

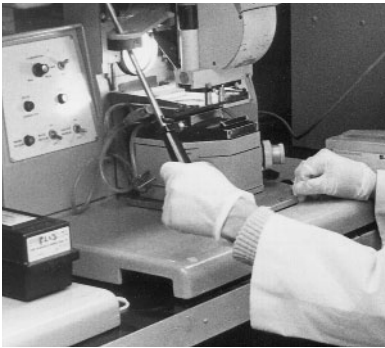
CONNECTION

NEW ENGLAND'S JOURNAL

OF HIGHER EDUCATION AND ECONOMIC DEVELOPMENT

VOLUME XIV, NUMBER 2

SUMMER 1999 \$3.95



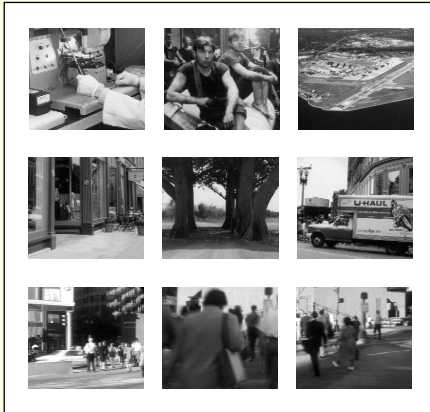
E C O N O M Y



C O M M U N I T Y



D E M O G R A P H Y



COVER STORIES

- 15** A Conversation about Demography
with Harold Hodgkinson
- 21** College Enrollment:
New England in a Changing Market
John O. Harney
- 22** College Openings and Closings
- 23** Ranking College Metros
- 24** Enrollment Management,
Meet Competitive Intelligence
David N. Giguere
- 27** University-Community Relations:
Doing the Tango with a Jellyfish
Christine McKenna
- 29** Civic Life in Gray Mountain:
Sizing up the Legacy of New England's
Blue-Collar Middle Class
Cynthia Mildred Duncan

32 Will New England Become Global Hub
or *Cul de Sac*?

Kip Bergstrom

34 Is Africa the Future of New England?
Yes, If We're Ready for It

Nathaniel Bowditch with Kate Pomper

37 New England and Africa: The Higher
Education Connection

Laura Ghirardini

40 An Economic Engine Overlooked

James T. Brett

DEPARTMENTS

- 5** Editor's Memo
John O. Harney
- 6** Short Courses
- 13** Data Connection
- 42** Books
*Civil Society: The Underpinnings
of American Democracy*
reviewed by Melvin H. Bernstein
- Thy Honored Name: A History of
the College of the Holy Cross*
reviewed by Alan R. Earls
- 46** Campus: News Briefly Noted

CONNECTION

NEW ENGLAND'S JOURNAL

OF HIGHER EDUCATION AND ECONOMIC DEVELOPMENT

CONNECTION: NEW ENGLAND'S JOURNAL OF HIGHER EDUCATION AND ECONOMIC DEVELOPMENT is published four times a year by the New England Board of Higher Education, 45 Temple Place, Boston, MA 02111. Phone: 617.357.9620 • Fax: 617.338.1577 Email: connection@nebhe.org

Vol. XIV, No. 2 Summer 1999
ISSN 0895-6405

Copyright © 1999 by the New England Board of Higher Education.

Publisher: John C. Hoy

Executive Editor: John O. Harney

Assistant Editor: Susan W. Martin

Director of Publications: Charlotte Stratton

Design and Production: The Publication Group

Advertising Sales and

Marketing Coordinator: Christine Quinlan

Subscription Information: \$20 per year (4 issues); regular issues \$3.95 each; annual FACTS issue \$14.95.

Advertising rates are available upon request.

CONNECTION is printed in New England. CONNECTION is indexed in PAIS International and in ERIC's *Current Index to Journals in Education*. CONNECTION is available in microform and electronically from University Microfilms, 800 North Zeeb Road, Ann Arbor, MI 48106. A cumulative index of CONNECTION articles and abstracts of recent articles are accessible on the World Wide Web at <http://www.nebhe.org>.

The **New England Board of Higher Education** is a nonprofit, congressionally authorized, interstate agency whose mission is to foster cooperation and the efficient use of resources among New England's approximately 260 colleges and universities. NEBHE was established by the New England Higher Education Compact, a 1955 agreement among the states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont.

Chair: David C. Knapp, President-Emeritus,
University of Massachusetts

President: John C. Hoy

CONNECTION Editorial Advisory Board

Kenneth Hooker *Chair*

Columnist, *Boston Globe*

Richard Barringer

Professor, University of Southern Maine

Laura Freid

Executive Vice President for Public Affairs and
University Relations, Brown University

Betsy Keady

Market Director, The Forum Corp.

Arnold Koch

Arnold Koch and Associates

Thomas L. McFarland

Director, University Press of New England

Ian Menzies

Hingham, Mass.

Neil Rolde

Sewall's Hill, Maine

E D I T O R ' S M E M O

You've heard the conventional wisdom about the Information Revolution's world-shrinking power. Your next email might just as easily go to Bangalore as Bangor. Your new colleague might just as well be in Sydney as Stamford. Your old regional affinities seem parochial in a world measured in mouseclicks.

Not so fast. If you're a New Englander, chances are the Internet and other information technologies are most notable for how they bring you closer to people whose *physical* existence already intersects with yours—people with whom you share common problems and opportunities, people you can visit in the flesh when the convening power of technology won't do.

Which is to say that the highly digitized ether may prove to be a more fertile place for regionalism than *terra firma*, carved up as it is in New England by good fences, Colonial political boundaries, turf animosities and indifference.

Sensing that cyber-regionalism is not the oxymoron some would suggest, the New England Board of Higher Education (NEBHE) recently unveiled a comprehensive gateway to New England on the Internet, aptly named *New England Online* and accessible on the World Wide Web at www.newenglandonline.org.

The new one-stop Web resource provides information and links in six different areas: *About New England* features general information on the six-state region. *Education* contains links to New England's 260-plus colleges and universities as well as sources of student financial aid and K-12 resources. *Government* provides vital information on New England state governments and links to key agencies and legislative resources. *Business and Economy* features access to updated workforce data and links to trade groups and economic development organizations. *Civil Society* includes links to the region's rich array of community service organizations. And the ambitiously titled *Life* section offers a range of information on New England media, arts, communities, recreation, tourism, weather and more.

New England Online was launched with financial support from AT&T and the cooperation of the New England Governors' Conference and the New England Council, the region's oldest business organization. It is the technical product of NEBHE intern Jonathan Bertsch and Director of Publications and Information Systems Charlotte Stratton.

The site was conceived by NEBHE's New England Public Policy Collaborative in response to repeated calls from New England leaders and commentators for more regional cooperation, especially a more visible and centralized regional Web presence.

