioneer. Some of her accomplishments, often ideas before their time, did not receive the praise they deserved. But that never dissuaded her from pushing forward.

Eleanor began her career in 1950 teaching tenth grade at Pawtucket West High School in Rhode Island. She soon was asked to be the school system's statistician and charged with the job of analyzing the performance of students and teachers. She quickly recognized an undeniable—but up to then generally ignored—correlation between student performance on the one hand and teacher qualifications, professional development and pedagogy on the other. She recommended that the city develop teacher performance standards based upon student results, a novel idea

in 1954 with what was then a novel name: Outcome-Based Management.

When Eleanor married Dick McMahon in 1955, she ran straight into an antiquated policy that banned married women from teaching in Pawtucket. That made her Irish blood boil. She appealed the policy, the first to do so, and she won. Her challenge to the policy presaged a major shift toward gender equity in education—another trail blazed by Eleanor McMahon.

Eleanor recognized that leadership often is controversial. An early supporter of teacher unions, she believed in a balance of professionalism and activism. A long, bitter teachers' strike in the early 1950s posed a difficult choice for her. State law banned such strikes, yet, as an officer of the teachers' union, she was expected to walk the picket line. Eleanor decided to oppose both policies; she opted not to return to the classroom until an equitable solution was agreed to, but also not to join the picket line. It was a lonely but courageous response.

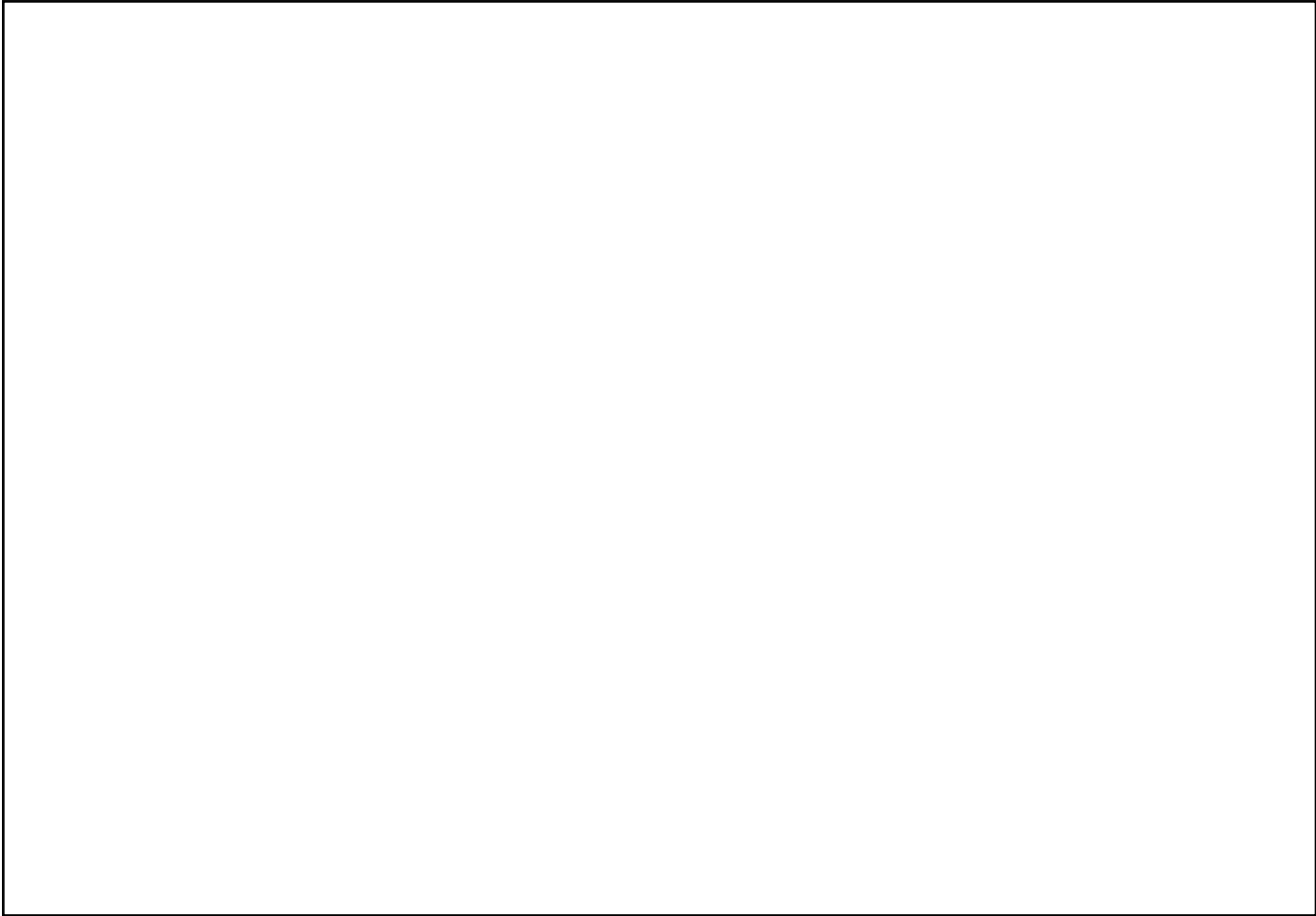
Eleanor's pioneering days were many. In 1955, she introduced the first "modern math" curriculum in the Pawtucket schools. In the 1960s, she initiated Rhode Island's first early childhood program and designed the first Head Start program in the City of Providence. In 1982, Eleanor became

Rhode Island's first and only woman commissioner of higher education and in 1996, she became the first woman chair of the New England Board of Higher Education.

Eleanor's academic credentials and accomplishments were remarkable. A graduate of the College of St. Elizabeth, she also received a master's degree in economics and education from Brown University and a doctorate in early childhood education from Harvard University. She was honored with nine honorary degrees and numerous public service awards. She held many education positions throughout her career, including first grade teacher, professor, dean, provost, college vice president, fellow and distinguished professor. She was a dedicated New England Board of Higher Education delegate for two-and-a-half decades and a frequent contributor to the pages of CONNECTION.

While she received many accolades, held many lofty positions and shouldered great responsibilities of leadership, Eleanor was always, *always* the teacher. We have lost a pioneer, a great woman, a dear friend.

Robert A. Weygand is president and CEO of the New England Board of Higher Education and publisher of CONNECTION.





please come to New England

Slow Growth Spells Trouble for Local Schools

PETER FRANCESE

New England may be the wealthiest region in the United States, but it is also the oldest and slowest-growing. And it is among the least diverse. These peculiar demographic characteristics combined with New England's history of heavy reliance on local governments suggest future problems for the region's educational systems.

Some facts: the median household income in New England, as recorded in the 2000 census, was about \$48,400, more than 15 percent above the national median. But New England's median household income grew the slowest of any region. Between the 1990 and 2000 census, it edged up only 2.9 percent (after adjusting for inflation) compared with a nationwide increase of 7.7 percent.

It's not only household income that grew so slowly over the past decade. New England's population grew by just 5.4 percent during the 1990s—less than half the U.S. rate of 13.2 percent. Four New England states are among the 10 slowest-growing states in the country. The primary reason for such low population and income growth is out-migration.

The Census Bureau estimates that approximately 500,000 New England residents left the region during the 1990s, mostly from Massachusetts and Connecticut. In the 15 months following the 2000 census, the bureau estimates that Massachusetts lost a net of more than 20,000 people and Connecticut lost about 8,000 residents through out-migration.

Out-migrants, in many cases, are higher-income individuals. The economic research firm Economy.com recently reported that people who moved out of Massachusetts had a median income \$4,000 higher than those who moved in from other states. A drain of above-average wage earners from this region is one reason for the minuscule increase in median household income.

New England is also the oldest region in the country in terms of median age. The 2000 census reported the median age in the region at 37.1—almost two years older than the national median of 35.3 and edging closer to the 38.7 median age of Florida. But an overall median does not tell the full story of an older New England, because only one segment of the population is responsible for such high age numbers.

The vast majority of New England residents (84 percent) are white, non-Hispanics, according to the latest census. Only about 6 percent were counted as black or African-American, 6 percent as Hispanic, and 3 percent Asian, making New England one of the least diverse parts of the United States.

New England may be the wealthiest region in the United States, but it is also the oldest and slowest-growing.

New England's white, non-Hispanic population—about 13 million—declined by about 1 percent during the 1990s, while the region's African-American population grew by 15 percent to 820,000, and the Hispanic population jumped by 54 percent to 875,000. About half of the latter two groups reside in New England's 10 largest cities, where the white, non-Hispanic population is a minority.

The median age of white, non-Hispanic New England residents is 39 years—40 for white women and 38 for white men. The median age for black and Hispanic New England residents is 29.5 and 24.7 respectively.

FIGURE 1 - HOMEOWNERS BY AGE

Age Segment	Number of Homeowners 2000	% Change 1990 - 2000
Under 35	395,500	-21%
35 to 44	834,400	+10%
45 to 54	841,900	+44%
55 to 64	569,900	+9%
65 +	852,500	+13%
Total	3,494,000	+ 12%

Source: U.S. Bureau of the Census.



More than 90 percent of New England’s population age 55 and older is white, non-Hispanic.

During the next decade, the age group 55 to 64 in New England is expected to grow by 4 percent to 5 percent per year, compared with overall growth of less than half of 1 percent. One consequence of such a rapidly aging population is that in most communities, an ever-larger majority of households have no children and, thus, no personal connection to their local public schools. By 2010, half of New England homeowners are likely to be age 55 or older.

FIGURE 2 – CHANGE IN HOUSEHOLD INCOME

State	Median Household Income, 1999	% Change 1989 to 1999
Connecticut	\$53,900	-0.4%
Massachusetts	\$50,500	+5.3%
Rhode Island	\$42,100	+0.8%
Maine	\$37,200	+3.0%
New Hampshire	\$49,500	+4.9%
Vermont	\$40,900	+5.7%
New England	\$48,400	+2.9%
United States	\$42,000	+7.7%

*Note: Income percent change is in constant dollars.
Source: U.S. Bureau of the Census.*

The second consequence of an aging population is that household income is dragged down. Households headed by someone ages 55 to 64 have incomes about 15 percent lower than those headed by younger people ages 45 to 54, according to the Census Bureau.

That drop in average household income is likely to become less dramatic as the incidence of early retirement diminishes. But the fact remains that many older New England households will find it necessary to get by on less as the region continues to age. Meanwhile, the out-migration of New Englanders with above-average incomes, if it continues, may further reduce household incomes in this region.

Since most public schools in New England are financed principally by local property taxes, any decline in the income of homeowners, and by extension, their ability or willingness to pay rising property taxes, is a serious matter. There is little doubt that in most New England communities, an aging population will make it more difficult to finance high-quality elementary and secondary public education.

This could have equally serious consequences for higher education in New England because if school districts are forced to spend less, fewer high school graduates may be prepared for college-level course work.

The heavy reliance on local property taxes, subject to a referendum, to finance public schools is an old New England tradition. When so many suburban and rural communities will have, at best, one in four households with children, perhaps it is time to re-examine that method of paying for public education.

At the very least, public schools across the region will need to pay closer attention to the majority of voters in their districts whose only connection to the schools is a big and rising tax bill once or twice a year. School districts will need to do a much better job of showing how a high-quality public education benefits the entire community and not just those few parents with kids in public schools.

A dismal demographic forecast need not be New England’s destiny, however. Leaders of colleges, universities and state governments should be asking: How could we change this scenario? What could be done to get the region’s income and younger population growing faster?

Perhaps what New England needs is a turnaround marketing plan. The region’s colleges and universities should work in partnership with the six state governments to execute a coordinated, well-financed marketing program. This might include using the World Wide Web and other vehicles to recruit more young people to attend college or graduate school in New England and enlisting New England employers to convince a larger share of them to stay in the region to work.

Lots of states have marketing programs to increase tourism. New England does not need more tourists as much as it needs to attract young people who will live and work in the region. The long-term objective should be to bring up household income and bring down the rising median age.

This will require more than just advertising economic opportunities available in New England. It will also mean addressing a few of the issues, such as lack of affordable housing, that hurt New England’s competitiveness. A marketing plan is not just an advertising program; it also offers an opportunity for a serious examination of how we came to where we are and what needs to be done to create a more positive future for the region.

Peter Francese is the founder of American Demographics magazine. He can be reached at peter@francese.com.



Higher Education Advantage

Economic Reality or Wishful Thinking?

NEETA P. FOGG AND PAUL E. HARRINGTON

The notion that New England has maintained a considerable labor supply advantage relative to other states because of its highly educated population is a cornerstone of thinking regarding the regional economy. For many years, we have drawn comfort from the view that our superior intellectual firepower will ensure economic prosperity for the region.

Certainly, the scientific and engineering research and innovation that have come from New England's remarkable array of colleges and universities have contributed greatly to the economic well-being of the region. But how well are the region's higher education institutions positioned to meet the inexorable demand for college graduates in the economy—and thereby, create jobs, income growth and economic stability?

College graduates

A look at various measures of educational attainment in the region's largest state is instructive. Although

Massachusetts still has among the best-educated population in the nation, a number of states are closing the gap.

Massachusetts historically has had a greater proportion of college-educated people than the nation. In 2001, only two states—Maryland and Colorado—had larger shares of people with bachelor's degrees or higher.

Since the mid-1980s, however, Massachusetts has lagged well behind the rest of the nation in growth of college graduates. While the nation's supply of college graduates expanded by nearly 63 percent, the Bay State's grew by just 38 percent, ranking the state a dismal 45th among the 50 states and the District of Columbia by this measure. With the exception of New Hampshire, the states with the most rapid growth in college graduates were all located outside the Northeast, mostly in the Rocky Mountain and Southern regions (see Table 1).

The *share* of college graduates also grew faster in several Mountain and Southern states than in Massachusetts (see Table 2). This was the product of strong overall population growth and even stronger growth in the number of college graduates, as these states attracted above-average shares of college-educated migrants from other states.

TABLE 1 – SIZE OF THE COLLEGE GRADUATE POPULATION

People 16 years old and over with a Bachelor's Degrees or Higher

The 10 States with the Most Rapid Growth in College Graduates Compared with Massachusetts and the United States

State	Average 1984 & 1985	Average 2000 & 2001	Relative Change	Rank by Relative Change
Nevada	110,456	240,516	118%	1
Florida	1,224,311	2,544,424	108%	2
Arizona	399,344	784,607	97%	3
Missouri	505,913	990,065	96%	4
New Hampshire	133,124	259,572	95%	5
Georgia	666,105	1,298,466	95%	6
Arkansas	166,038	320,724	93%	7
Alabama	302,260	583,269	93%	8
South Carolina	294,091	545,441	86%	9
Utah	182,284	337,984	85%	10
Massachusetts	1,002,624	1,378,948	38%	45
U.S. Total	29,280,303	47,657,991	63%	NA

Source: U.S. Bureau of the Census; federal Bureau of Labor Statistics; tabulations by authors.

Growth in college-educated workforce

Massachusetts also lags behind other states in the growth of college graduates in the workforce. The Bay State's college-educated, adult workforce grew by 38 percent, ranking 43rd nationally. Again with the exception of New Hampshire, the states with the most rapidly growing number of college-educated workers were all outside the Northeast, mostly in the South and Mountain regions.

The high growth in the adult, employed, college-educated populations

of the Rocky Mountain states was due primarily to an expansion in overall population. In contrast, the growth in the Southern states was due to more intensive utilization

TABLE 2 – SHARE OF COLLEGE GRADUATES (BACHELOR’S DEGREES OR HIGHER) IN THE WORKING-AGE POPULATION

The 10 States with the Largest Growth in the College-Educated Population Compared with Massachusetts and the United States

State	Average 1984 & 1985	Average 2000 & 2001	Relative Change
Nevada	16%	17%	8%
Florida	14%	21%	50%
Arizona	18%	21%	21%
Missouri	13%	24%	76%
New Hampshire	18%	28%	54%
Georgia	16%	22%	40%
Arkansas	10%	16%	69%
Alabama	10%	17%	67%
S. Carolina	12%	18%	48%
Utah	17%	22%	30%
Massachusetts	22%	29%	29%
U.S. Total	17%	23%	37%

Source: U.S. Bureau of the Census; federal Bureau of Labor Statistics; tabulations by authors.

of college-educated workers in their labor markets. This is evident from a sharp increase in the share of college graduates in the adult workforce in most Southern states.

For example, the number of employed college graduates in Florida doubled since the mid-1980s in part because the share of Florida’s adult workforce with a college degree rose from 20 percent to 27 percent—a relative increase of 38 percent. Georgia, Tennessee, Virginia and Arkansas all experienced similarly large increases in the share of their workers with college degrees. The share of college graduates in the Massachusetts workforce, by contrast, increased by just 21 percent (see Table 4).

College grads in metro areas

Much of the growth in demand for college graduates has centered in the nation’s growing metropolitan areas. These metro areas also have become increasingly similar in terms of composition of industries and occupations and levels of educational attainment of the workforce. In 1985, college graduates accounted

for 36 percent of the workforce in metropolitan Boston—a far higher share than in any other major metro area. But by 2001, this gap had begun to close (see Table 5).

TABLE 3 – NUMBER OF EMPLOYED COLLEGE GRADUATES (BACHELOR’S DEGREES OR HIGHER) BETWEEN AGES 22 AND 64

The 10 Most Rapidly Growing States Compared with Massachusetts and the United States, 1985 to 2001

State	Average 1984 & 1985	Average 2000 & 2001	Relative Change	Rank in Relative Change
Florida	863,733	1,814,929	110%	1
Missouri	413,135	848,627	105%	2
Georgia	529,386	1,065,112	101%	3
Tennessee	359,884	694,572	93%	4
Nevada	93,449	175,657	88%	5
Virginia	673,415	1,262,431	88%	6
Arizona	297,453	556,108	87%	7
New Hampshire	110,844	206,210	86%	8
Utah	143,343	264,800	85%	9
Arkansas	133,893	247,130	85%	10
Massachusetts	826,458	1,136,215	38%	43
U.S. Total	23,836,626	37,935,923	59%	NA

Source: U.S. Bureau of the Census; federal Bureau of Labor Statistics; tabulations by authors.

TABLE 4 – PROPORTION OF COLLEGE GRADUATES (BACHELOR’S DEGREES OR HIGHER) AMONG EMPLOYED PEOPLE AGES 22 TO 64

The 10 States with the Greatest Increase in Employed College Graduates

State	Average 1984 & 1985	Average 2000 & 2001	Relative Change	Rank by Relative Change
Florida	20%	27%	38%	12
Missouri	20%	31%	59%	1
Georgia	21%	28%	31%	19
Tennessee	19%	26%	41%	10
Nevada	21%	20%	-4%	50
Virginia	26%	38%	42%	8
Arizona	24%	26%	12%	42
New Hampshire	24%	34%	41%	11
Utah	24%	27%	16%	38
Arkansas	15%	23%	51%	3
Massachusetts	31%	38%	21%	32
U.S. Total	24%	30%	25%	NA

Source: U.S. Bureau of the Census; federal Bureau of Labor Statistics; tabulations by authors.

Sources of labor supply

Colleges and universities play an important role in determining the size of a region’s skilled workforce by providing regular undergraduate and graduate education as well as skills upgrading and retraining of adult workers. Since the mid-1980s, colleges and universities have substantially increased their capacity to meet the rising demand for an educated workforce across the nation. The total number of college degrees awarded in the United States grew by about 504,000 or 28 percent between 1985-86 and 1998-99. The total number in Massachusetts rose by just under 10 percent.

Between academic years 1985-86 and 1998-99, the number of bachelor’s degrees granted by U.S. colleges grew by more nearly 22 percent from 984,100 to nearly 1.2 million. Relative increases in the number of associate degrees, master’s degrees and doctorates granted



by U.S. institutions have been even larger. However, there are sharp differences among states in the number and level of degrees conferred.

The number of bachelor's degrees awarded by colleges in the West grew by 37 percent between academic years 1985-86 and 1998-99, accounting for 30 percent of the total increase nationally. Over the same time period, the number of bachelor's degrees conferred in the South increased by nearly 90,000, rising by more than 30 percent and accounting for 42 percent of the total increase nationally.

In contrast, the number of bachelor's degrees conferred by colleges in the Northeast grew by only 7 percent—just one-third the national rate of growth. Out of an increase of 213,600 bachelor's degrees awarded,

colleges in the Northeast granted just 17,770, or about 8 percent of the total increase. The number of bachelor's degrees conferred in Massachusetts increased by just over 2 percent.

The Northeast and Massachusetts also lag behind the nation in numbers of associate degrees granted. Since the mid-1980s, the number of associate degrees conferred has grown by 28 percent nationally, but by only 4 percent in the Northeast. Indeed, the number of associates conferred in Massachusetts actually declined 25 percent over the period. In short, Massachusetts and the rest of the Northeast failed to expand labor supply to the entry-level occupations in the college labor market where most of these graduates begin employment.

Higher education in Massachusetts seems to have focused its expansion efforts almost exclusively at the graduate level. While the number of master's degrees granted in the United States rose by 152,000 or about 53 percent since the mid-1980s, the number of master's granted in Massachusetts grew by 64 percent. Massachusetts also kept pace with the modest national growth in professional degrees conferred (though it substantially trailed the nation in growth of doctorates).

During the 1990s, New England saw a sizable flight of its population to other parts of the country. The driving force behind this out-migration has been the region's high cost of living, driven by astronomical housing costs, particularly in Massachusetts. Unfortunately, a large majority of the out-migrants from the region were young and well-educated. During the 1990s, two-thirds of the population that left Massachusetts for other states had some postsecondary education and one-half had a bachelor's or more advanced degree. This out-migration was an important contributor to the widespread labor shortages in New England's college labor markets. As the region's economy emerges from the current economic downturn, these labor shortages will return.

New England's inability to prevent a net out-migration of college graduates to other parts of the nation puts added pressure on the region's colleges and universities to produce graduates. So far, the degree data suggest, they are not meeting the challenge.

TABLE 5 – SHARE OF COLLEGE GRADUATES (BACHELOR'S DEGREES OR HIGHER) IN THE WORKFORCE BETWEEN AGES 22 AND 64 BY METRO AREA

The 20 Metropolitan Areas with the Most Rapid Rate of Growth on this Measure Between 1985 and 2001

Metropolitan Area	1985	2001	Relative Change
Kansas City, MO-KS	22%	37%	65%
Buffalo-Niagara Falls, NY	21%	35%	65%
Pittsburgh, PA	20%	31%	56%
Indianapolis, IN	22%	34%	51%
Philadelphia, PA-NJ	25%	37%	46%
Greensboro-Winston-Salem-High Point, NC	21%	30%	45%
Sacramento, CA	25%	36%	44%
Birmingham, AL	20%	27%	40%
San Diego, CA	29%	39%	34%
New York, NY	29%	39%	34%
Detroit, MI	24%	31%	33%
St. Louis, IL-MO	24%	31%	32%
Dallas, TX	27%	36%	31%
Riverside-San Bernardino, CA	16%	21%	30%
Denver, CO	31%	41%	30%
Akron, OH	26%	33%	29%
Newark, NJ	30%	39%	29%
Norfolk-Virginia Beach-Newsport News, VA-NC	26%	34%	28%
Miami, FLA	21%	27%	28%
San Jose, CA	35%	45%	27%
Boston, MA-NH	36%	46%	27%
U.S. Total	24%	30%	25%

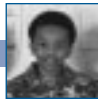
Source: U.S. Bureau of the Census; federal Bureau of Labor Statistics; tabulations by authors.

TABLE 6 – PERCENTAGE CHANGE IN THE NUMBER OF COLLEGE DEGREES CONFERRED BY DEGREE LEVEL, 1985-86 TO 1998-99

	Total	Associate	Bachelor's	Master's	Doctorate	Professional
United States	29%	28%	22%	53%	31%	7%
Northeast	14%	4%	7%	50%	19%	7%
Midwest	20%	16%	16%	50%	27%	-2%
South	35%	34%	30%	58%	47%	13%
West	46%	65%	37%	55%	32%	9%
Massachusetts	10%	-24%	2%	64%	19%	7%

Source: Integrated Postsecondary Educational Data System, U.S. Department of Education; tabulations by authors.

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Changing Faces

How the Demographic Revolution Plays Out in New England's Largest Metro Area

MARY HUFF STEVENSON AND BARRY BLUESTONE

At the end of World War II, Greater Boston was one of the most lily-white metropolitan areas in the United States. In 1950, the "minority" population of only one of its 154 towns and cities exceeded 5 percent and that was the City of Boston at only 5.3 percent. In the second half of the century, the region rapidly became multiracial and multicultural. By the 2000 Census, Boston itself was *majority minority*, with 50.5 percent minority residents, and dozens of cities and towns in the region boasted a rainbow of races and ethnic groups. Lowell, which was only 0.2 percent minority in 1950, had a minority population of more than 37 percent in 2000. The old white European "Immigrant City" of Lawrence, which was but 0.3 percent minority in 1950, has become a new, largely Hispanic "Immigrant City" with a "minority" population of nearly 66 percent. This demographic revolution, along with dramatic changes in the area's industry mix, has contributed to the economic and social renaissance of the region. Greater Boston has been transformed from an economic basket case hemorrhaging industries and jobs throughout much of the period before the 1980s to a vibrant metropolitan region based on high technology and professional services—the knowledge industries of the 21st century.

Yet the fruits of the metro region's prosperity have been unevenly distributed. Workers with limited education, particularly those who are members of racial or ethnic minorities (i.e., groups other than non-Hispanic whites), continue to confront significant barriers. The

nature of these barriers varies by race, ethnicity and gender so policies to reduce inequality must be tailored to each group.

New urban inequality

New immigrant groups have been replacing the outmigrating progeny of previous generations of immigrants, stabilizing population levels in many of the region's older cities. Most of these changes occurred after 1970, the consequence of mid-1960s changes in federal immigration law, which loosened restrictions and removed the national origins quotas that had favored immigrants from Northern and Western Europe.

The new arrivals to Greater Boston differ from one another in various ways. Most are immigrants, whether legal or illegal, but those coming from Puerto Rico are U.S. citizens. Many do not speak or read English, but it is the primary language of those from Ireland and the British West Indies. Most are people of color, but those from Ireland and the former Soviet Union are white. Some are political refugees, perhaps from the Western Hemisphere (Cuba, Haiti) or maybe from the Eastern Hemisphere (Vietnam, Laos, Cambodia).

A recent report from the Gastón Institute at the University of Massachusetts Boston on legal immigration to New England from Latin America and the Caribbean alone reveals that from 1990 to 1998, there were more than 47,000 new arrivals from these regions to Massachusetts, nearly 29,000 to Connecticut, and more than 9,000 to Rhode Island. Data from the 2000 Census show that Hispanics are the largest minority in those states, as well as in New Hampshire. In Maine and Vermont, multiracial non-Hispanics are the largest minority group. In all three of the Northern New England states, however, the population is over 90 percent white, compared with about 75 percent for the United States as a whole.

In the early 1990s, along with research teams from three other cities (Atlanta, Detroit and Los Angeles) and

with the support of the Ford and the Russell Sage foundations, we set out to study some of the key dimensions of urban inequality, focusing on questions of racial and ethnic attitudes, residential segregation and labor market outcomes. As part of that study, the Greater Boston Social Survey (GBSS) gathered data from 1,820 Greater Boston households in 1993 and 1994. Our original research plan included special attention not only to blacks and Hispanics, but also to the rapidly growing Asian population in the region. Because of funding limits, however, it was not possible to “oversample” Asians in our survey. As a result, while we have sufficient data to detail the problems facing blacks and Hispanics, we do not have comparable data for Asians.

According to the GBSS, only about 7 percent of (non-Hispanic) white adults have failed to complete high school. This compares with 24 percent of (non-Hispanic) blacks and 58 percent of Hispanics. At the other end of the education spectrum, 37 percent of whites, but only 15 percent of blacks and 6 percent of Hispanics have at least a college degree (see Figure 1).

Comparing years of education among those who were born on the U.S. mainland versus those who were not, one finds that while some of the foreign-born are extremely poorly educated, nearly a third have a college degree or more (see Figure 2). With its high concentration of colleges and universities and abundance of high-tech firms, Greater Boston attracts a large contingent of well-educated and well-trained immigrants, some of whom arrived initially as students. In a March 2001 address to the New England Council on ways to solve the shortage of scientific, engineering, and information technology (SEIT) workers in the region, Northeastern University President Richard Freeland pointed out that “more than one-third of all graduate students enrolled in SEIT-related programs in the U.S. are foreign-born and hold a visa allowing them to

The fruits of metro Boston’s prosperity have been unevenly distributed.

enter the United States for educational purposes. More than 90 percent of foreign-born workers employed in the SEIT professions in the United States are graduates of American colleges and universities.”

At the same time, however, Greater Boston has attracted a significant number of political and economic refugees from Central America, Haiti and the Dominican Republic, where education levels tend to be extremely low.

With their relatively high educational attainment, more than 40 percent of white men in Greater Boston are in high-skilled white-collar fields, with professional and managerial occupations predominating. An additional 16 percent are in sales occupations, many in the financial services industry, with others in higher-level positions in wholesale and retail trade (see Figure 3).

Black men, by contrast, are almost invisible in Greater Boston’s executive suites; just 1.4 percent of them hold executive and managerial jobs. However, they are strongly represented in professional specialties, a category that includes medical technicians, teachers and social workers. Black men are also concentrated in service occupations. They are more likely than any other group to work in protective services, a category that includes security guards and night watchmen.

Hispanic men are found predominantly in lower skilled manual jobs and service work. Although 10 percent are in executive and managerial occupations, this tends to reflect their roles as proprietors of small stores in ethnic enclaves rather than executives in downtown office towers.

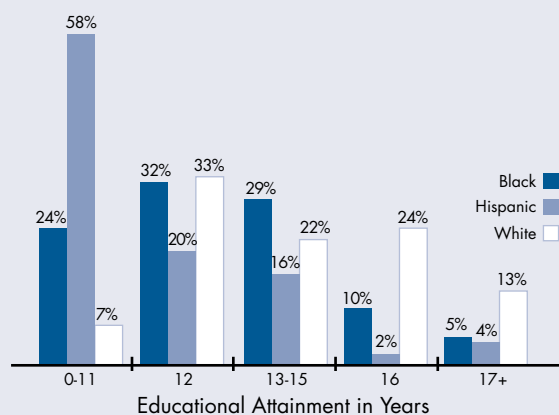
White women in Greater Boston are most heavily concentrated in professional specialty occupations. This category, which includes teachers and nurses, accounts for 29 percent of white women. Smaller proportions work in administrative support (20 percent) and sales positions (17 percent) (see Figure 4).

Black women are concentrated in service occupations and administrative support positions. Fully 30 percent of black women work in service jobs, 23 percent in administrative support and 16 percent in sales.

Hispanic women occupy a niche traditionally held by immigrant women of earlier generations who found work in the region’s factories. Over 40 percent of Hispanic women in Greater Boston work as machine operators, assemblers and inspectors. An additional 18 percent work in service occupations, while some have entered white-collar jobs.