For example, last year when NEBHE invited six forward-looking New England political figures to take part in a mock *Race for Governor of the State of New England*, two "candidates," Connecticut state Senate President Kevin Sullivan and former New Hampshire state Rep. Deborah "Arnie" Amesen, quipped that the capital of New England should not be, say, Boston or Hartford, but instead something along the lines of "www.ne.gov."

"That suggests that we have a technological and symbolic context in which to think differently about what it means to be a region," noted Sullivan.

A year earlier, regionalism expert Neal Peirce told a NEBHE conference: "We must use the Internet to create the virtual region (metropolitan or multistate) that politics denies us—a home for all the reports, analyses, updates, benchmarks, citizen goals, commentaries, debates that a healthy and competitive society should have. Yet New England, known as a high-tech region, presents a pitiful image on this, the high-tech medium of our time."

Added Peirce: "Any region that could give us such economists as Michael Porter and Lester Thurow ought to have basic economic material available quickly and easily."

Peirce suggested further that a strong New England Internet presence would allow businesses, organizations and potential customers from around the globe "to see an aware, customer-oriented, self-critical, mature, adaptive, promising region," while helping New England media outlets offer better news coverage and bringing together the region's college students, high school students and civic organizations.

New England Online may do all that and more. But only if it is a truly regional effort with plenty of input from people like you.

John O. Harney is executive editor of CONNECTION.

Telepsychiatry and Turf

Don't expect a good idea to get in the way of New England's fragmented approach to professional licensing and certification.

The Passamaquoddy on Maine's Indian Township reservation have wrestled with high unemployment, substance abuse and violent crime. The difficulties of tribal life are particularly tough on kids but, until recently, the nearest child psychiatrist was 90 miles away.

Now Harvard psychologists provide weekly consultations to a half dozen counselors at the township's Tribal Health Center via long-distance videophone hookup from the posh suburb of Boxford, Mass.

Harvard's Telepsychiatry Project was founded in 1993 to experiment with communications technology in providing mental health services to underserved populations.

One thing the Harvard professors don't do is directly counsel Passamaquoddy youths. Why? It's unclear which state has authority to license the counselors, Maine or Massachusetts.

Getting Testy

Initial eligibility for \$28 million in annual National Merit Scholarships is based solely on a three-hour, multiple-choice exam, and that reliance on test scores has shortchanged women. For years, female students won fewer than 40 percent of the prestigious scholarships, even though young women tend to earn higher grades in high school and college than their male counterparts. Now, changes made to the test aimed in response to a gender bias complaint seem to be making a difference, albeit a modest one.

The share of females among the 7,600 winners from the high school class of 1999 inched up above 45 percent, according to an analysis by the Cambridge, Mass.-based National Center for Fair and Open Testing (FairTest), which in 1994, filed a complaint against the Educational Testing Service and the College Board, the test sponsors, for illegally discriminating against females.

FairTest officials charge that even the reformed Preliminary SAT/National Merit Scholarship Qualifying Test cheats women, who

accounted for more than 56 percent of class of 1999 students taking the test, to say nothing of the SAT, GRE and related exams.

Community College Community

Former American Council on Education President Robert H. Atwell once remarked that community colleges, with their cutting-edge workforce training programs and flexibility to respond to changing student needs "are America's most exciting colleges."

"Community colleges," Atwell added, "often are more vital to the social and economic health of their states and communities than the local research universities."

Now, the two-year public institutions are getting some key organizational support.

The Denver-based Education Commission of the States was awarded a three-year, \$750,000 grant by the U.S. Department of Education to create a Center for Community College Policy. The center will develop an electronic information clearinghouse to collect, analyze and disseminate information on community college policy issues, commission new research on the issues and work with state and federal policymakers.

The New England Consortium for Community College Leadership, meanwhile, was created to research, develop and direct a leadership development program for community college administrators and faculty. The consortium planned to convene New England community college presidents and trustees and nationally prominent educators in Maine in October 1999 for three days of informal sessions devoted to working with local communities.

Up the Academy

If you want to understand New England higher education's pecking order, look at the college plans of graduating high school seniors from prestigious Phillips Academy in Andover, Mass., where school officials boast that 47 percent of graduates will attend one of the nation's 19 most selective colleges next fall.

As of the end of the 1998-99 school year, 20 Phillips Andover seniors were headed to Yale, 17 to Brown, 14 to Harvard, and 12 to Amherst College. Among academy graduates planning to enroll outside New England, 15

had their sights set on Columbia University, 14 were headed to Georgetown, 10 to the University of Pennsylvania, and eight to Duke.

More than 30 planned to attend nationally prominent public universities outside New England such as the University of California Berkeley and the University of Michigan, while just one was set to enroll in a New England public—the University of New Hampshire.

Minority Engineers: An Uptick?

The number of minority college freshmen majoring in engineering rose by 5 percent in academic year 1998-99, according to the National Action Council for Minorities in Engineering (NACME).

African-American freshman enrollment in engineering grew by 8 percent, marking the second straight annual increase after five years of decline.

Still, while African-Americans, Latinos and Native Americans constitute nearly 30 percent of the traditional college-age population nationally, they account for just 16 percent of engineering freshmen, 10 percent of engineering graduates and 6 percent of the engineering workforce.

Twelve States

You thought there were six states in New England? Economists and other commentators count more.

Mainers have long referred to the “two Maines” because of the cultural and economic differences between the rural north and the suburban south.

More recently, the Massachusetts Taxpayers Foundation has identified two commonwealths of Massachusetts: the knowledge-intensive Boston area, which lost 10 percent of its jobs in the recession of the early 1990s but more than recovered by 1997, and the more traditional Massachusetts beyond Route 495, which lost a quarter of its jobs in the recession and still hadn't recovered by 1998.

Vermont legislators and educators taking part in a recent New England Board of Higher Education “focus group” meeting similarly worried about two Vermonts: one doing quite well, the other struggling.

Missing the Cold War?

Was massive military research spending in the 1950s and '60s the key to New England's high-technology development? Or did the Pentagon's constant siphoning of scientific talent and other resources cost the region leadership in civilian electronics and information technologies?

That question is at the heart of an upcoming series of seminars to be cosponsored by the Federal Reserve Bank of Boston's not-yet-opened Economic History Museum along with the Massachusetts Institute of Technology's Security Studies Program and the University of New Hampshire Manufacturing Project.

The "informal" seminars, scheduled roughly monthly from September 1999 through June 2000, will feature scholars and industry experts drawn from the region's military-university-industry complex.

Over a year ago, the Boston Fed announced plans to open a New England-oriented museum of economic history aimed at an audience ranging, according to a Fed announcement, from "sophisticates to semi-rambunctious kids." The 10,000 square-foot facility, featuring artifacts

and interactive exhibits, is tentatively set to open in April 2002.

For New Englanders who learned to love the bomb, meanwhile, there is some good news. Despite the end of the Cold War, federal funding of basic defense research rose by 7 percent in fiscal 1999 after several years of decline.

Showtime

Academics don't like to put too much weight on the success of college athletic programs. But could national basketball glory do for University of Connecticut fundraising what Doug Flutie did for Boston College recruitment?

Last year, while UConn's Huskies were marching to the men's national college basketball championship, the University of Connecticut Foundation was collecting \$26 million in charitable gifts from private sources—a healthy 25 percent increase over the year before.

Gifts to support academic programs rose by 33 percent, while gifts earmarked for athletic programs rose by 21 percent.

The figures don't even include a recent \$23

million commitment to UConn's School of Education and the university's Health Center in Farmington from 1956 graduate Ray Neag. That represents the largest gift ever received by a New England public university and the largest received by any U.S. school of education.

Comings and Goings

Carol A. Moore, a biology professor and former provost and vice president of academic affairs at Mercy College in New York, became president of Lyndon State College, replacing **Peggy Williams**, who became president of Ithaca College in New York in 1997.

Paul R. Dauphinais, a former University of Maine assistant professor and more recently head administrator of Nebraska's McCook Community College, became president of York County Technical College in Wells, Maine, replacing **Darrel Staat**, who left to head a community college in Virginia.

Former New England School of Law Professor **Robert V. Ward Jr.** was appointed dean of the Southern New England School of Law in North

Dartmouth, Mass., becoming New England's first African-American law school dean.

William R. Holland, professor of educational leadership at Rhode Island College and executive director of the Rhode Island Association of School Principals, became Rhode Island's commissioner of higher education, succeeding **Stephen T. Hulbert**, who left the post to pursue academic work. Holland previously served as superintendent of two Massachusetts school systems and as president of the New England Association of Schools and Colleges.

Connecticut's former Deputy Commissioner of Higher Education **Valerie F. Lewis** became interim commissioner, succeeding **Andrew G. De Rocco**, who resigned.

Hartford Seminary President **Barbara Brown Zikmund** announced she would resign at the end of the 1999-2000 academic year after 10 years in charge.

Mount Ida College President **Bryan E. Carlson** announced he would resign by July 2000 after more than 20 years at the helm.

Gene Outka, a Yale University professor

of philosophy and Christian ethics, became chair of Yale's 22-year-old Program on Non-Profit Organizations, while research scholar and lecturer **Lisa R. Berlinger** became director, replacing longtime director **Peter Dobkin Hall**, who joined the faculty of Harvard's Kennedy School of Government.

Bernard LaFayette, a Civil Rights leader who co-founded the Student Non-Violent Coordinating Committee and served most recently as president of the American Baptist College in Tennessee, began a three-year term as distinguished scholar-in-residence at the University of Rhode Island. LaFayette is expected to play a key role in developing a new URI Center for Nonviolence and Peace Studies.

Vermont Law School Professor **Karin P. Sheldon** became director of the school's Environmental Law Center, replacing **Patrick A. Parenteau**, who will continue teaching at the law school.

Joan Morthland Hutchins, president of Los Angeles-based Computite Corp. and MBH Farms Inc. of New York, became president of Harvard's Board of Overseers.

William E. Haggett, chairman and CEO of Naturally Potatoes of Mars Hill, Maine, and former CEO of Bath Iron Works Corp., was elected chair of Maine Maritime Academy.

Providence College President **Rev. Philip A. Smith** became chair of Health & Education Leadership for Providence (HELP), a coalition of the city's six nonprofit hospitals and four private colleges.

Former West Virginia Gov. **Gaston Caperton** became president of the College Board, succeeding **Donald M. Stewart**, who became program director for higher education policy at the Carnegie Corp.

Education Commission of the States (ECS) Vice President **Kay McClenney** became interim president of the ECS, succeeding **Frank Newman**, who served for 14 years in the post.

Former Clemson University President **Constantine "Deno" William Curris** was named president of the American Association of State Colleges and Universities, succeeding **James B. Appleberry**.

- Percentage of American adults in the full-time job market who changed jobs between 1996 and 1999 or expected to within a year: **32%**
- Weighted average annual wage for the 10 Maine industries that *shed* the most jobs between 1992 and 1998: **\$34,734**
- Weighted average annual wage for the 10 Maine industries that *added* the most jobs between 1992 and 1998: **\$22,852**
- Percentage of U.S. workers holding multiple jobs, 1997: **6.2%**
- Percentage of Maine workers holding multiple jobs, 1997: **8.8%**
- Percentage of Massachusetts minimum-wage workers who are age 20 or over: **71%**
- Percentage of Americans who think protecting jobs of American workers is a very important foreign policy goal: **80%**
- Percentage of senior officials in government, business, media and nonprofits who agree: **45%**
- Average number of minutes it takes a U.S. executive doing a job interview to determine whether a candidate is a good match for a position: **16**
- Percentage of U.S. executives who say it's helpful for job candidates to send thank you notes following interviews: **76%**
- Percentage of Massachusetts families who live in poverty: **9%**
- Percentage of Massachusetts Latinos who live in poverty: **48%**
- Latinos as a percentage of the total Massachusetts population: **6%**
- Latinos as a percentage of the total population of Lawrence, Mass.: **48%**
- Approximate ratio of college administration quotes to college faculty quotes in U.S. newspaper stories about issues related to diversity and affirmative action: **7-to-4**
- Percentage of candidates admitted to Harvard's Class of 2003 who declined the offer of admission: **20%**
- Women as a share of Harvard Medical School's Class of 1999: **50%**
- Women as a share of Harvard Medical School's full professors: **10%**
- Women among managing partners of Boston's top 12 intellectual property law firms: **0**
- Percentage of parents who say they have done a child's homework because it was too difficult for the child or because the child was too tired: **22%**
- Percentage of parents who say they have walked away and let the child deal with the consequences of not doing his schoolwork rather than dealing with the child's stalling: **49%**
- Number of New England institutions among America's 50 "most wired" colleges in terms of technology courses, hardware and services: **12**
- Number of wiretap orders authorized by federal and state courts in 1998: **1,329**
- Percentage points by which taps on pagers, cell phones and email exceeded conventional telephone wiretaps: **6**
- Worldwide availability of water in per-capita cubic meters today: **7,000**
- In 1950: **17,000**
- Number of New England daily newspapers that have changed ownership since 1994: **26**
- Number of New England representatives on the 15-member board of directors of the national Council of Graduate Schools: **0**

Sources: 1 Fidelity Investments; 2,3,4,5 Maine Center for Economic Policy; 6 Chris Tilley, University of Massachusetts at Lowell; 7,8 Chicago Council on Foreign Relations; 9,10 Accountemps; 11,12,13,14 The Mauricio Gaston Institute, University of Massachusetts at Boston; 15 Oscar Gandy, University of Pennsylvania; 16,17,18 Harvard University; 19 NEBHE analysis of *Mass High Tech* data; 20,21 Public Agenda; 22 *Yahoo! Internet Life*; 23,24 Administrative Office of the U.S. Courts; 25,26 UN Human Development Program; 27 NEBHE analysis of *American Journalism Review* data; 28 NEBHE analysis of Council of Graduate Schools data.