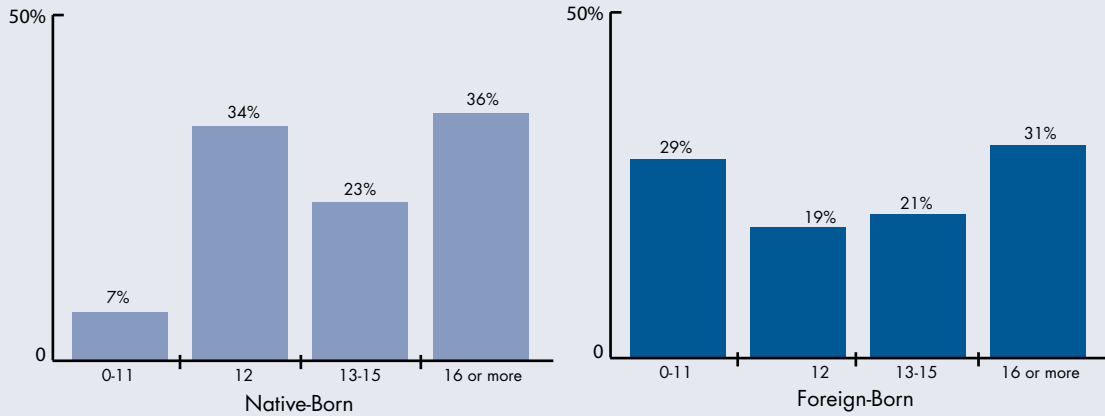
The disparity in these occupational distributions is largely due to differences in educational attainment. Improving the educational attainment of minorities and

FIGURE 1 – YEARS OF EDUCATION



Source: Greater Boston Social Survey, 1995.

**FIGURE 2 – YEARS OF EDUCATION
NATIVE-BORN VS. FOREIGN-BORN**



Source: Greater Boston Social Survey, 1995.

FIGURE 3 – MALE OCCUPATION BY RACE AND ETHNICITY

Occupation	Black Male Distribution	Hispanic Male Distribution	White Male Distribution
Executive, Administrative and Managerial	1%	11%	20%
Professional Specialty	23%	1%	20%
Technical and Related Support	3%	0	3%
Sales	7%	1%	16%
Administrative Support	11%	10%	6%
Private Household	0	0	0
Protective Service	12%	1%	3%
Service	15%	20%	4%
Farming, Forestry and Fishing	3%	1%	1%
Precision Production, Craft and Repair	8%	13%	13%
Machine Operators, Assemblers and Inspectors	3%	23%	3%
Transportation and Material Moving	6%	7%	9%
Handlers, Equipment Cleaners, Helpers and Laborers	8%	14%	2%

Note: The three most important occupations for each group are highlighted.
Source: Greater Boston Social Survey, 1995.

FIGURE 4 – FEMALE OCCUPATION BY RACE AND ETHNICITY

Occupation	Black Female Distribution	Hispanic Female Distribution	White Female Distribution
Executive, Administrative and Managerial	8%	1%	7%
Professional Specialty	9%	16%	29%
Technical and Related Support	2%	0	5%
Sales	16%	9%	17%
Administrative Support	23%	15%	20%
Private Household	1%	0	0
Protective Service	1%	0	0
Service	30%	18%	14%
Farming, Forestry and Fishing	0	0	2%
Precision Production, Craft and Repair	0	0	3%
Machine Operators, Assemblers and Inspectors	5%	41%	2%
Transportation and Material Moving	5%	0	1%
Handlers, Equipment Cleaners, Helpers and Laborers	1%	0	0

Note: The three most important occupations for each group are highlighted.
Source: Greater Boston Social Survey, 1995.



increasing their rate of postsecondary schooling would help move them to higher status occupational categories where they would be likely to have higher labor force participation rates, a lower risk of unemployment, higher weekly work hours, and higher hourly wages.

Workers with limited education

For workers with relatively low educational attainment (high school diplomas or less), Greater Boston's recovering economy in 1993-1994 delivered both good and bad news. The good news was that in contrast to places like Chicago and Newark, labor force participation was high, both for men and women regardless of race or ethnicity. More than 80 percent of men with limited education were in the workforce, regardless of whether they were white, black or Hispanic. Similarly, about two-thirds of the women were in the workforce, again regardless of race or ethnicity. While William Julius Wilson has written eloquently of the "jobless ghettos" among low-income blacks in Chicago, where large segments of the adult population are totally divorced from the world of work, Greater Boston does not seem to have such places of total despair. Nevertheless, serious problems exist for Boston-area workers with limited education. The nature of the problem varies according to race/ethnicity and gender.

One can calculate expected annual earnings for each group of workers who had no more than a high school education, taking into account the likelihood of being in the labor force, the likelihood of avoiding unemployment, the median hourly wage and mean weekly hours

(multiplied by 52 to get annual hours). Among men, blacks could expect to earn only 55 percent as much as whites (\$12,762 vs. \$23,291) and Hispanics only 63 percent (\$14,751 vs. \$23,291). For the Hispanic men, the major problem was a low hourly wage rate, the result of severely limited education. This was partially offset by high annual work hours in the manufacturing sector where they were clustered. For black men, the major problem was unsteady work: particularly, a higher likelihood of unemployment and part-time work.

Among Greater Boston's women with limited education, blacks could expect to earn just 65 percent as much as whites (\$7,188 vs. \$11,101). Hispanic women did better, earning about 94 percent of what white women earned (\$10,378 vs. \$11,101). But Hispanic women come close to parity with white women only because of their high concentration as factory operatives working long hours. Indeed, the Hispanic women's median hourly wage was only \$8.45, compared with \$10.12 for white women, but they worked an additional 132 hours per year. Like black men, black women also suffered from unsteady work, but in their case, it was often high rates of single motherhood that interfered with the ability to find steady employment.

Closing the earnings gap

If workers with limited education are to share in prosperous times, policymakers should consider a range of policies:

- Young Hispanics, in particular, need to be encouraged to improve their education—at least to the point of earning high school diplomas—if they are to find decent work outside of manufacturing, a sector which continues to shrink.
- Black women, in particular, require greater access to affordable quality child care to be full participants in the workforce.
- Black men continue to suffer the most from discrimination and stereotyping. More vigilant enforcement of anti-discrimination laws is needed for this group to close the earnings gap with white men.

If we are to improve the earnings status of all groups of residents, we must improve access to higher education. But only by attacking all barriers to improved earnings for minorities and women can we hope to reduce the enormous earnings gaps that continue to detract from the otherwise exceptional economic record of the Greater Boston region.

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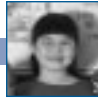
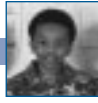
Men and Women

Inner-city men are much less likely than women to finish high school, enroll in college and earn a degree, according to a recent study by Northeastern University's Center for Labor Market Studies and the Boston Private Industry Council.

Across Massachusetts, about 15 percent of men drop out of high school before earning a diploma, compared with 11 percent of women. But in the state's large cities, nearly one third of men drop out before graduating. While 62 percent of women from Massachusetts's 11 large central cities both graduate from high school and go on to college, only 48 percent of men do.

Nationally, 151 women graduate with an associate degree for every 100 men who do; 133 women earn bachelor's degrees for every 100 men. In Massachusetts, 170 women earn associates for every 100 men, and 130 earn bachelor's degrees for every 100 men.

The researchers warn that a growing army of undereducated men threatens disaster for labor markets, incarceration rates and family formation.



Does the Cafe Serve Rice and Beans?

What colleges need to know

about changing demography

JOSEPH M. CRONIN

College faculty, staff and trustees are important consumers of demographic information. Yet most of them have little time or inclination to review great collections of tables, trend lines and projections. Except for a few sociologists, political scientists and marketing experts, most of them pay no attention to demography and population trends until they show up as individual students in classes and residence halls. But demography is destiny, and college officials need to know who's in the pipeline.

The greatest commentator on demography and education in the past 20 years is Harold "Bud" Hodgkinson, once a Simmons College dean, who provided a generation of educators with concise and witty summaries of data answering the question, "Guess Who's Coming to College?" He provided a model on how to display and reduce the data so that trustees and administrators can appreciate the relevance.

Hodgkinson often expounded on these themes:

- Three states—California, Texas and Florida—will account for half of new growth in people of "traditional" college-age, that is 18- to 21-year-olds. Half the states are losing traditional college-age population.
- Much of the new growth in the traditional college-age population of the South and the Northeast will be among people whose grandparents grew up in Asia, Latin America or the Caribbean.
- Recent growth in higher education enrollment has come not from traditional college age students but from adults. Much of the 20 to 40 crowd enrolls in community colleges where the average age of students is now 27.
- The United States has been a mostly white country. But three states—Arizona, New Mexico and California—now have non-white majorities, and that

distinction will spread beyond the Southwest in the decades to come.

The New England student

White enrollment at New England colleges declined by more than 20 percent during the 1990s, mainly because of shrinking family sizes, particularly among families with two college graduates as parents.

Many of New England's selective colleges have made racial diversity a top priority. MIT, Harvard, Boston University, Yale and Northeastern have made the greatest efforts to attract racial and ethnic minorities both in the pursuit of quality and as a commitment to racial justice. Ivy League and small liberal arts colleges each year recruit and admit as many as 40 percent racial minorities.

So who are these *new* New England students?

Hispanics. Hispanic college enrollment in New England grew by 60 percent during the 1990s—the fastest growth of any group in the region. Demographers forecast that Hispanic growth in New England and the East Coast will far surpass that of any other group in the first decade of this century. Rhode Island's Hispanic population doubled between 1980 and 1990 and again between 1990 and 2000. It could double again by 2010. Preparation for higher education varies widely, depending on whether the migration was from business or professional classes (as was the case from Cuba) or from poverty-stricken rural areas where parents themselves found minimal opportunities to achieve literacy.

In percentage terms, the biggest enrollers of Hispanic students are the region's community colleges led by Northern Essex Community College in Massachusetts and the Community College of Rhode Island. But Harvard, Boston University and the Massachusetts Institute of Technology also boast significant Hispanic enrollment.

Asians. Asian-American college enrollment in New England grew by 43 percent during the 1990s—the second-fastest growth of any group in the region. Perhaps this is not surprising. Asians make up more than half of the world’s population. And though educational attainment varies among Asian subgroups, many Koreans, Chinese, Japanese and others bring an

especially strong family commitment to education and a desire to excel in school and in life. In many states, their average SAT test scores exceed those of whites, as does the percentage of high school students staying in high school through graduation.

Harvard and BU each enroll nearly 3,000 Asian-American students, while the Massachusetts College

FIGURE 1 – MINORITY ENROLLMENT BY STATE AND RACE/ETHNICITY: 1990 AND 2000

	As % of 18-to-24-Year-Old Population		% Change in Enrollment	
	1990	2000	2000	1990-2000
Connecticut				
African-American	9,955	13,187	12%	32%
	5.7%	8.3%		
Asian-American	4,364	6,070	3%	39%
	2.5%	3.8%		
Hispanic	5,651	9,656	15%	71%
	3.2%	6.0%		
Native American	432	557	1%	29%
	0.2%	0.3%		
White	143,501	112,743	63%	-21%
	81.7%	70.5%		
Race Unknown	6,853	11,365	NA	66%
	3.9%	7.1%		
Maine				
African-American	296	516	1%	74%
	0.5%	0.9%		
Asian-American	418	805	1%	93%
	0.7%	1.4%		
Hispanic	195	409	1%	110%
	0.3%	0.7%		
Native American	398	770	1%	93%
	0.7%	1.3%		
White	55,487	49,789	95%	-10%
	94.7%	85.1%		
Race Unknown	1,424	5,150	NA	262%
	2.4%	8.8%		
Massachusetts				
African-American	18,473	22,466	7%	22%
	4.0%	5.4%		
Asian-American	16,289	23,352	6%	43%
	3.5%	5.7%		
Hispanic	12,619	18,484	10%	46%
	2.7%	4.5%		
Native American	1,198	1,569	0.3%	31%
	0.3%	0.4%		
White	348,206	258,547	71%	-26%
	74.9%	62.6%		
Race Unknown	47,001	61,922	NA	32%
	10.1%	15.0%		
New Hampshire				
African-American	669	803	1%	20%
	1.0%	1.3%		
Asian-American	760	1,070	2%	41%
	1.2%	1.7%		
Hispanic	490	908	1%	85%
	0.8%	1.5%		
Native American	229	265	1%	16%
	0.4%	0.4%		
White	55,788	46,389	93%	-17%
	86.0%	75.2%		
Race Unknown	6,107	10,677	NA	75%
	9.4%	17.3%		
Rhode Island				
African-American	2,558	3,604	6%	41%
	3.0%	4.9%		
Asian-American	1,891	2,806	4%	48%
	2.2%	3.8%		
Hispanic	1,606	3,496	12%	118%
	1.9%	4.7%		
Native American	222	271	1%	22%
	0.3%	0.4%		
White	70,416	53,270	71%	-24%
	82.5%	72.0%		
Race Unknown	6,635	9,065	NA	37%
	7.8%	12.3%		
Vermont				
African-American	375	395	1%	5%
	1.0%	1.1%		
Asian-American	569	581	1%	2%
	1.5%	1.6%		
Hispanic	428	551	2%	29%
	1.2%	1.6%		
Native American	131	164	1%	25%
	0.4%	0.5%		
White	34,178	31,379	95%	-8%
	92.2%	88.4%		
Race Unknown	685	1,544	NA	125%
	1.8%	4.4%		
New England				
African-American	32,326	40,971	7%	27%
	3.9%	5.1%		
Asian-American	24,291	34,684	4%	43%
	3.0%	4.3%		
Hispanic	20,989	33,504	10%	60%
	2.6%	4.2%		
Native American	2,610	3,596	0.4%	38%
	0.3%	0.5%		
White	707,576	552,117	74%	-22%
	86.4%	69.2%		
Race Unknown	68,705	99,722	NA	45%
	8.4%	12.5%		
United States				
African-Amer.	1,129,580	1,584,902	12%	40%
	8.7%	10.9%		
Asian-Amer.	496,688	901,896	4%	82%
	3.8%	6.2%		
Hispanic	679,962	1,259,586	15%	85%
	5.2%	8.7%		
Native Amer.	92,534	144,554	1%	56%
	0.7%	1.0%		
White	10,722,378	10,195,494	68%	-5%
	82.2%	70.3%		

Note: Table does not include enrollment at U.S. military academies. African-American, Asian-American, Native American and White totals reflect non-Hispanic population. Table does not include non-resident aliens. Most current data for United States are for 1998; no U.S. figure for "Race Unknown."
Source: New England Board of Higher Education analysis of U.S. Department of Education and Census Bureau data.



of Pharmacy, Wellesley and MIT enroll the highest percentages of Asian-Americans.

African-Americans. African-American enrollment grew by 27 percent during the 1990s. Although the numbers are largest in the three southern New England states, some northern New England institutions such as the University of Vermont have made significant efforts to recruit black students. By percentage, the largest enrollers of African-American students are the region's urban community colleges. Harvard, UMass Boston and Southern Connecticut University are among other institutions with large black enrollments.

Native Americans. College enrollment is also growing among the group that was in New England long before English settlers arrived. Enrollment among Native Americans, though small, grew by 38 percent during the 1990s. Maine institutions enroll the most Native Americans. Indeed, four campuses in the University of Maine System enroll more than 500 of the region's 3,600 Native American students.

Ready for diversity?

While New England's total number of new high school graduates will grow more slowly than in most parts of the country between 1994 and 2012, the region will lead the United States in growth of African-American high school graduates with an increase of 39 percent. New England's total number of Hispanic high school graduates will increase by 114 percent between 1994 and 2012, while the region's total number of Asian-American high school graduates grows by 84 percent.

Just 15 of New England's 270 institutions account for fully one-third of African-American enrollment, and just 15 account for one-third of Hispanic enrollment, according to the Spring 2002 issue of CONNECTION. White students will increase slowly through 2008 and then decrease for a number of years (it is difficult to project beyond 18 years). These are amazing trends. But are colleges studying them and making the necessary corrections in policy planning?