MARK YOUR CALENDAR!

New England Board of Higher Education *Conference Schedule for Fall 1999-Spring 2000*



EIGHTH ANNUAL MEETING OF SCIENCE AND ENGINEERING ACADEMIC NETWORK FOR MINORITY STUDENTS

Massachusetts Institute of Technology, Cambridge, Mass., Oct. 23, 1999

A CRITICAL SHORTFALL: COMPETENCY AND SHORTAGES IN NEW ENGLAND'S TEACHING PROFESSION

Federal Reserve Bank of Boston, Boston, Mass., Dec. 3, 1999

EXPANDING MINORITY ACCESS AND OPPORTUNITY

Federal Reserve Bank of Boston, Boston, Mass., March 6, 2000

PARTNERS IN DEVELOPMENT: THE UNIVERSITY AND THE COMMUNITY

Federal Reserve Bank of Boston, Boston, Mass., March 31, 2000

FORGING AN ALLIANCE: THE PERFORMING ARTS, THE CAMPUS AND THE COMMUNITY

Location and date to be announced, April 2000

CONFRONTING NEW ENGLAND'S WORKFORCE CHALLENGE

Federal Reserve Bank of Boston, Boston, Mass., April 18, 2000

NEW ENGLAND TELECOMMUNICATIONS AND DISTANCE LEARNING CONFERENCE

Federal Reserve Bank of Boston, Boston, Mass., May 25, 2000

**For further information, visit NEBHE
on the Internet at www.nebhe.org or contact:**

Jan Queenan
NEBHE Director of Conferences
New England Board of Higher Education
45 Temple Place
Boston, MA 02111



A Conversation about Demography with Harold Hodgkinson

When Harold L. Hodgkinson became dean of the Simmons College School of Education in the late 1950s, he was beginning an odyssey in higher education that would earn him a reputation as America's leading educational demographer. After Simmons, it was on to the deanship of Bard College and later, a faculty position at Berkeley. In 1974, President Ford appointed him director of the National Institute of Education. Hodgkinson did stints as president of the American Association for Higher Education, president of the National Training Laboratories, director of the American Management Association and fellow of the American Council on Education. Since 1987, he has directed the Washington, D.C.-based Institute for Educational Leadership's Center for Demographic Policy.

A former editor of the *Harvard Educational Review* and the *Journal of Higher Education*, Hodgkinson has been recognized by the National Science Foundation as a Distinguished Lecturer. He recently shared his views on key issues with CONNECTION.

ON THE EDUCATION CONTINUUM

We have begun to realize that the most important years of life for education are the first five. And we've realized there's a role for education throughout people's lives—*lifelong learning*. Though we have studied the school-to-college transition, we don't know very much about what happens when a child leaves preschool and enters school. Twelve governors have

now established K-16 commissions, bringing together for the first time interested parties from kindergarten through college—already a fairly common practice in countries that have centralized ministry systems.

We also know that when we allow a student to drop out of high school, we are essentially creating a prisoner. Eighty percent of U.S. prisoners are high-school dropouts. In fact, someone who doesn't graduate high school is more likely to go to prison than a heavy smoker is likely to get lung cancer. After all, dropping out of high school means there's no way of achieving the American Dream other than by stealing the BMW—because you're never going to be able to buy it.

Now, U.S. higher education institutions must end their isolation from the rest of the educational system, because it's in their self-interest to make sure everybody has a chance to travel through the system and move into higher education.

ON THE DEMOGRAPHER'S CRAFT

Some people have more children than others, some people live longer, some move more often and some have more money than others. Understanding those variables, along with the ability to compute percents, sums up the field of demography.

The reason we're so successful at predicting the future is the simple scientific principle that every decade, people get precisely 10 years older. In 1946, the year President Clinton was born, there was a 37 percent increase in people born in the United States, so

in 1996, there was a 37 percent increase in 50-year-olds, and in 2006, there will be a 37 percent increase in 60 year-olds, and in 2011, there will be a 37 percent increase in people applying for retirement.

If a college wants to plan its freshman enrollment for the year 2010, it doesn't have to wait. Higher education enrollment forecasting is based largely on people who have already been born, and the "traditional college-age" freshmen of the year 2010 were born in 1992. Simple forecasting techniques turn out to be astonishingly accurate—usually, plus or minus 5 percent.

ON THE BABY BOOM

People born in the 1930s are not a problem for Social Security because there are very few of them. The Baby Boomers can take care of my retirement by paying into the system without much trouble at all. But who will support these aging, white Baby Boomers in their retirement years?

The answer is a small and shrinking workforce that is also the most ethnically diverse workforce the United States has ever seen.

Differential fertility plus immigration determines the future makeup of the United States. The average black female gets pregnant about five times over her lifetime and gives birth to 2.6 children. The average Hispanic female gets pregnant less often and gives birth to more children. The average white female gets pregnant 2.8 times and gives birth to 1.7.

The Baby Boom is the result of a 17-year celebration of the end of World War II.

There wasn't much optimism among blacks after World War II, so their fertility rates did not go up to the same degree as that of whites. Result? The Baby Boom is essentially white.

The decline in births following the Baby Boom was also essentially white, though some decline also occurred among blacks. If it were not for Hispanic and Asian immigrants, we would be in a very difficult situation in terms of keeping schools going.

ON AN AGING POPULATION

In the London of Charles Dickens, half the funerals were for children under age 10. In 1880s New York City, one child died for every child born. The birth and death rates for children canceled each other out.

In contrast, by 1997, fully 57,000 Americans were over age 100, according to the Census Bureau. The third quarter of human life is clearly from age 50 to age 75.

The problem is that increased life expectancy presents us with a smaller

workforce and a very large retired force. There were once 18 workers per retiree; now there are three workers per retiree and there will soon be just two. So if a man retires at \$40,000 a year in Social Security, a working woman must give that retiree \$20,000 a year for as long as he's retired and she's working. That's enough to prevent her from putting a new roof on her home or sending her children to the college of their choice.

Furthermore, nothing is distributed evenly in the United States. In 27 states, including Vermont and Maine, one-fifth of the total population will be over age 65 in the year 2025.

These states will feature a mailbox economy in which income does not come through wages, but through the



mail in the form of Social Security checks, dividends from stocks and bonds and interest on savings accounts. Money in the mailbox economy isn't taxed until the older person spends it. Try putting a tax on somebody's Social Security check and you'll have a revolution.

Also because more people are getting older, disabilities are becoming more common. Some products advertised on TV would have been embarrassing to consider publicly 15 years ago; now we're talking about diapers for adults and nobody seems to mind.

Finally, many older people whose children have finished school and college are not interested in bond revenues for new school construction or state support for higher education.

ON DENSITY AND POLICY

Population density in New England varies from 1,000 people per square mile in the *BosWash* Corridor from Boston to Washington—greater than Japan's 750 people per square mile—to six people per square mile in Maine's Piscataquis County, which is the population density of the Gobi Desert.