Here are a few things college trustees and administrators need to consider if they are to achieve diversity:

1.) Does the senior staff of the college include members of these rapidly growing groups? The admissions and financial aid staff? What efforts have been made to mobilize alumni recruiters from these groups? Bentley College found that hiring Asian, Hispanic and black admissions staff gave prospective students the feeling that the overwhelmingly white college might welcome them. The staff also sought help from alumni of color to meet with top prospects.

2.) Does the board of trustees reflect the future or the alumni base of 30 years ago? What criteria are used to

nominate trustees? Is there a diversity plan that includes trustee and alumni association leadership? If not, why not? If most of the trustees reflect the mostly Caucasian alumni from yesteryear, it makes sense to seek new "friends of the college" among employers, professionals and parents of current students of other races.

3.) Does the curriculum include courses, majors, readings, music and drama from other than the traditional white authors? Universities have been debating the role of Latin American culture, Asian art and literature, and the history of the non-Western world. Check the catalogue. Are the studies mostly of American and European culture, such as they might have been in 1902? One third of the world lives in China or India. Would students recognize that reality in the list of courses? The best colleges now teach the religions of the world and the novels of Latin America, Egypt and Asia.

4.) Does the food in the dining areas reflect the tastes of a multinational community or of an American McDonalds? Is rice on the menu, ever? Rice and beans? Do students other than Caucasians have a role in setting menu priorities. Is dinner served from 5 p.m. to 7 p.m. only? Sure, keeping a dining hall open until 10 p.m. creates costs and inconvenience for the food service vendors, but so does the loss of students who transfer to a more agreeable campus. Dartmouth College, for one, recently opened a dining hall that meets the religious dietary laws of Islam and Judaism as well as the Hindu vegetarian diet called "sakahara."

5.) Do the counselors and campus ministry include access to adult workers from other races and faiths? Buddhists, Hindus and Muslims need opportunities for worship, too. Tufts University provides a model, hiring both full-time and part-time clergy from other than Christian and Jewish faiths to show their support for the spiritual and moral development of all of their students.

Perhaps the biggest challenge to universities and colleges will be in recruiting a more diverse faculty, because the pool of doctorates has been too small. However, if the overall community is convinced of this priority, over a 10-year period, change will happen.

It is not easy for traditional colleges to change their culture—to transform a higher education community into a multicultural and international enterprise. But it is an obligation of higher education to anticipate the future while honoring the past. If the smart people in higher education can't do it, who can?

Joseph M. Cronin is president of Edvisors and former Massachusetts secretary of educational affairs.



Why So Few Minority Faculty and What To Do?

Diversifying the Region's Professoriate

CATHY A. TROWER

Despite 30 years of affirmative action, America's college faculty remains largely white and largely male, especially at preeminent universities and in the higher ranks. Women and people of color are less likely than white males to hold full-time faculty positions, be promoted to full professor or receive tenure—and women of color fare worse than white women.

Women earned 44 percent of doctorates awarded in 2000, up from 12 percent in the 1960s. Minority U.S. citizens earned only 16 percent, up from 6 percent in 1975, with nearly a third of those going to Asian-Americans. Progress at the faculty level has been less impressive (see Figure 1). Today, whites account for 88 percent of faculty jobs, not much change since 1975 when they constituted 96 percent of the faculty (see Figure 2). What little growth has occurred in numbers of minority faculty has been among Asian-Americans. Meanwhile, African-Americans, Hispanics and Native Americans remain underrepresented in doctoral programs and on faculties.

FIGURE 1 - WOMEN FACULTY, 1972 VS. 1999

Women	1972	1999
Part-time Faculty	34%	48%
Full-time Faculty	25%	36%
Full-time Faculty at Research Universities	18%	25%
Full Professors	10%	24%
Full Professors in Science & Engineering	3%	10%

FIGURE 2 - FACULTY OF COLOR, 1989 VS. 1999

Faculty of Color	1989	1999
Part-time Faculty	10%	13%
Full-time Faculty	11%	11%
Full-time Faculty at Research Universities	8%	9%
Full Professors	8%	11%
Full Professors in Science & Engineering	NA	6%

The percentage of women faculty in New England is slightly higher than the U.S. average—40 percent versus 37 percent in 1999 (see Figure 3). But the percentage of faculty of color in New England is lower than the national average. In 1999, the New England faculty was nearly 90 percent white, 6 percent Asian-American, 4 percent African-American, 2 percent Hispanic, and less than 1 percent Native American.

When it comes to faculty rank, both gender and race matter (see Figure 4). Nearly 80 percent of full professors are male, and nearly 90 percent are white. In contrast, 54 of lecturers, are women and 15 percent are persons of color. Women and faculty of color are also less likely to be tenured than are white males (see Figure 5). In 1997, 75 percent of white faculty who sought tenure achieved it, but just 64 percent of faculty of color succeeded.

Why so few?

Why so few women and people of color on college faculties? Much research has been conducted to answer this question. During the past decade, scholars became increasingly aware that affirmative action laws, policies and practices did not mean that women and minority faculty would come or, if they did, that they would stay.

Various obstacles preclude many women from reaching the pinnacles of academic success and prevent many people of color from even attempting doctoral studies or pursuing academic careers. Both women and people of color are adversely affected by the traditional academic model, designed by and for white males, as well as an academic culture that says there is only one way of knowing (through conquering, proving or disproving, and competition rather than cooperation), one way to conduct research (independently, in a disciplinary silo, undistracted by teaching or service activities that take time away from tradition-

al scholarship), one way to “fit” into a department and be a good colleague (by assimilating to the dominant culture and sacrificing family or other personal obligations), one way to prove oneself in the academy (by peer review among mostly white males), one way to earn tenure (by publishing in the “appropriate” academic journals, which are usually refereed by white males), and one way to achieve full professorship (through the approval of tenured colleagues).

For people of color, especially women of color who face both race and gender issues, the white male model is especially troublesome. A 1998 study by professors Linda K. Johnsrud of the University of Hawaii, Manoa, and Kathleen C. Sadao of the University of the Pacific, found that “White faculty developed mechanisms that reinforced their dominant values and their ‘power to define who is to be included and who is to be excluded from—or remain peripheral to—the academy.’”

What to do

Many colleges and universities have attempted to close the race and gender gap in college teaching. The most common approaches have included: 1) “fixing” those who are in the minority by providing them with professional development and teaching them the “rules of the game”; 2) valuing difference, an approach that includes consciousness-training for everyone to help ease the transition of women and minorities into the workplace; and 3) examining the structural barriers that prevent women and minorities from being recruited and advancing and then creating policies such as work-family benefits that level the playing field.

A nontraditional approach to gender advanced recently by Robin J. Ely of Harvard Business School and Debra E. Meyerson of the Stanford Business School focuses on social practices. Many campus policies and practices appear to be gender- and race-neutral, but upon closer consideration, they really aren’t.

Take tenure, for example. On its face, tenure policies allowing new faculty to prove themselves during a probationary period of six or seven years appears to be neutral. But for women, tenure policies collide squarely with the biological clock. And even when women and minorities perform with excellence in teaching, research and service—that basic triad of scholarly activity—they are sometimes “derailed by a more slippery fourth factor: collegiality,” as reported in a July 2002 *New York Times* story.

The traditional science research model requires uninterrupted, around-the-clock lab work. Gender neutral? Not when we consider that most child care still falls on women. What about expanding interdisciplinary work? Gender- and race-neutral? Not when we realize that faculty of color and women are more likely to have joint appointments than white males. What about the typically isolated, independent scholarly research process? Gender -and race-neutral? Not when we consider that, for many ethnic groups, community is of utmost importance. And not for women who would rather work together than alone and who believe that breakthroughs are more apt to happen through sharing information and data disclosure than through isolation and hoarding information. What about tenure and promotion rules that reward the scholarship of discovery above all else? Gender- and race-neutral? Not when we see that women and faculty of color are much more frequently called upon to teach more classes and advise more students than their white male counterparts. What about peer review? Gender- and race-neutral? Not when a study out of Sweden’s Guteborg University shows that women have to be

FIGURE 3 – FULL-TIME FACULTY BY RACE, 1999

	United States	New England
Total Men	63%	61%
White (non-Hispanic)	86%	87%
Minority	14%	13%
Total Women	37%	40%
White (non-Hispanic)	85%	90%
Minority	15%	10%
Total African-American	5%	4%
Men	4%	4%
Women	7%	3%
Total Hispanic	3%	2%
Men	3%	2%
Women	3%	3%
Total Asian-American	6%	6%
Men	7%	7%
Women	5%	4%
Total Native American	<1%	<1%
Men	<1%	<1%
Women	<1%	<1%

FIGURE 4 – FACULTY BY RANK, RACE AND GENDER, 1999

Rank	White Men	Men of Color	White Women	Women of Color
Professor	71%	8%	18%	2%
Associate Professor	55%	9%	31%	5%
Assistant Professor	44%	10%	38%	8%
Instructor	41%	8%	42%	8%
Lecturer	40%	7%	45%	9%
Other Faculty	47%	8%	39%	7%

FIGURE 5 – TENURE RATES FOR MINORITY AND WHITE TENURE-TRACK FACULTY BY GENDER, 1997

Faculty	Women	Men
Of Color	56%	68%
White	64%	80%
Total	63%	77%



A Sampling of Campus Initiatives to Increase Minority Faculty

Several New England colleges and universities have launched initiatives to promote faculty diversity.

In 1995, Lesley University conducted a Culture Audit that made 23 suggestions for moving forward on diversity issues. Among them: special racism training for senior staff and faculty, expanded women's programs, increased child care and work and family support, celebrations of diversity on campus, increased access to buildings for the disabled, more support for international students and mentoring.

The audit and subsequent efforts have delivered results: people of color now constitute 18 percent of Lesley employees, up from 8 percent in 1989; 18 percent of faculty, up from 7 percent; and 16 percent of administrators, up from 4 percent.

The audit also led to faculty development programs to prepare graduates to engage with mainstream and socially marginalized populations; partnerships with Boston schools to provide an urban immersion experience for future teachers; and a Spousal Equivalent Policy extending benefits to same-sex partners.

Brown University's Minority Faculty Reinvestment Fund allows a department or school to hire a

minority faculty member even if it does not have an open position.

Dartmouth College tries to increase diversity in leadership positions by recruiting women and minority faculty at higher ranks than assistant professor—the traditional starting point for college faculty.

Harvard Medical School's Minority Faculty Development Program offers various fellowships and degree programs aimed at preparing minority students for careers in academic health centers.

For more than 10 years, the New England Board of Higher Education (NEBHE) has encouraged minority students to choose science, technology, engineering and math disciplines and pursue advanced degrees. Notably, NEBHE's Excellence Through Diversity Program organizes an annual networking meeting at MIT where students of all levels are paired with professionals in their disciplines and attend workshops and an internship fair. NEBHE also arranges networking and professional development events for underrepresented doctoral students in science, math and engineering, and publishes an annual directory of new minority Ph.D.s seeking teaching positions at New England colleges.

2.5 times more productive than men to be considered equally competent.

The trouble is, most of academia's policies, practices and procedures were designed early in the last century and they fit very poorly with the lives of today's scholars. Yet we keep them, in part because those who are in power are, by and large, the ones who made these rules. Meanwhile, innovative efforts to enhance diversity tend to be seen as "luxury" programs—the first to be cut during difficult fiscal times. Even in the good times,

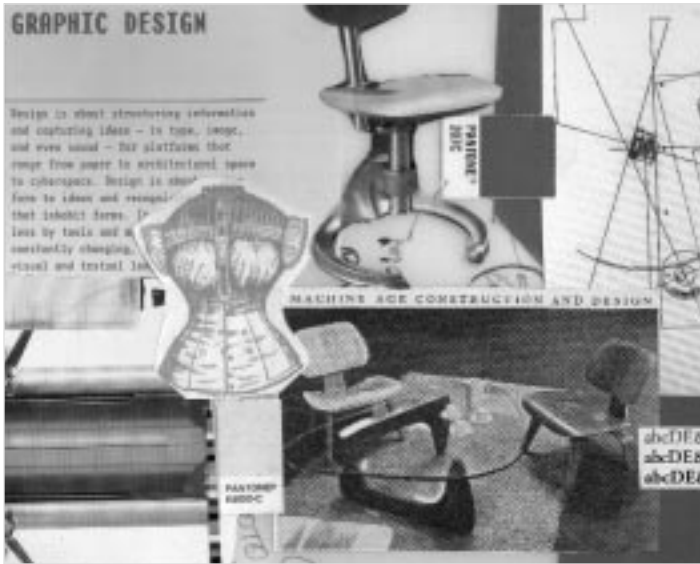
we didn't make much progress changing the underlying structures and culture of the academy. Until we do, New England's burgeoning population of African-American and Hispanic high school graduates will be poorly served in colleges where few on the faculty look like them, and those who do are beleaguered and exhausted.

Cathy A. Trower is principal investigator with the Study of New Scholars at Harvard University's Graduate School of Education.

NEW ENGLAND'S CHANGING DEMOGRAPHY: INDICATORS

	Conn.	Maine	Mass.	N.H.	R.I.	Vt.	New England	U.S.
Population, 2000								
Percent White Non-Hispanic	3,405,565	1,274,923	6,349,097	1,235,786	1,048,319	608,827	13,922,517	281,421,906
Percent Hispanic	9.4	0.7	6.8	1.7	8.7	0.9	7.2	12.5
Percent African-American	9.1	0.5	5.4	0.7	4.5	0.5	6.0	12.3
Percent Asian-American	2.4	0.7	3.8	1.3	2.3	0.9	3.0	3.6
Percent Native American	0.3	0.6	0.2	0.2	0.5	0.4	0.3	0.9
Population Growth, 2000-2001								
Births minus deaths	12,078	674	23,599	4,403	2,152	1,101	44,007	1,617,450
Net domestic migration	8,102	8,513	-20,751	13,605	3,870	1,705	-1,160	NA
Net foreign immigration	11,974	742	20,697	1,353	2,957	700	38,423	1,065,000
Educational Attainment								
Percent high school graduate or higher	85.2	84.8	86.1	87.5	78.9	86.8	NA	81.6
Percent w/bachelor's degrees or higher	33.3	22.8	35.0	29.9	25.4	28.3	NA	25.1

Source: New England Board of Higher Education analysis of U.S. Bureau of the Census data.



Economic Development ... by Design

Crafting a Blueprint for New England's Creative Economy

JAMES T. BRETT

Design-related firms employ 30,996 New Englanders from designers to administrative assistants.

During 2000, the New England Council found that the New England arts and culture sectors—nonprofits, for-profits and individual artists—provide jobs for 245,000 New Englanders, generate more than \$4.4 billion in payroll alone and surpass other touted employment sectors such as biotechnology and computer software in numbers of jobs and growth potential. This so-called “creative economy” employs nearly 4 percent of the region’s workers, on par with computer and communications hardware and significantly larger than health care technology’s 1 percent. Moreover, from 1993 to 1997, the creative cluster added jobs in New England at a rate of 14 percent—surpassing the 8 percent growth in all jobs.

Within the creative economy, the council found a particularly vibrant design industry. Design-related firms employ 30,996 New Englanders from designers to administrative assistants. At the same time, thousands of other designers work outside the design industry.

Now, as the council’s Creative Economy Initiative moves from economic impact study to blueprint for development, one area of focus is the design sector. The council has enlisted presidents of two leading New England colleges of design—Roger Mandle of the Rhode Island School of Design (RISD) and Kay Sloan of the Massachusetts College of Art (MassArt)—to spearhead a sub-project

focused more specifically on design. Earlier this year, they held their first meeting of representatives from the academic and business worlds. “It’s really about bringing the players together who have common interests, but who may not be working together already,” Sloan says.

Beyond visual arts

Mandle notes that design has long been an important industry in New England—and the basis of many other industries in the region going back to early furniture making, textiles, jewelry, clothing, shoes and more.

In the 19th century, New England was a major center for those businesses. The region produced few raw materials, but resourceful New England manufacturers would craft leather into shoes, for example, and buy cotton to turn it into fabric which would later be “designed” as clothing. Those New England industries depended on design for a competitive edge.

Printing and publishing, another long-standing New England industry, attracted graphic designers. Today, more than 3,700 graphic artists work in New England, according to the council’s Creative Economy survey published in 2000.

In the second half of the 20th century, designers played a key role in the technology industries that developed around Route 128. Extensive scientific technology went into designing computers. Says Mandle of the com-

puter development process: "Once the math is figured out, how a computer works and looks is a design issue."

While New York retains its distinction as the "design capital," the New England design sector is holding its own, according to Mandle. The Providence-Boston axis probably has a higher concentration of designers than any urban area its size.

Sloan says the competitiveness of New England's design industry is evident in the recent choice of Boston and San Francisco as the only two U.S. stops for visits from the British Design Council, the Danish Design Council and New Design Ireland. "They came to visit MassArt, RISD and some local design firms with the intention of visiting only two places in the United States," says Sloan. "These areas are seen as two important design centers in the United States and all of the colleges of art and design are in the thick of it."

Initiative goals

The design initiative aims to promote New England talent and resources nationally to attract business. "This might attract people from places like Chicago and Atlanta to utilize the services of the people in our area," says Mandle. "It will also serve to enhance the local reputation of our people."

The initiative also aims to instill in government a regional sense of responsibility to the enhancement of the design industry." Mandle envisions a regional conference of governors and economic development officers to examine how the states can work together to enhance regional design elements here and grow it even more.

As a first step, Mandle and Sloan are taking inventory of what is known about the region's design industry through local chapters of groups such as the American Institute of Architects, American Institute of Graphic Artists, Industrial Design Society of America and Graphic Artists Guild. They will then determine how a New England-wide initiative could add value.

Among other things, the initiative will provide a regional forum that

brings people together and creates the critical mass needed to influence public policy in support of design and creative industries as significant factors in the New England economy, Sloan says.

Policy issues that may unite this group include funding for arts education in public schools. Studies have demonstrated that arts education helps students perform well in other subjects as well. Also, some communities have introduced tax incentives for artists to assist in the revitalization of downtown areas or inner-city neighborhoods. These types of public initiatives could become models for the region. "We want to bring groups together to understand how important design is to good business," says Sloan. "We don't want to just have designers talking to other designers. We want to have an ongoing and broader network."

Another goal is to get higher education more engaged. "We need to examine what kinds of connections can be made between industry and higher education," says Mandle. "How can education enhance the talent here and ensure that those graduating in design fields will stay in the region? How can we make sure it is reasonable for them to stay?"



Already, between 65 percent and 83 percent of Massachusetts College of Art students stay in New England upon graduation each year, according to college officials, who stress that the campus provides conferences, networking and other connections for working designers.

A region of opportunities

About 20 New England institutions from Yale University to the University of Southern Maine, from Montserrat College of Art to Salve Regina University, offer majors in visual arts.

At RISD, students may pursue any of 10 design majors, concentrating in fields such as architecture, landscape architecture, graphic design, apparel design; film, video and animation, furniture design, illustration or textile design; as well as fine arts majors such as sculpture, painting, printmaking, glass-blowing, ceramics, jewelry and light metals.

Graduates enter a range of careers. Many ceramics studies majors take jobs in the dinnerware manufacturing industry. Jewelry-making grads are reinvigorating the region's jewelry design trade. Product designers make careers at companies ranging from Chrysler to Reebok. In shoe design, a designer developing new styles may start with a sketch and translate that into a computer model. She may then build the physical model and get involved in selling his idea and providing input on how it will be produced. This career challenges the skill sets of the designer—beginning with the basic skill of drawing.

The technology-based opportunities are growing all of the time, Mandle says, particularly in Internet design and in designing computer equipment and software.

Some 600 people attended a recent RISD conference on how important design is to marketing and business success—with media giant Martha Stewart the keynoter.

Many MassArt graduates find work in architecture, fashion, graphic, industrial and interactive design. According to Sloan, fashion design programs, including shoe and apparel design, are increasingly popular at



the nation's only publicly funded college of art. Another top field is interactive design, which has grown along with the World Wide Web. The interactive design field includes the information design and interactivity work that is critical to the success of

international companies.

But the focus on individual disciplines has begun to disappear somewhat. Design is viewed as problem-solving and work groups form which include communications designers, graphic designers and other creative workers all working together on a project to solve a problem, Sloan says. "We used to view the disciplines as all in separate professions and separate worlds."

Some design schools are already involved in economic development projects. RISD, for example, began a joint effort with Bryant College five years ago and created the Center for Design in Business. This program is designed to train artists and designers to be better business people and help employers apply design in their

business. In addition, RISD has received a \$2 million grant from the Small Business Administration to operate an incubator center for design-based start-up businesses. And a partnership between RISD and the state of Rhode Island provide venture capital to design startups.

Sloan and Mandle are seeking participation in the initiative from the region's other internationally recognized design schools, including MIT and Maine College of Art. Together, they have a simple mission: "We are educators," says Sloan. "We are trying to educate others to understand the connection that design has to the region and the economy."

James T. Brett is president and CEO of the New England Council.



Learning Organizations

Higher Education Institutions
Can Work Smarter Too

JAMES JF FOREST

In the same sense that we apply ourselves to instilling intellectual curiosity among students, we must encourage and reward learning at the organizational level.

What did you learn today? It's a fairly ubiquitous question built on the assumption that we human beings can and should constantly acquire new skills and knowledge. Given a moment, each of us can respond to this question appropriately, often recognizing that what we learned today had little to do with what we set out intentionally to learn, and much to do with haphazard discovery.

Why are we driven to learn? We live in a society that reveres smart people more than not-so-smart ones. Individuals who are bright and curious have significant advantages over others, and institutions of higher education seek to help people grow smarter. Through curricular programs, course syllabi and exams, and certification and degree qualifications, we have built a tremendously successful mechanism for equipping students with the knowledge and skills they need to be productive in the career field of their choice.

Isn't it ironic, though, that these same institutions of higher learning fail to apply these activities toward learning more about themselves and their environment and toward improving their organization's intellectual capacity?

Over the past decade, we have seen a number of colleges face real danger. Some like Bradford in Massachusetts, Castle in New Hampshire and Trinity in Vermont recently lost their struggle to survive, and others are

sure to follow. In response to the challenges of today's higher education environment, a variety of scholars and practitioners have rightly called for institutions to develop strategic goals and appropriate assessment activities. I would add that colleges and universities also need to develop organizational learning goals and related measurement instruments.

Colleges and universities can and must grow smarter. In the same sense that we apply ourselves to instilling intellectual curiosity among students, we must encourage and reward learning at the organizational level. We can do this by implementing an organizational learning plan (or syllabi) and appropriate assessment instruments (or exams), appointing a member of the organization to be responsible for guiding and assessing learning, and rewarding members of the organization for demonstrating and sharing what they have learned.

Learning plan

Organizations need a learning plan to encourage and guide learning, with the understanding that learning is likely to occur regardless of any planned course of action. The most effective form of learning plans are aligned with the institution's strategic plan. The strategic plan lays out what you seek to accomplish; the learning plan describes what you hope to learn in the process of achieving that goal.

For example, if a college's goal is to improve student retention, the members of

A New Route for Public Higher Education

FRANK NEWMAN AND JAMIE E. SCURRY

While Americans remain transfixed by the slow-motion stock market crash, another national investment has quietly taken a beating: higher education. Most New England public universities, state colleges and community colleges have seen their state allocations slashed. In the struggle to close the budget gap, some have instituted hiring freezes, laid off staff, cut course offerings or increased class size. Others are putting renovations on hold. And nearly every public institution has raised out-of-state tuition (“Crunch Time,” CONNECTION, Summer 2002).

The road back to good times is expected to be long and painful. Rather than adopt the wait-it-out mentality of earlier recessions, public college officials and policymakers should consider a new route that takes higher education beyond survival.

It begins with an acknowledgment that the foundation of our public institutions is in danger of eroding. More than ever, the system rewards prestige rather than fulfillment of the institution’s public mission. Market-like pressures have encouraged institutions to compete for star students, star faculty and corporate dollars. The results have carried colleges and universities far from their public purpose: some have turned their athletic programs into semi-pro farm teams, others funnel funds that should be spent on all students to small honors colleges or to a handful of high-profile researchers. Chasing corporate dollars, some public universities have compromised the integrity of their research.

Slowly, higher education’s public mission is being forgotten. Higher education is losing its special status as a societal good, devoted to serving the community. Public higher education cannot win back public confidence and support unless it rededicates itself to its original purpose: providing a high-quality academic experience for an ever-expanding share of the population. It also must make a commitment to achieving measurable results in student learning.

But college and university presidents can’t maintain a high-quality system without resources. And they can’t offer more accountability without more managerial

control over their institutions. The Futures Project on higher education at Brown University has found that leadership flourishes when it is freed from rigid state controls. This is especially true during times of budget shortfalls. What’s required is a new relationship between policymakers and academic leaders. Legislators must create a climate that encourages entrepreneurial management within a framework that holds colleges and universities to their public missions.

Defining autonomy and accountability is central to this new compact. Each institution should establish a clear mission and a focused strategy for realizing that mission. The state should provide an annual allocation—adjustable for inflation—that ensures continuity of programs, plus a chance for campuses to earn other state funds by meeting performance goals. In return, presidents should have autonomy to improve academic achievement, accessibility and efficiency and to develop other revenue streams. College presidents could adequately and creatively support the programs that best serve the public, and policymakers could fund what works.

Already, a handful of states are experimenting with new ways to spend their higher education dollars more effectively. In 1999, Maryland transformed its state university system into a public corporation and semi-independent unit of government. The Colorado Legislature has tied some funding to performance standards and made the Colorado School of the Mines into a charter college with its own autonomous board. And North Dakota’s public universities and colleges have been operating under an autonomy-for-accountability agreement for a couple of years.

When academic leaders and policymakers work together, higher education wins—and so does the public.

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that institution must seek to learn how various dimensions of the college affect current students and their retention, from the course-registration process, to life in the residence halls, to perceived quality of teaching, to athletic facilities. The same approach can be applied to a variety of other strategic goals, from developing and implementing new programs to improving the institution's external relations and fundraising efforts. Generally speaking, all departments within an educational organization must consider the following question: What do we need to learn in order to do what we do better?

An organization's learning plan must incorporate a dimension of purposeful assessment. Learning must be assessed and measured in a manner similar to our traditional course exams. The products of these learning assessment efforts should be made available throughout the organization in order to enhance the institution's overall knowledge base.

More importantly, a college must seek to instill a culture of intellectual curiosity throughout the organization, such that learning is consistently encouraged and rewarded. This may involve a high tolerance of risk, which allows for an organization's members to experiment and innovate. Regardless of the success or failure of experimentation, an organization must document what was learned in the process of such activities, and reward those who produced that new knowledge.

Organizational learning plans can increasingly be found throughout private industry. Further, the principles of organizational learning have been a component of many graduate business programs during the past decade. A university's own business school can often provide valuable and thoughtful details on the concepts of organizational learning.

Learning guide

Educational institutions need to designate someone to be officially responsible for guiding and assessing organizational learning. This person should be widely recognized as an effective teacher and be able to draw

on years of classroom teaching to design an organizational learning syllabus and appropriate learning measurement instruments.

Clearly, learning happens without a plan. But with someone in the organization responsible for asking members "What did you learn?" and documenting their responses, learning can be shared throughout the institution. A staff member in one department who discovers a new approach for serving students more effectively should be expected to share this new knowledge with her or his colleagues, as it could have significant implications for improving student retention.

Who at your college is responsible for encouraging the intellectual curiosity and growth on your campus? This is not a task for someone to assume on top of their existing responsibilities; what's needed is a full-time *learning guide*. Moreover, to be successful, the organizational learning guide must have visible support from the institution's senior administration, faculty, and trustees, and should report directly to the president or provost.

Organizational learning is not a function that can be added to an existing office of institutional research or strategic planning. This is not to undermine the importance or effectiveness of traditional institutional research functions. Colleges are typically served well by the data collection and reporting activities of their institutional researchers, many of whom also lead or support their college's assessment initiatives.

The collection and understanding of traditional institutional data, even when driven by a set of agreed-upon performance indicators, is one type of activity in which a successful college must engage. But to set organizational learning goals and measure progress toward achieving them requires leadership from an organizational member with proven expertise in teaching and the assessment of learning. Also, while organizational learning is in some sense a strategic activity for advancing the organization, these activities complement—rather than duplicate—

strategic planning activities, which themselves require considerable attention and assessment.

Rewarding learning

Members of an organization must be rewarded for demonstrating what they have learned and incorporating that learning into their daily work. In the classroom context, we use grades to reward students who demonstrate that they have effectively learned what we expected them to learn—for example, critical reasoning skills, the ability to draft poetry, statistical equations or a foreign language. In addition, the grading system presumably encourages all students to apply themselves diligently toward learning generally. Many faculty consider it a given that our approach to teaching and learning encourages the kind of lifelong intellectual curiosity that benefits both the individual and the larger society.

Learning is often viewed as fluid and individual-specific, yet we know that groups can and do learn collaboratively. Further, groups that apply their collective energies toward documenting what they have learned, and then make that knowledge available to other groups, produce a lasting impact on the organization as a whole.

Our colleges and universities must become organizations dedicated to "lifelong learning." Guided by thoughtful planning and leadership and adherence to the concepts of organizational learning, colleges and universities can acquire the knowledge and skills needed to respond to current and future challenges with increasing sophistication and success. How higher education leaders respond to the need for organizational learning will largely determine success or failure. In time, perhaps one measure we use for determining an educational institution's quality will be the response to the question: "What did you learn today?"

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Course Change: Reinventing Champlain

ROGER H. PERRY

Champlain cancelled 15 academic majors over the past 15 years, yet virtually no one lost their job.

There it was in black and white. The numbers for the electronics engineering technology program continued to plummet even though the program and its faculty were highly regarded and its graduates were in demand by companies like IBM and General Electric. It was foundering. Since it required even more new equipment, we felt we couldn't support the program anymore. It was a gut-wrenching decision, but it was time to move on.

That was one of hundreds of tough decisions Champlain College had to face over the past 15 years if it were to reach its 125th anniversary. Over this time, we learned what has become a rule in education today: for a small, private college to thrive, it must continually reinvent itself. But the devil is in the details. Here are some of the details of the Champlain story. ...

Problems everywhere

During the recession of 1990, two-year private colleges, including Champlain, faced an onslaught of killer challenges. Over the previous decade, interest in two-year, private education slowed to a trickle, and Champlain's career-oriented junior college tradition, which dated back to 1878, suddenly felt like a ball and chain around our neck.

Champlain historically attracted students from lower-income families, so a steady decline in the real value of federal Pell grants for the needy squeezed college finances.

While four-year colleges started to rely more

on donations from alumni, we couldn't because two-year graduates typically aren't wealthy or their allegiance is to the four-year colleges they graduated from later.

As if these problems weren't enough, Champlain faced other challenges:

The Community College of Vermont (CCV) built education centers around the state that for the first time attracted students immediately out of high school. Because many Champlain students were not academically strong and came from poorer families, CCV started "eating our lunch."

The percentage of Vermont high school graduates who attended out-of-state institutions increased from about 38 percent in the early 1980s to about 60 percent today. The exodus of students from Vermont was a particularly critical problem for Champlain, where 85 percent of full-time students came from within the state.

Vermont Student Assistance Corp. grants, among the most generous state grants in the nation, also declined in terms of real dollars, compounding the decline in federal Pell grants.

What we did

Even though our backs were against the wall, we wanted Champlain to thrive, not simply survive. So we charted a new course, focusing on these priorities:

In the early 1990s, we started aggressively recruiting out-of-state students and targeting families that could afford to pay private col-

lege tuition. Fifteen years ago, just 15 percent of Champlain's freshmen were from outside Vermont. Today, more than 50 percent are.