Why is density important? Florida recently gave up on running a bullet train because the densities along the route in Florida simply are not great enough. But a bullet train will work between Boston and Washington. Similarly, if you're delivering Meals on Wheels to elderly people around Providence, you could deliver 20 meals in 20 minutes. In southern Utah, it could take all day because there may be five miles between stops. And if you have a heart attack in a county with six people per square mile, your chances of being Medicaid'd are much worse than if you were outside Boston. So population has a lot to do with the efficiency of social service delivery.

It's also very hard to run schools with only six taxpayers per square mile.

With high densities, mistakes can be fatal. A little problem with transportation doesn't matter much in Provo, Utah, but matters a lot in Boston. High-density areas *have* to be efficient. In fact, the *BosWash* Corridor functions like a single, efficient city right from Boston to Washington. And one reason the corridor works is that it doesn't have a mayor!

Incidentally, another principle of demography is that metropolitan areas do not confine themselves to state lines. Forty percent of metropolitan St. Louis is in Illinois. Memphis is not only the largest metropolitan area in Tennessee—it's also the largest in Arkansas and Mississippi. And from a demographic standpoint, Cleveland and Pittsburgh have come together to form *Clevelandburg*.

ON POPULATION STABILITY

Every year, 43 million Americans move from one address to another, in many cases, from the North to the South. And because *movers* are younger and better educated than *stayers*, what's left in the Northern half of the country is a residual population of older, white citizens.

Hundreds of studies examine why people leave places, but few ask why people stay. Yet this is enormously important.

Transience destroys communities. Communities need engaged churches that care about the larger community as well

as their own members. Communities need small retail stores with places to hang out, sit down and gossip (if you can't sit down, you can't truly gossip). And they need active associations. Writing a check to the Boy Scouts is not enough; communities need troop leaders. Communities also need diverse economies with small manufacturing companies where even high school graduates can earn enough to own homes in the community. High home ownership rates, in turn, offer further stability, even in big-city neighborhoods.

Families with children are important in a community, too. And if the children are known by adults who are not their parents, that's pure gold. If somebody who is not a parent can say, "Johnny, you better stop doing that or I'm going to tell your mother," Johnny stops doing that. It's one of the world's great surveillance systems, but it only works for adults who know children by name.

People also tend to stay in communities with stable, clustered incomes, because everyone is in the same boat financially.

Very few people move to New England and very few leave. Still, the leader by this measure is Pennsylvania: fully 80 percent of the people living in Pennsylvania were born there. By contrast, just 30 percent of Floridians were born in Florida. Some of the implications are obvious. Pennsylvania is a wonderful place to raise children, crime rates are low and there are few street signs because everyone has been there before. But getting a new idea across the state line into Pennsylvania might as well be illegal. Along with the comfort and security comes hostility to innovation. Florida, on the other hand, is dangerous, transient, multilingual—a difficult place to raise children. But new ideas wash into Florida like the tide because there is no established repertoire of ideas—no Floridian way of thinking about things as there is in Pennsylvania. As a result, lobbyists love Florida because Floridians don't know how to behave, and the lobbyists are delighted to show them.

Transient legislatures are another new phenomenon with important implications for higher education. Some lawmakers are just passing through, not interested in building a legacy for *their* grandchildren through higher education.

ON COLLEGE-GOING

Few phenomena vary by state as widely as college admissions. The percentage of

19-year-olds who have graduated from high school and been admitted to college ranges from a high of 60 percent in North Dakota to a low of 25 percent in Nevada. No international test comparisons show that great a deviation between nations.

Coming after North Dakota at the top of the list are Iowa, New Jersey, Nebraska, Massachusetts, Illinois, Wisconsin and Rhode Island—some of the most stable states in terms of population growth. At the bottom of the list are Nevada, Nebraska, Florida, Texas and Arizona—the five most transient states in the United States. Teachers all over these states report having totally different students in their classrooms in the spring than in the fall when school began. Ministers talk of never having seen a third or more of the



*If the funeral
replaces the baby
shower in
your town, put
your house on
the market.*

people gathered in their halls of worship. Hospital physicians spend their time treating patients who are total strangers.

Nationally, 24 percent of adults have bachelor's degrees or more. In New England, the figures are: 33 percent in Massachusetts, 30 percent in Connecticut; 27 percent in New Hampshire, 25 percent in Rhode Island; 20 percent in Maine; and 14 percent in Vermont.

ON RACE AND POVERTY

The percentage of people in poverty in New England is below the U.S. average. That's important, because if you can prevent people from moving into poverty, you have a better shot at achieving educational equity.

Furthermore, we should look at race and class together. You can look at

eighth-grade students in terms of math proficiency and compare four different ethnic groups, but try comparing the highest-income quarter with the lowest-income quarter within each ethnic group and you see how much of the experience is due to race and how much is due to class. Look at the math scores for wealthy Asian kids versus poor Asian kids. Look at the scores for wealthy whites and poor whites, wealthy Hispanics and poor Hispanics, wealthy blacks and poor blacks. It turns out this is roughly 30 percent about race and 70 percent about class.

The fact that 20 percent of black households have a higher income than the white average doesn't mean there aren't severe problems with poverty among black, and especially, Hispanic populations. But it does suggest that the universally handicapping condition is not race, but poverty.

Without exception, as you get more education your lifetime income increases, and those numbers have not changed in terms of consistency for at least 50 years. In fact, education is so important in determining income that you can pass those benefits on to your children. If you look at who goes to college by income level—and there's no reason to think this is based on IQ—you see there is very little opportunity for people with incomes below \$23,000.

SATs, meanwhile, predict one thing beautifully, but it's not the grades students will earn as freshmen; it's the household income of the test-takers. For every \$10,000 increase in household income, math and verbal scores go up a minimum of nine points without exception. This is what's called a "linear series"—it's so rare a lot of computer programs don't even do it.

ON CITIES

In virtually all 351 U.S. metropolitan areas, poverty is moving out to the innermost suburbs or *Ring 2*. *Ring 3* is where the baby boom is raising its children, and *Ring 4* is where real estate is being created from farmland sold to developers, and the sprawl moves out even further.

In his great book *Cities Without Suburbs*, David Rusk talks about *rigid* cities—places where poverty is confined to city limits and poor people can't seem to move out. The most rigid city in the United States is East St. Louis; the second most rigid city is Hartford, Conn. You

can see where the city of Hartford ends as if it were cut with a razor. Bridgeport and New Haven, Conn., are other cities where poverty is rigidly confined, with significant implications for education.

By contrast, in *elastic* places where poverty is not confined to the city, neither are college graduates confined to the suburbs. New jobs are created in the elastic city as well as its suburbs, whereas new jobs appear mostly outside the rigid city.