The college introduced numerous four-year programs; now almost all students enroll in these bachelor's degree programs or in one of three terminal associate programs.

The college diversified its educational portfolio to capitalize on global trends. We had some exceptionally strong programs that could go online, so in 1993, we launched Champlain College OnLine (CCOL), which has increased Champlain's part-time, adult enrollment by 75 percent since 1988. CCOL now has about 1,800 online course enrollments a year and it has attracted corporate training contracts, including online training for Putnam Investments.

We started international programs that now have 1,500 full-time students studying Champlain business and technology programs in India, the United Arab Emirates and Malaysia. By being online and overseas, Champlain faculty and staff are practicing the global and electronic lessons taught in the classroom. These new endeavors brought in 11 percent of the college's income last year. Over the past decade, they've supported the renovation of a number of Victorian-era buildings on campus.

Champlain carved out a niche as a technologically savvy, entrepreneurial organization. With this reputation, the college has attracted to its campus: the Vermont Information Technology and Vermont Telecom Advancement centers, the Governor's Institute on Information Technology, the Young Vermont Writer's Conference, and the Dynamic Landscapes technology training program for Vermont teachers.

Champlain has also become more selective. As late as 1994, the college rejected only 86 applicants; in 2001, it rejected 511.

What we kept

We blended the best of the old Champlain with the most promising new ventures. The college maintained a student-centered approach to education. We brought faculty from different

divisions together with the assistance of Davis and Perkins grants, to design and implement an intensive, assessment/student outcomes process to explicitly explain outcomes by major, by course and by general education programs. This process ensures that our programs incorporate the latest techniques and activities.

Keeping a career-oriented program current is a demanding task. For this reason, most new full-time instructors at Champlain are offered 12-month positions, so they can work with peers in teams throughout the year to develop links with businesses, revamp academic programs, increase enrollment, write grants and plan for the future. There is now a critical mass of academics on campus during the summer who have time to develop long-range plans and implement action steps. Champlain requires 12-month teachers to be accountable for enrollment in their programs to help propel the institution forward. While these functions have traditionally been seen as "someone else's job," this new paradigm stresses the importance of an integrated, holistic approach to instruction.

We maintained an entrepreneurial spirit that reflects our pioneer beginnings, with close ties to the marketplace and the organizations we serve. Our faculty continue to develop programs to fill the needs of business in fields such as e-business, multimedia, professional writing, elementary education or our first master's degree in managing innovation and information technology.

Incredible challenges still

With so much in transition, it hasn't been a bed of roses. It's difficult for campuses to handle change.

Trustees and faculty were reluctant to introduce and expand four-year programs. Many felt "why fix what's not broken" or "why abandon our established niche." Also, some felt we should continue to primarily serve lower-income Vermonters who didn't excel in high school. The trustees even voted in the early 1990s to cap four-year enrollment at 200 students, a ceiling subsequent boards lifted.

Many faculty expressed concerns that the entrepreneurial moves were too "businesslike" for a college. Some felt Champlain's academic programs shouldn't be measured by their ability to support themselves financially or they shouldn't clearly state what graduates should know or be able to do.

Some on campus felt we shouldn't enter the online market because it would dilute the value of our degree. Some maintained that students can only learn through direct classroom contact with instructors. Others questioned Champlain's overseas initiatives, saying it harmed what we do on campus.

Still, Champlain continues to make hard decisions. In 2000, Champlain trustees took the step of eliminating the college's intercollegiate sports teams—teams that had won national championships—in favor of expanded recreational, extracurricular and fitness programs for all students. Naturally, there were opponents to this decision, which came about as we were transitioning into a four-year college and looking at the four-year academic leagues that were available. At that time, a broader question was raised about what lifelong interests students can cultivate in college, and we debated whether varsity sports were fulfilling this need. The decision was, at its core, based on philosophy, not budget. The decision was a bold one, covered with skepticism by the *Burlington Free Press* and *Boston Globe*. Since 2000, Champlain has doubled its on-campus student programming, and student participation grows each semester.

Things we did right

Champlain didn't force faculty and staff to participate in most new initiatives. Teaching online courses or overseas was strictly voluntary. No one was forced to shift from nine-month to 12-month contracts.

We continued to celebrate the traditional teaching methods and programs that people have always honored on campus. These programs and approaches have served Champlain well and will continue to do so in the future. However, at the

same time, we supported faculty interested in developing alternative instructional strategies. The college has been known for a close-knit rapport between faculty and students—and that hasn't changed.

We cancelled 15 academic majors over the past 15 years, yet virtually no one lost their job. We retrained some people, helped others pursue careers outside Champlain or waited until some retired or moved on.

In the beginning, we set up separate units to run our new initiatives such as CCOL and international programs so "life went on as usual" in the traditional part of the College.

We provided the traditional parts of the college with considerable resources so they had the professional freedom to pursue their dreams.

We exemplified what many entrepreneurs in the area thought higher education should really be doing. Because of this identification, we typically raise 95 percent of our campaign donations from "movers and shakers" who graduated from other colleges.

We worked hard at building community on campus. In the 1990s, we started disseminating a "Summer Update" each August to keep the campus informed of decisions, new programs and happenings. They are followed by campus community meetings where faculty and staff can interact with administrators about issues.

As we moved into the mid-1990s, we asked ourselves how could we further diversify our student body. How do you reach out to new audiences? We've started to do this by offering

our programs online to students who live busy lives—or make their homes a half a world away. We offered programs on-site in countries that are hungry for business and technology education. And we've crafted new programs in multimedia and professional writing, for example, which attract students who never before would have considered Champlain's business-heavy offerings.

Another underlying theme has been to make these moves as easy as possible on the college's systems and people. For the last 15 years, it hasn't been "business as usual" at Champlain and that's made a world of difference.

Roger H. Perry is president of Champlain College.



Survival and Success: The Saint Joseph's Experience

DAVID B. HOUSE

Strategic planning at Saint Joseph's, as at many colleges, had been more about creating a "wish list" than a serious process of establishing goals and specific strategies to attain them.

Shortly after I was appointed president of Saint Joseph's College of Maine in 1995, I gave a brief talk before the Rotary Club in Portland. As the new president of a small college, I was full of confidence about the future as I extolled the virtues of small, liberal arts colleges. Then a question from the audience nearly stopped me dead in my tracks: Would Saint Joseph's College survive? After all, the questioner surmised, New England's small colleges were in decline. For proof, he reminded me, one need look no farther than Portland's own Westbrook College, which had recently merged with the University of New England. What was different about Saint Joseph's College?

The gentleman asking the question was not being hostile. He simply assumed that most small colleges would not be around much longer. I don't recall my answer to the question, but I remember thinking how vulnerable Saint Joseph's must have appeared to others.

There still is reason to be concerned. In the past five years, several New England colleges have closed, including Bradford in Massachusetts, Trinity College of Vermont and Castle and Notre Dame colleges of New Hampshire. Several other underendowed, rural or semi-rural colleges that depend heavily on tuition and face strong competition from public institutions may not survive either, especially those that are "discounting" tuition by 50 percent or more using their own institutional funds.

In 1995, Saint Joseph's enrollment had plateaued, only about 50 percent of freshmen returned for their sophomore year and the college's physical plant was deteriorating. The college had a weak history of fundraising and no strategic plan. Student satisfaction was at an all-time low, and many faculty were focused on 10-year-old labor disputes. Moreover, despite a proud history of sponsorship by the Sisters of Mercy, the college's Catholic mission and Catholic identity were unclear to many people. As one trustee commented early in my tenure: "We've raised tuition every year, and we don't have anything to show for it."

The college's trustees and I knew Saint Joseph's had great potential. The campus is located on 330 acres on Sebago Lake with stunning views of the White Mountains. Its mission, though not fully realized, was clearly, even boldly, described in a mission statement revised just two years earlier. The college also had a successful paper-based, distance education program that produced surplus revenue. The faculty and staff were highly committed to the college and they understood that changes would be necessary for success. And the college was virtually debt-free. But we also knew we needed to make fundamental changes if the college were to survive. And we did.

In the past seven years, Saint Joseph's College has experienced a 40 percent increase in undergraduate enrollment, while maintaining a successful nontraditional, distance

education program with students throughout the United States and in 22 other countries. SAT scores are up 40 points this fall, and the discount rate has decreased steadily, as mandated by the trustees, from about 46 percent to 40 percent—perhaps lower this year.

When a new academic building is completed in 2005, we will have more than doubled the square footage of buildings on campus. Our retention rate between freshman and sophomore year increased to 75 percent, up from 50 percent, and the quality of student life has improved. In fact, we have begun construction of a new residence hall a year earlier than planned in order to house incoming students next fall.

How did we do it?

First, we focused directly on our mission as a small, private, Catholic college in a beautiful rural location. We recognized that the combination of these features gives the college its distinctive character, so we concentrated our energies on maximizing them. As the only Catholic college in the state—a unique status in New England—we placed our mission in the foreground and emphasized the great Catholic intellectual tradition, a commitment of service to others and a high-quality and safe student environment. We stopped trying to be all things to all people, and began playing to our strengths and distinctive features.

Strategic planning at Saint Joseph's, as at many colleges, had been more about creating a "wish list" than a serious process of establishing goals and specific strategies to attain them with agreed-upon time periods and budgets. With a grant from the Teagle Foundation, we began the college's first strategic planning process in years, involving the Sisters of Mercy, the trustees, faculty, students, alumni and staff. We created a "strategic vision" for the college that responded to the question "Where do we want to be in 10 years?" Then, we developed a detailed strategic plan tied directly to operating budgets and focused on specific, realistic operational objectives.

Strategic planning also gave the trustees and administration the courage to take some risks, including borrowing to cover capital expenses. We built the first new building on campus in 10 years—a residence hall. We scrapped a stalled plan for a vaguely defined student center and built a 55,000-square-foot recreation center with gym, fitness center, swimming pool, running track, climbing wall, aerobics and dance studio, offices and meeting rooms. We borrowed through the Maine Health and Higher Educational Facilities Authority at favorable rates to cover much of the cost of the facility, and received a \$1 million matching gift from a donor. We raised the matching funds and more, and the Harold Alfond Center opened in 1998. We expected to be able to service our debt through added enrollments—one of the calculated risks we had to take.

Other improvements to the physical plant followed. We doubled the size of the dining hall and created a new entrance. We renovated classrooms, residence halls and common spaces where students like to hang out. A new, suite-style residence hall added 120 beds (its "twin" is under construction now), and we are halfway through a five-year plan to install fire sprinklers in all residence halls. We beefed up our technology services with a new server and computer labs (but stopped short of requiring students to bring laptops to campus). We spruced-up landscaping and signage.

Concentrating on our small size, we wanted to create the best student life we could. We hired highly qualified professionals in areas such as counseling, advisement, residential life and student activities. We reorganized housekeeping, engaged a new food-service provider and developed a new student orientation program. We raised disciplinary standards and discouraged prospective students looking for a four-year party funded by mom and dad. At the same time, we increased the breadth of our student activities and tried to stress the seamlessness of curricular and extracurricular life. We received a

grant from the Council of Independent Colleges to boost faculty interest in service learning.

Success, of course, should be gauged by more than buildings and landscaping: a college must provide a quality academic experience. With this in mind, we hired additional faculty, made courses more in-depth by adopting a four-credit per course system and greatly strengthened the core curriculum required of all students in all majors. We upgraded computer resources. We also focused on ways to improve our library and bought 70,000 volumes from Trinity College of Vermont when it closed last year.

By the mid-90s the Saint Joseph's, paper-based, distance education program, created in 1976, had become a victim of its own success. The program had failed to respond to the opportunities afforded by new communications technologies. It was not difficult to see that the future of distance education was inextricably linked to information technologies and that we would have to address the issue of moving from a paper-based mode of delivery to the Internet. Yet the program was also fundamentally sound, with a highly developed and outstanding infrastructure of academic advisors. Emphasizing our 20-plus years of experience in the field, we received two grants from the Sloan Foundation, which enabled us to begin putting courses online. We revised some existing programs while creating several new ones and adopted an improved method of accounting for revenue and expenses by program. We entered into strategic partnerships that have been enormously successful and hired new program directors who are challenged to identify emerging opportunities and create new programs.

Change does not come easily to a small college. But Saint Joseph's had done it before, changing its name, moving to Sebago Lake in the 1950s, becoming coeducational and establishing the paper-based distance program in the mid-70s. Moving a small college ahead on several fronts simultaneously is daunting, but not impossible, particularly if some fundamental principals remain in the forefront.

First, a college needs a clearly written mission statement that is widely understood by faculty, students, board members, alumni and prospective students and their parents. It need not be a doctrinaire statement, but should not be so vague as to be meaningless. The statement should be brief, but as specific as possible, and it should spark pride of ownership among constituents. The mission statement describes the fundamental principles upon which an institution is built, not the particulars of the mission as it will be expressed. At the same time, a college should interpret its mission expansively. Too many small colleges have closed because they regarded their mission in terms too limiting.

Armed with a strong, well-articulated mission, a college can move ahead with purpose and focus. Change and growth, then, become the product not of an individual president, governing board or faculty senate, but of the mission itself. No strategic decision should be made without the mission in mind.

Consensus has been and remains an important element in college governance, especially at small colleges. Yet administrators and governing boards need to understand that “consensus” does not mean “majority.” Lincoln’s dictum that you can’t please all the people all the time is never more true than in the case of management of institutional change. What is needed to move ahead is a “critical mass” of agreement, and what this constitutes—a slight majority, a small group of key people, or even everyone—is something each institution has to determine for itself, and it will change from issue to issue.