Every time I go to Boston and Hartford, I see this rigid confining of poverty to the city limits. That's partly because annexation is very difficult in New England, whereas in North Carolina, a voluntary annexation law permits any two counties to affiliate through annexation without asking permission. In Arizona, Phoenix has annexed neighboring communities 26 times, and in the process, added space for new schools and corporations. Hartford can't annex anything. The city is exactly the same size as it was after World War II.

If the 10 biggest metropolitan areas in the United States, including Boston, were a country, their gross product would be the fourth largest in the world. The only trouble with these metropolitan areas is that because they are combinations of cities and surrounding suburbs, they're not politically real. This is beginning to change, as metro councils bring together cities and suburbs. But New England is behind on those issues.

ON POPULATION LOSS

A variety of federal funds are distributed to states based largely on the state's rank in population. New England has lost rank. Massachusetts is now the 13th largest state, down from 11th in 1980. Connecticut ranks 28th, down from 25th in 1980. Maine ranks 38th, compared with 39th in 1980. New Hampshire remains 42nd. Rhode Island ranks 43rd, down from 40th, while Vermont slips from 48th to 49th.

The population of the New England states is projected to reach 14 million by the year 2010; 6.4 million in Massachusetts; 3.4 million in Connecticut; 1.3 million in Maine; 1.3 million in New Hampshire; 1 million in Rhode Island; and 651,000 for Vermont. But every New England state will experience a decline in people under age 18 by 2010. The group of young workers ages 18 to 44 will also be down. These would be the young workers starting families, buying retail items and getting the new economy going. How about older workers, ages 45 to 64? Their numbers are rising. In fact, all the New England states will see

increases in the over-65 group by 2010. These are people who get sick and complain a lot.

Moreover, Connecticut, Pennsylvania, Ohio, New York, Michigan, Wisconsin and Illinois will be unable to maintain their present population level because their populations are aging so fast. They forgot to have children. And nobody with children moved in. As a result, these places are becoming *Palm Beachified*. Palm Beach has one birth per death, compared with the national norm of 2.2 births per death. The average age in Palm Beach is 49, compared with a national average age of 36, and the fertility rate of people over 49 is not worth calculating. In Palm Beach two years ago, the debutante cotillion ball was canceled, not for lack of interest, but for lack of debutantes.



Virtually every county in Iowa has fewer people than it had in 1980. How do you get people to come back? You don't. That's not the solution. The solution is to provide a job in the community for every high school graduate, and make sure college graduates who come back to the state have good jobs for at least three years guaranteed by the state.

In 1997, 221,000 more people left Massachusetts than moved in. The same year, 192,000 more people left Connecticut than moved in. Rhode Island lost 66,000; Maine 15,000; and Vermont, 5,000. New Hampshire actually had a net in-migration of 13,000.

Right now, fertility rates in New England are strong enough that if people stop moving in, the region can still remain even for

a while. But if the funeral replaces the baby shower in your town, put your house on the market. This is a very dangerous thing. And New England could be next.

ON IMMIGRATION

We are experiencing the second biggest immigration wave of this century. But while we're used to a European immigrant population, those coming now are mostly non-European. Americans say that immigrants can come in as long as they adopt our customs. But what happens when a new group moves in is that *we* change too. That reciprocity is what makes it work.

The United States remains the only nation that has made immigration work. After 10 years here, new immigrants go right up to or above the U.S. average in home ownership—a pretty good indicator of middle class life. When I was dean of Bard College, the entire Dean's List was the children or grandchildren of Jewish immigrants. Today, Bard's Dean's List is composed of the children or grandchildren of Asian immigrants. Forty percent of the members of the U.S. Senate have immigrant grandparents. Contrast that with how immigrants move into the political leadership in other countries.

ON RACE AND ETHNICITY

Between 2000 and 2010, the white population will decline in Connecticut, Massachusetts and Rhode Island, and increase in Maine, New Hampshire and Vermont. The black population will be flat in Maine, but will grow significantly in Connecticut and Massachusetts and less spectacularly in the other three states. The Asian and Hispanic populations will grow across the board.

Fully 80 percent of the U.S. black population lives in 20 percent of the land mass—the South Coast and the Mississippi Delta. We talk about the melting pot, but it's pretty hard to melt in the 75 percent of U.S. counties where less than 1 percent of the population is black. Indeed, a friend who's a school superintendent in South Dakota declared last year to be Ethnic Diversity Year, and said every student in his schools was going to have to have one black friend by the end of the year, which also meant every black student would have 296 white friends!

The New South is where the new black middle class is thriving, and many blacks are moving back because: 1) good jobs exist there; and 2) not one of

the 10 most segregated cities in the United States is there—they're all in the Rust Belt. We've segregated income and race 100 percent in heavy manufacturing cities like Detroit and Flint, Mich., but not in the coastal South.

Ninety percent of Hispanics, meanwhile, live in 10 states, and Massachusetts is number 10. Hispanics have more political clout in many counties now than blacks do. In Detroit, a candidate for public office needs the black vote to get elected. Any place else in Michigan, a candidate needs the Hispanic vote.

Importantly, however, the term *Hispanic* doesn't represent a common heritage. It's merely a catchall phrase developed by the U.S. Census Bureau. Puerto Ricans and Cubans in Florida have a heritage from Spain. Mexicans in the Southwest have a heritage from Mexico. There is no Hispanic food. And there were no Hispanics before the 1980 census. Indeed, there are no Hispanics anywhere else in the world except in the United States. A Cuban friend of mine told me he had to move from Cuba to Miami to become a Hispanic. The prob-

lem is *Hispanic* hides as much as it reveals.

In fact, every time we have a census, we change the categories. In 1960, you were either white or non-white. How would women feel if the sex question had been: "Are you male or non-male?"

More recently, U.S. Sen. Daniel Inouye introduced a bill to reclassify Hawaiians as Native Americans because only Native Americans can run gambling casinos.

Look at some of the amazing words we've used in the past like *mulatto*, *quadroon* and *octoroon*, and you see that we don't really know what we're doing in these categories. Race is important historically and politically, but it's scientific nonsense. The U.S. Census Bureau's own Directive 15 begins by saying, "The categories in the Census have no scientific validity whatever." Today, the darkest quarter of the white population is darker than the lightest quarter of the black population.

A Gallup Survey showed that about 66 percent of white people had a good black friend in 1990, up from 54 percent in 1981, while 80 percent of blacks have

a good white friend, up from 69 percent in 1981.

I meet with a group of about 16 researchers once a year for dinner. Last year, our conversation revolved around the O.J. Simpson verdict. We know each other well enough that we could say what we really thought. The whites were saying, "You call yourself researchers yet you pay no attention to the DNA evidence?" And one of the blacks said, "Nobody in your household has ever been arrested at two o'clock in the morning driving around in a suburb in a nice car doing nothing wrong." The Hispanics and Asians in the group were sitting there as if they were at a tennis match: *Yes, good point, well played*. After about half an hour, a Hispanic raised his hand (nobody had raised a hand in 10 years of these meetings). "Can I say something?" he asked. The white and black group shouted at him, "Keep out of this" Now, we have to ask: How many blacks have a good Hispanic friend? How many Asians have a good black friend?

Black-white won't do for the future. If *e pluribus* changes, so does *unum*. ■



College Enrollment

New England in a Changing Market

JOHN O. HARNEY

At the University of Connecticut and Trinity College, not only are applications up. So is the “yield,” the percentage of accepted students who choose to attend. So are SAT scores. The University of New Hampshire reports a substantial increase in high-achieving applicants. Tufts reportedly has to turn away the salutatorian of a Boston charter school, the competition for slots is so fierce.

With a few exceptions, these are flush times for college admissions in a region where total enrollment had plummeted from 827,000 in 1992 to 795,000 in 1996. New England’s share of total U.S. college enrollment had decreased from more than 6 percent in the mid-1980s to 5.5 percent in 1996. But an upturn is evident.

New England college and university campuses received more than 510,000 freshman applications for the fall 1999 term as of the traditional deadline of May 1—an increase of 7 percent over the previous year, according to the New England Board of Higher Education (NEBHE) 1999 Student Vacancy Survey of 217 undergraduate campuses.

The 7 percent increase in freshman applications is the largest single-year jump in recent years. New England colleges and universities saw only modest annual increases in the number of freshman applications from 1994 to 1998.

More than 64 percent of New England institutions reported an increase in fall-term freshman applications this year, according to the latest survey.

Freshman applications to New England’s six state “land-grant” universities increased 9 percent overall, following three years of no increase. More than half (54 percent) of New England *public* colleges and universities saw an increase in freshman applications in 1999, with 18 percent reporting increases of 10 percent or more.

Among New England’s *private* colleges and universities, 69 percent reported increases in fall-term freshman applications as of May 1, and 40 percent reported increases of 10 percent or more.

NEBHE found that freshman applications to New England colleges and universities from 1995 to 1999 rose by a total of 10 percent, mirroring a projected 10 percent increase in high school graduates during that period. The more recent one-year jump of 7 percent, however, exceeds the 4 percent growth in the number of New England high school graduates projected by the Western Interstate Commission on Higher Education (WICHE), which tracks demographic data nationally.

To be sure, some of the increase in applications reported by NEBHE may be attributed to multiple applications filed—often via the Internet—by prospective students. (Worcester Polytechnic Institute, for example, reports that 70 percent of newly admitted students applied online.)

But another reason for the jump in applications is that more young people are aspiring to college. A record 67 percent of the 2.8 million students who graduated from U.S. high schools in the spring of 1997 were attending college in the fall of 1998, according to

federal figures. By 1999, U.S. colleges and universities enrolled nearly 15 million students—more than 40 percent of them part-time—and the U.S. Department of Education has projected that total enrollment will top 16 million by the year 2007.

WICHE projected that New England high schools would graduate about 144,000 students in the spring of 1999—5 percent of the national total.

NEBHE has surveyed New England higher education institutions every year since 1960 to measure college application trends and to determine which campuses would consider additional new freshman and transfer applications for the fall term as of May 1.

The 1999 survey revealed that 56 New England institutions—including 11 four-year public colleges and universities—were no longer considering applications for the freshman class as of May 1.

DEMOGRAPHIC REBOUND?

New England is gradually recovering from a severe 15-year downturn in the number of 18-year-olds which began in 1979 and ended in 1994. Indeed, from 1985 to 1995, college enrollment grew by 21 percent nationally. But in Maine, for example, where poor demography is compounded by historically low college aspirations, the figure was 8 percent.

Since 1994, a steady, moderate increase in the number of high school graduates has been projected, and New England col-

leges have seen modest increases in the number of freshman applications.

The moderate increase in the number of high school graduates is projected to continue into the next millennium and reach its peak between 2004 and 2008 in New England. “The larger pool of high school graduates means that freshman applicants will face more admissions competition over the next four to eight years,” said John C. Hoy, president of NEBHE.

New England’s demographic rebound, however, will continue to trail the nation’s. By the year 2012, the number of high school graduates will grow by 31 percent in the West and 23 percent in the South, but by just 17 percent in the Northeast and 10 percent in the North Central states, according to WICHE and the College Board. Maine is among a handful of states where the number of graduates will actually decrease.

Notably, nearly half of the growth in U.S. college enrollment during the past decade has occurred in the South, according to the Southern Regional Education Board. States such as North Carolina are wrestling with questions of where to educate tens of thousands of new college students over the next decade.

Notably, some New England educators have suggested that slow-growing New England prepare to attract some of the overflow from California’s tidal waves

of high school graduates, perhaps by lobbying for federal aid incentives to lure students to the region.

DIVERSITY

If the demographic dilemma had a silver lining it was that many New England colleges reached out to women, who now represent 56 percent of total enrollment, as well as older students, working people and minorities.

African-Americans, Hispanics, Native Americans and certain sub-groups of Asian-Americans remain disturbingly underrepresented on many New England campuses, especially in science and engineering fields. But initiatives such as NEBHE’s Equity and Pluralism Action Program are making strides in increasing the success of minorities in New England higher education. African-American enrollment at New England colleges grew by 25 percent between 1990 and 1995, while Hispanic enrollment grew by 45 percent and Native American enrollment by 55 percent.

Still, college participation rates among minority students remain low. Though African-Americans, Hispanics and Native Americans represent more than 12 percent of New England’s 18- to 24-year-old population, they account for under 10 percent of the region’s college enrollment.

Moreover, enrollment trends affect different kinds of institutions differently. For example, applications and enrollment at women’s colleges nationally have grown

Opening and Closing

Throughout the entire 1980s, only two New England colleges closed and just four new colleges opened. The region’s higher education landscape was similarly static through the first half of the 1990s. “It’s been a very stable industry,” says Charles Cook, director of the New England Association of Schools of Colleges (NEASC) Commission on Institutions of Higher Education.

But with the growth of distance learning and other competitive pressures, some observers wonder if the first decade of the 21st century might more closely resemble the 1970s, when 26 New England higher education institutions closed their doors and 25—about half of them state institutions—opened.

With help from NEASC, a look at some recent and planned openings and closings:

INSTITUTION	LOCATION	STATUS
Olin College of Engineering	Needham, Mass.	<i>Opening, Fall 2001</i>
UMass Center for Professional Education	Westborough, Mass.	<i>Opening, Fall 1999</i>
International Institute of Culinary Arts	Fall River, Mass.	<i>Opened, Fall 1997</i>
Aquinas College	Milton, Mass.	<i>Closing, Summer 2000</i>
Aquinas College	Newton, Mass.	<i>Closed, Summer 1999</i>
Saint Hyacinth College and Seminary	Hamden, Conn.	<i>Closed, Summer 1999</i>
Castle College	Windham, N.H.	<i>Closed, Summer 1999</i>
Casco Bay College	Portland, Maine	<i>Merged with Andover College, Summer 1999</i>
The Gordon Institute	Wakefield, Mass.	<i>Merged with Tufts University, Summer 1992</i>

significantly since a series of early 1990s studies suggested that coeducational settings shortchange women academically.