Finally, no one should discount the importance of sheer will power. Institutions endure in large part because enough people want them to. Remember the song from *Bugsy Malone*, “We Could’ve Been Anything We Wanted to Be... We Became the Best at Being Bad.” Well, success at a small college depends largely upon administrators, board members, faculty, students and alumni who

deliberately, even passionately, have made the decision to be good. They make that conscious determination with full knowledge that quality does not come cheap and not without struggle, sacrifice or risk. But they

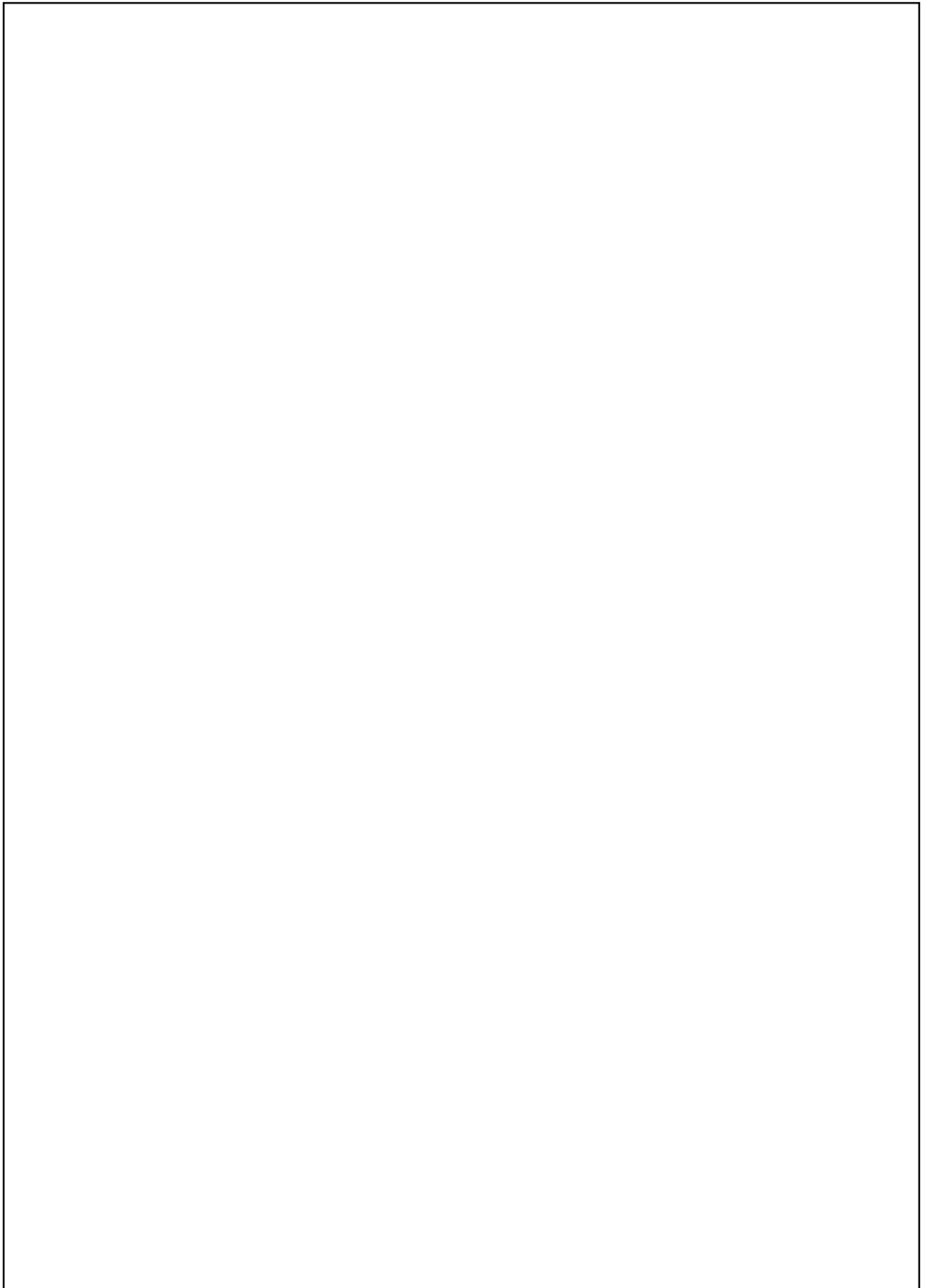
also understand that ultimately the success of the college and the students it serves is worth the effort.

David B. House is president of Saint Joseph's College of Maine.

Corrections

CONNECTION’s “Trends & Indicators in Higher Education, 2002” erroneously listed Saint Joseph’s College of Maine among the bottom 25 New England institutions in the percentage of bachelor’s degree-seeking freshmen who return for sophomore year [Retention and Graduation, Spring 2002]. The table should have bestowed that dubious distinction on the College of St. Joseph in Rutland, Vt., where just 55 percent of freshmen return as sophomores. The Maine Saint Joseph’s sees 73 percent of freshmen return. And in case you’re wondering, Saint Joseph College of West Hartford, Conn., has 76 percent return. We regret the mix-up.

It is true that colleges are doing more with less. But our suggestion that Saint Michael’s College and the Burlington, Vt., public schools would boost the success rate of non-native speakers of English with \$1.25 over five years was pure omission [Campus, Summer 2002]. The grant from the Federal Office of Bilingual Education and Minority Language Affairs actually amounts to \$1.25 million.



Books

Test Patterns

Peter Sacks

Fair Game? The Use of Standardized Tests in Higher Education, Rebecca Zwick, Routledge, 2002, \$19.95

The “high-stakes” in college admissions exams usually elicit fears of missing out on one’s dreams because of a bad day at the testing center. But recently, the stakes in at least one important college admissions test, the SAT, have taken on a whole new meaning. To appease the University of California system, among the largest and most influential customers of the College Board’s flagship product, the organization has decided to revamp its storied exam.

Although the changes received widespread media attention, periodic course corrections to the SAT enterprise are nothing new. What began as the Scholastic Aptitude Test (harking back to its roots as an IQ test) became several years ago the more publicly acceptable Scholastic Assessment Test. More recently, the College Board dropped any underlying references altogether, and the exam became simply “The SAT,” a name good for all times and social upheavals.

But the recent attacks on the SAT suggest that the testing program can’t be fixed with a name change, as evidenced by the College Board’s decision to attempt more substantive changes to the SAT. Under a threat from University of California President

Richard C. Atkinson to stop using the exam for UC’s freshman admissions, owing to the often-obscure nature and practical irrelevance of the test compared with what students actually study in school, the College Board agreed in June to changes in the test that, at least superficially, respond to some of Atkinson’s concerns.



Into this mix comes Rebecca Zwick, a professor of education at UC Santa Barbara, with her new book, *Fair Game?* One might guess that a book about standardized testing in American higher education, which starts by reminding readers that such tests have been part of civilized society going back to 200 B.C. in China, would take a favorable view of the prevalence of admissions tests for entry to U.S. colleges and graduate schools.

Indeed, the tried-and-true ancient Chinese example is useful to Zwick and for the premise of *Fair Game?* After all, mental testing as a means to

allocate opportunities has been a fact of civilization for eons. How misguided could such testing possibly be?

The use of standardized cognitive exams as gatekeepers to schools, colleges and jobs has been a blue chip investment, if not since 200 B.C., at least in recent times thanks to the instincts of American entrepreneurs. In higher education, the commercial success story centers around the SAT, the modern version of which was first administered in 1926. The alliance of the College Board, the owner of the SAT, and its designated test designer, the Educational Testing Service (ETS) would dominate the college admissions testing business for years to come.

However, the mettle of the SAT enterprise as well as other admissions exams, such as the Law School Admissions Test, the Graduate Record Exam and the Medical College Admissions Test, have been tested with some frequency over the years amid public concerns that colleges and universities—which don’t pay for the tests—place undue weight on test scores, jeopardizing the fairness and validity of their admissions systems.

For her part, Zwick would have us believe that she’s a middle-of-the-roader, a breath of fresh air in what she sees as the overheated testing debates. “All too often,” Zwick writes in her preface, “discussions of testing rely more on politics or emotion than on fact. This book was written with the aim of equipping the contestants in the inevitable public debates with some solid information about testing.”

In truth, however, Zwick—who is also a former researcher at the ETS—is mostly a not very subtle advocate for the status quo, mounting a rear-guard action in *Fair Game?* to fend off all the flack with which the SAT has been pelted in recent years. This book easily could have been written by the research staff at ETS.

Like her former colleagues at ETS, Zwick seems to suggest that if the high-stakes exams seem like a fixture of the so-called meritocracy, then perhaps it's for good reason. The tests, while not perfect, are an effective and economical way to assess academic talent. If poor and minority kids don't do as well as rich white kids on the SAT, then don't blame the tests, blame the underlying inequalities.

To those familiar with the great testing debates of recent years, that's exactly the argument that the College Board and ETS have made for decades in order to justify the heavy reliance on admissions tests in higher education.

Where did this ideology come from? At its roots, the SAT enterprise germinated from the notion (an idea given birth at the turn of the last century by early eugenicists and inventors of IQ tests in Britain and the United States) that individuals ought to succeed on the basis of their intellectual merits, not their aristocratic birthright. Conveniently for the commercial enterprises that designed and made the tests, that notion further held that the new "science" of mental measurement was the single best way to assess intellectual merit and thus the capacity one might have for society's leadership roles.

It was a clever piece of fiction from the start of the College Board-ETS alliance that mental testing of individuals for slots in their proper social order would lead to a true meritocracy, as championed by Harvard President James Bryant Conant. Despite all known evidence about the relationship between a young person's performance on so-called intelligence tests and his or her family's social and economic class, Conant believed that tests like the SAT would be the great equalizer of society, allowing the intellectual cream to rise.

Over the years, that ideology has become increasingly dubious. Critics of admissions testing can point to stark evidence that the exams tend to reinforce and exacerbate existing class and racial inequalities. Other critics, such as UC's Atkinson, a testing expert in his own right, have condemned the test as too obscure and removed from what students actually study in school. He has also complained about the test-preparation frenzy surrounding the SAT that ill serves the aims of education.

At nearly every opportunity, Zwick betrays her supposed evenhandedness, often leaving readers with the impression that this or that College Board or ETS study is the final word on a point of contention about standardized testing in higher education, while she either ignores, skims or downplays evidence to the contrary.

Examples of such miscues abound in *Fair Game?*, but the case of Bates College is illustrative. Almost 20 years ago, after considerable study, Bates stopped requiring the SAT and began offering applicants the choice of whether to submit SAT scores. The highly selective college in Lewiston, Maine, would, however, require that all applicants submit detailed portfolios of their actual work and accomplishments in high school, for evaluation by the Bates faculty.

As it turned out, Bates applicants who chose not to submit SAT scores underperformed SAT submitters by an average of 160 points, according to the college's own research. The non-submitters even underperformed national SAT averages. And yet, applicants who chose not to submit test scores performed as well or better academically at Bates than their high-SAT peers. What's more, the SAT could account for less than 10 percent of the differences in grades among first-year students at Bates—that is, SAT scores were virtually useless for their intended purpose, leaving more than 90 percent of the variation in freshman grades unexplained. As a result of dropping the SAT requirement, the college's applicant pool and student body ballooned to

include more women, people of color and working-class students.

Of course, Zwick is obliged to at least mention the examples of Bates and other institutions that have stopped requiring test scores or reduced the emphasis on gatekeeping tests for admissions. But she does so dismissively, marginalizing the significance of those stories. For example, Zwick makes a point of noting that William Hiss, the former admissions director at Bates and now a senior administrator at the college, suggested in a 1993 interview that the Bates experience worked well at a small liberal arts college but probably couldn't be duplicated at large public institutions.

Readers wouldn't know from *Fair Game?* that Hiss has since disavowed that position. Considering the modest relationship between test scores and later college grades, the large and growing disparities in test scores between the privileged and the not privileged, and the feasibility of portfolio assessments that portray a more complete and accurate picture of student accomplishments than permitted by test scores or grades, Hiss has recently argued in the strongest terms that the bureaucratic convenience of heavy reliance on admissions testing is simply no longer viable for public institutions in a democratic society.

In books, sometimes longer is better, permitting readers a rich understanding of a complex subject. Zwick has taken a different tack, apparently believing that brevity (189 pages of text) and a textbookish style are tantamount to truth. But the approach ultimately fails, leaving more informed readers unsatisfied and others misled. As for that evenhanded account of the testing wars, giving due weight to all sides of the question, don't look for it in *Fair Game?*

Peter Sacks writes frequently about education and American culture. His latest book is "Standardized Minds: The High Price of America's Testing Culture and What We Can do to Change It" (Perseus, 2000).

Catholic Women

Sylvia Simmons

Catholic Women's Colleges in America, Tracy Schier and Cynthia Russett, eds., *The Johns Hopkins University Press*, 2002, \$45

In the history of higher education, the role of Catholic women's colleges has been largely ignored. This collection of essays begins to tell their story, from the reasons for their establishment at the turn of the 20th century to their growth through the 1960s and their innovative strategies for survival in the 1990s. At their peak, there were 170 colleges founded by *women religious*, or nuns. There are now 110, of which, 18 are women's colleges.

Some of the essays examine the institutions from a theological, sociological and ethnographic perspective, but most are historical, so there is inevitable overlapping.

Editors Tracy Schier, the associate director of the Boston College Institute for Administrators in Catholic Higher Education, and Cynthia Russett, the Larned Professor of History at Yale University, begin by acknowledging that the book is a beginning—an exploration meant to raise questions for future scholars to answer.

Former Smith College President and novelist Jill Kerr Conway reminds readers that more than half the institutions founded to educate women in the United States were Catholic colleges founded by women religious. She touches on the integration of faith and knowledge and its relation to gender but not enough to satisfy the reader. She does, however, express the need for more research on the ethnography of religious life and notes that the history of these institutions is longer and more complex than first thought.

The essays by Monika K. Hellwig, executive director of the Association of Catholic Colleges and Universities, and Karen Kennelly, president emerita of Mount Saint Mary's College in Los Angeles, discuss the spiritual heritage

of the colleges, the reasons women religious were called upon to found the colleges and the steps taken to complete the transformation from academy teacher to college professor. The Kennelly essay also addresses the development of a curriculum for the institutions based in the liberal arts, adapted to pragmatic needs and focused on leadership and service.

Mary J. Oates, research professor of economics at Regis College reminds us, in her essay on the sisterhood, that women religious founded, directed, staffed and subsidized these institutions with little help from local bishops. When Chicago's Mundelein College opened in 1930, for example, Cardinal George Mundelein presented the college named in his honor with an organ and a small collection of memorabilia.

The essay authored by Melanie M. Morey, a senior associate of Leadership and Legacy Associates in Boston, outlines the relationship of the founding congregations to the institutions and their trustees and raises current issues related to governance and control.

In one of the best essays in the book, Kathleen Mahoney, a senior vice president of the Humanitas Foundation, guides the reader through the historical origins of the colleges based on their European antecedents. Another excellent essay by Georgetown University Provost Dorothy M. Brown and Boston College Associate Dean Carol Hurd Green explains how the colleges were hard hit by the social change of the 1960s, Vatican II and declining enrollments, and provides examples of innovative survival strategies and options for maintaining institutional identity.

Thomas M. Landy, associate director of the Center for Religion, Ethics and Culture at the College of the Holy Cross, writes that lack of endowment and low tuition made it difficult for the colleges to withstand the changing higher education environment. Landy charts and compares the growth, tuition, student-faculty ratio, private benefactions and library holdings of the colleges to other institutions. His analysis of library holdings at these and other kinds of colleges

provides a particularly interesting, though inconclusive, comparison.

This book contains some less compelling essays as well. One describing similarities and differences among three Philadelphia colleges begs for a broader context. Another details a survey of 20 alumnae of Catholic women's colleges—too small a sample to get the full picture of what this class of colleges has meant to women over the last 100 years.

Though the number of women religious is dwindling, the editors and the authors are optimistic that the charism of the congregations or sisterhoods will continue, and the colleges will be strengthened by the challenges ahead.

Kudos to Schier and Russett for providing this book as a catalyst and charging scholars to continue work they have begun. Anyone interested in the history of higher education should read it as a first step in understanding a group of colleges that has been invisible and ignored. Anyone interested in women's issues should read it for its story of female initiative on a grand scale.

Sylvia Simmons is chair of Regis College and former president of American Student Assistance. She is a graduate of Manhattanville College, a former women's Catholic college that went coed in the 1970s.

Chicanery

Andrew G. De Rocco

Crisis on Campus: Confronting Academic Misconduct, Wilfried Decoo, *The MIT Press*, 2002, \$32.95

This volume could not have been better timed. We are awash in academic and intellectual misconduct. Plagiarism, the fabrication of experience and the falsification of data and results have cast a long shadow across the integrity of the academic landscape.

In a sense, this book reads like a manual, for it begins by defining the categories of misconduct—fabrication, falsification, plagiarism—then lays out

methods for detection, analysis, assessment, reporting and, finally, prevention.

As a proscriptive manual, the book offers clear indications of what to avoid and what to prohibit, valuable advice for all parties. As a prescriptive manual, it makes useful suggestions about establishing an academic climate that removes the putative advantages a bit of chicanery might afford. Wilfried Decoo, a professor of Romance Languages at Brigham Young University and of Education and French Philology at the University of Antwerp, is especially clear about the power of the Internet to provide easy access, especially for students, to fully fashioned materials that can be passed off as original. (Aware that his is not the first foray into academic misconduct, Decoo has compiled a substantial bibliography and an appendix that details the Cerebus program, a computer-based protocol for detecting plagiarism.)

The author notes that the “hard” and “soft” sciences differ in the prospect for misconduct. In experimentally based

hard sciences, fabrication and or falsification are the common problems. In languages, the humanities and philosophy, plagiarism is the problem. Furthermore, the offenders can range from undergraduates, a significant proportion of whom admit to cheating, to faculty, and, where a “cover up” occurs, to university officials as well.



One example is discussed in considerable detail. A doctoral dissertation containing little, if any, original research and just slight changes in language from existing sources was accepted even when evidence of the shabby work was well-documented.

Why? Decoo argues that it was an institutional defense that prompted the decision—an unwillingness to accept responsibility for an embarrassing disclosure.

His account of the matter serves to illustrate in meticulous detail what he characterizes as “analysis.” It constitutes a surgical exposition of fraud and is accomplished with the equivalent of a lancet. Each new example of misconduct adds to a growing sadness for anyone who cares for the integrity of an academic institution. Decoo makes clear that in this instance, he was the whistleblower, yet the account is a fair and essentially disinterested analysis of the circumstances and outcome.

In concluding this volume, Decoo makes a strong case for ethical firmness, one that grows in meaning as it is demonstrated. It is a reminder that the certain way to teach ethics is by example.

Andrew G. De Rocco is former commissioner of higher education in Connecticut.

ORONO, MAINE—The University of Maine began setting aside spaces in teacher-training courses for students from Maine Maritime Academy in an effort to address a shortage of math and science teachers. Under the three-year pilot program, Maine Maritime students who complete required education and methods courses at UMaine and develop a professional portfolio will be eligible to seek conditional or provisional teacher certification when they receive bachelor's degrees from the marine academy in Castine.

NORTH DARTMOUTH, MASS.—The University of Massachusetts Intercampus Graduate School of Marine Sciences and Technology signed an agreement with the Naval Undersea Warfare Center in Newport, R.I., to offer master's-level students cooperative work experience at the Navy lab. Under the agreement, students in the multicampus UMass program receive a full-tuition waiver and stipend while they apply their coursework to the Navy's technical needs in areas such as marine robotics and oceanographic studies using unmanned undersea vehicles. Eventually, the program will include projects that emphasize transfer of Navy technology to civilian needs such as fisheries and environmental research.

SOUTH ROYALTON, VT.—Vermont Law School and Yale University's School of Forestry & Environmental Studies agreed to introduce a joint degree program allowing students to earn a law degree from Vermont Law School while they earn a master's in environmental management from Yale, beginning in fall 2002.

MANCHESTER, N.H.—New Hampshire Technical Institute and the University of New Hampshire at Manchester initiated a dual admissions agreement allowing students who earn associate degrees in engineering technology fields at the institute to begin bachelor's programs in engineering technology at UNH Manchester without applying separately.

HAVERTHILL, MASS.—Northern Essex Community College was awarded a three-year, \$250,000 grant by the

National Science Foundation to connect local classrooms with business-world math applications. Under the program, 30 teachers from Northern Essex, Merrimack College and Northeastern University as well as high schools in nearby Andover, Amesbury and Haverhill will participate in "externships" at area businesses and experiment with technology as a teaching tool. They will also develop classroom teaching modules incorporating business applications. Participating businesses include UPS of Chelmsford, Formatech Inc. and Physical Sciences Inc., both of Andover, and Enviro-Business of Cambridge. The U.S. Department of Agriculture in Westford is also a partner.

PROVIDENCE, R.I.—Brown University established a doctorate program in modern culture and media, beginning with two students in fall 2003 and rising to a maximum of 10 at a time. Students will be trained in areas such as film or digital media and pursue coursework in cultural and social theory.

NEWTON, MASS.—Lasell College introduced an evening master's program in management, which includes a concentration in elder care. The college's first graduate degree program aims to blend business principles with disciplines such as gerontology, hospitality and allied health to prepare students for management positions with organizations and facilities serving the elderly. Students may apply their coursework in settings such as Lasell Village, a college-sponsored retirement community.

CAMBRIDGE, MASS.—The Harvard University Art Museums launched a searchable Web-based database of more than 60,000 works of art from Harvard's three art museums. Through "Collections Online" at www.artmuseums.harvard.edu, anyone can access textual information and high-resolution images of works in the Harvard collection.

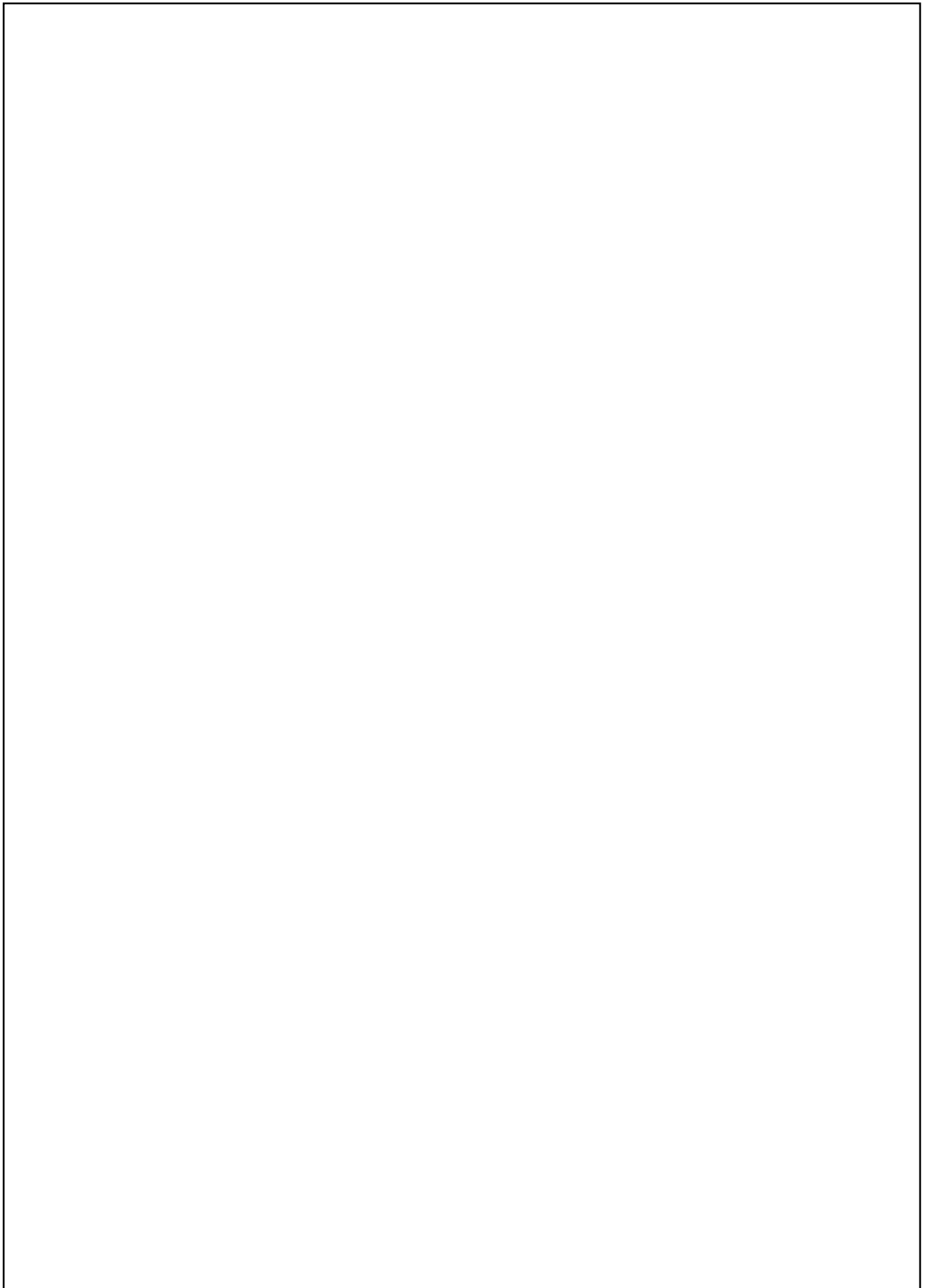
BOSTON, MASS.—Boston University's School of Public Health received \$100,000 from the founder of the Boston-based ReSource Institute for

Low Entropy Systems to establish a human ecology program linking students, public health professionals and community members concerned about pollution and environmental health. The donation from Abby Rockefeller will support an accessible research and teaching archive on the Love Canal hazardous waste site, a field-based project in Mexico to measure the impact of sustainable sanitation technologies and a seminar series on the implications of technological choices on ecological and human health.

PROVIDENCE, R.I.—Johnson & Wales University announced it would open a new campus in Charlotte, N.C., and begin enrolling students there in fall 2004. Pending state approvals, the Charlotte campus will offer associate and bachelor's degree programs in business, culinary arts and hospitality fields. The \$82 million campus will feature new residence and academic facilities, including culinary arts instruction labs, classrooms, administrative offices and practicum facilities in which students receive hands-on training in areas ranging from retail store management to hospitality and food service. The Providence-based university plans to consolidate its southeastern U.S. presence by moving its smaller Charleston, S.C., and Norfolk, Va. campuses, to Charlotte by 2006.

BRATTLEBORO, VT.—Marlboro College introduced a master's degree program in systems integration management to provide graduates with the ability to line up databases for a variety of financial institutions. Marlboro officials noted that as companies grow or merge, they are often left with incompatible databases. The one-year master's program includes classes at the Marlboro College Technology Center every other weekend as well as online coursework.

DURHAM, N.H.—The University of New Hampshire hosted a summer institute to help faculty members teach with technology. Eighteen faculty members representing every UNH school and college took part in the institute featuring presentations by national speakers and hands-on workshops.



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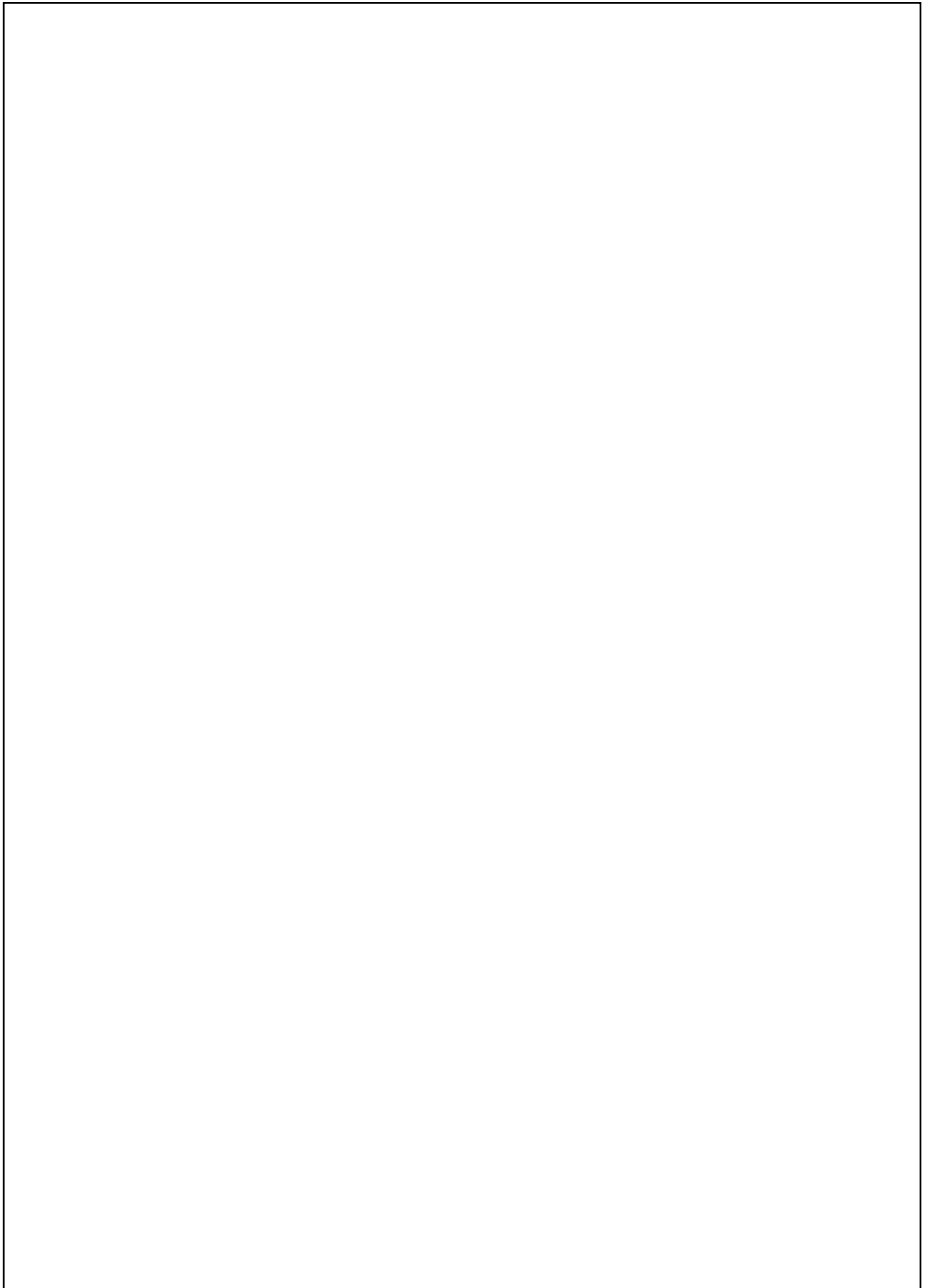
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- Percentage that was in 2000: **78%**
- Percentage of all *federal* student financial aid that was awarded based on financial need in 1985: **86%**
- Percentage that was in 2000: **52%**
- Voting rate in the 2000 presidential election among people with bachelor's degrees: **75%**
- Voting rate among people with high school diplomas or GEDs only: **53%**
- Percentage of high school students who take an art or music class with a teacher who does not have a major or certification in the subject: **20%**
- Percentage of high school graduates who earn credit in visual arts courses: **53%**
- Percentage of colleges that count high school arts grades when computing grade point averages: **35%**
- Of the 10 highest-paid presidents of U.S. liberal arts colleges in 1999-2000, number who remained in their positions as of November 2001: **2**
- Number of coaches of college athletic teams who made more than \$500,000 in 1999-2000: **8**
- Number of professors who did: **2**
- Average annual salary for U.S. preschool teachers: **\$19,610**
- Average annual salary for hairdressers and cosmetologists: **\$20,800**
- Number of Northern Essex Community College employees who retired under a recent early retirement incentive program for Massachusetts state employees: **27**
- Number of Northern Essex full-time nursing faculty who retired under the program: **7**
- Percentage of salaries of retiring employees that the college will receive from the state: **20%**
- Nursing vacancy rate at Holy Family Hospital in Methuen, Mass.: **10%**
- Amount Holy Name and three other local hospitals agreed to contribute to replace one of the lost nursing faculty positions at Northern Essex: **\$60,000**
- Number of Yale University employees who have bought homes in designated neighborhoods of New Haven, Conn., since 1994 under the university's homebuyer incentive program: **500**
- Share of total value of home sales in New Haven accounted for by the Yale program: **10%**
- Number of the 25 largest-circulation daily newspapers in Massachusetts that are not owned by a parent publishing company: **3**
- Number of recipients of Brandeis University's Lewis S. Rosenstiel Award for basic medical research who have gone on to win Nobel prizes since 1972: **13**
- Change in number of associate degrees granted nationally in all fields between 1989 and 2000: **+29%**
- Change in number of associate degrees granted in computer and information sciences: **+159%**
- Change in number granted in engineering-related technologies: **-17%**
- Percentage of undergraduates who are as satisfied or more satisfied with distance learning classes than they are with regular classes: **70%**

Sources: 1,2,3,4,5,6 Postsecondary Education Opportunity; 7,8,9 National Art Education Association; 10,11,12 CONNECTION analysis of *Chronicle of Higher Education* data; 13,14 *Education Week* analysis of U.S. Department of Labor data; 15,16,17,18,19 Northern Essex Community College; 20,21 Yale University; 22 CONNECTION analysis of *Boston Business Journal* data; 23 Brandeis University; 24,25,26,27 U.S. Department of Education



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