New England campuses attract about 40,000 foreign students annually—almost 9 percent of all foreign students in the United States. In addition, fully 25 percent of the students enrolled on the region's campuses travel to New England from other parts of the United States to attend college.

Diversity is not a frill. It is all that

keeps New England viable. If it weren't for foreign immigrants, the workforces of Massachusetts, Connecticut and Rhode Island would have shrunk during the past decade. As a recent Massachusetts Taxpayers Foundation report noted: "Welcoming foreign immigrants and training them to play a fruitful role in the state's economy is therefore more important to our continued prosperity than has been commonly recognized."

"The growth in New England college applications holds promise for solving New England's manpower shortage," concluded Hoy of NEBHE. "Now the key is to encourage the new freshmen on campus to stay through graduation and pursue their careers here in New England." ■

John O. Harney is executive editor of CONNECTION.

College Metros

The Atlanta Regional Consortium for Higher Education recently conducted a major study comparing the impact of higher education in America's 60 largest metropolitan areas. The consortium had reason to celebrate. The more than 40 colleges and universities in the Atlanta Metropolitan Statistical Area, plus the University

of Georgia just to the north, together propel the capital of the South to a very respectable third place by three key measures of higher education strength.

Of course, Greater Boston's no slouch either.

The following tables show how the 10 largest U.S. metro areas rate as higher education hubs.

RANKED BY 1996-97 FULL-TIME EQUIVALENT ENROLLMENT PER 1,000 POPULATION

1.	Boston, MA-NH PMSA	43.0
2.	New York, NY PMSA	40.0
3.	Atlanta, GA MSA	37.2
4.	Chicago, IL PMSA	36.4
5.	Los Angeles-Long Beach, CA PMSA	34.7
6.	Philadelphia, PA-NJ PMSA	33.6
7.	Dallas, TX PMSA	29.9
6.	Washington, DC-MD-VA-WV PMSA	23.3
9.	Detroit, MI PMSA	21.5
10.	Houston, TX PMSA	18.1

RANKED BY 1996-97 BACHELOR'S, MASTER'S, DOCTORAL AND PROFESSIONAL DEGREES CONFERRED PER 1,000 POPULATION

1.	Boston, MA-NH PMSA	11.2
2.	New York, NY PMSA	7.8
3.	Atlanta, GA MSA	7.5
4.	Chicago, IL PMSA	6.6
5.	Philadelphia, PA-NJ PMSA	6.6
6.	Washington, DC-MD-VA-WV PMSA	5.8
7.	Dallas, TX PMSA	5.3
8.	Los Angeles-Long Beach, CA PMSA	4.7
9.	Detroit, MI PMSA	3.5
10.	Houston, TX PMSA	2.2

RANKED BY 1995-96 HIGHER EDUCATION EXPENDITURES PER 1,000 POPULATION

1.	Boston, MA-NH PMSA	\$1,246,686
2.	Philadelphia, PA-NJ PMSA	\$1,175,982
3.	Atlanta, GA MSA	\$965,400
4.	New York, NY PMSA	\$934,514
5.	Chicago, IL PMSA	\$895,821
6.	Washington, DC-MD-VA-WV PMSA	\$751,303
7.	Los Angeles-Long Beach, CA PMSA	\$664,514
8.	Dallas, TX PMSA	\$486,676
9.	Houston, TX PMSA	\$460,463
10.	Detroit, MI PMSA	\$305,531



ARTWORK BY JEFF KILBURN.

Note: In cases where a Metropolitan Statistical Area (MSA) is located in a Consolidated MSA, the unit of measure is the Primary MSA.

Source: Atlanta Regional Consortium for Higher Education (www.atlantahighered.org)



Enrollment Management, Meet Competitive Intelligence

DAVID N. GIGUERE

For some, the mere mention of competitive intelligence (CI) conjures up a Hollywood image of trench coats, shadows and spying. Others see it simply as a fancy name for gathering and processing information. The result is a confusing and loaded phrase that many are reluctant to use. One elite New England university, for example, offers a multipart lecture on CI, but the professor dares not call it that, so the lessons are wrapped into a larger course on “international strategic development.”

Teachers in the emerging field are fighting an uphill battle to win legitimacy even in business schools. The problem is the curriculum is painfully thin and composed mainly of war stories. Fears of academic turf wars compounded by general disagreement about what competitive intelligence really means have stymied development of CI courses of study.

EMBRACING CI

But if CI is struggling to get in the front door of academia, it seems to be having little trouble walking in through the back.

Indeed, while the deans and faculty hesitate, college administrators and marketers are increasingly embracing the elemental concepts of CI. They realize that in a world of savvy students and parents, price sensitivity and third-party rankings, they have to keep closer track of what other institutions are doing in order to remain successful themselves.

A consultant to a top East Coast CI firm reports that a New England business school wants to build

“competitive portfolios” on other business schools in the region. The portfolio would include analyses of their counterparts’ academic offerings as well as marketing strategies and tactics used to attract students. “They’re taking the normally accepted tenets of running a business and applying them to school, which is still not a widely accepted notion in academia,” the consultant reports.

More institutions are beginning to think like Franklin Pierce College in New Hampshire, which last year used a grant to hire a director of strategic analysis. The position is formalizing data collection and analysis on such issues as “student achievement, alumni involvement, quality of service delivery, faculty and staff development, and the institution’s competitive position in the higher education marketplace.”

Today’s enrollment management firms and pollsters of prospective donors say that as competition intensifies for students and funding, more of their work touches upon competitive assessment.

To be sure, words like *marketing* or *branding* remain anathema to many in higher education. But they are showing up more in the headlines of *The Chronicle of Higher Education*. Some college administrators “are beginning to recognize that these are useful concepts, that they are in a competitive situation and there’s no reason not to use proven tools to accomplish their goals,” says Carol Hillman of Hillman & Kersey Strategic Communications, a Boston firm that helps colleges and universities develop marketing and communications plans.

PHOTOS BY CAROLINE KELLY.

CI, meanwhile, is thriving in the corporate world. Consider the example of the big drug company that became worried over reports from its sales force that a strong competitor might soon introduce a me-too, over-the-counter analgesic product. The company hired a competitive intelligence firm to assess whether it truly faced a formidable new challenge and a potentially huge loss in market share.

The firm assessed information from public sources and, in some instances, from obscure, private contacts. It talked to raw materials suppliers and manufacturers of pill-making machines. And it studied training regimes at the competitor company. Surprisingly, many of the leads came from querying the client's own purchasing department.

The conclusion was that the competitor could not possibly roll out the new analgesic as quickly as the sales force feared. The drug company then was able to cancel a counter-offensive, promotional campaign that would have depleted its war chest and left it in a weakened position for the real battle ahead.

The stock of competitive intelligence began to rise in the late 1980s when leading American companies, for a long time the 800-pound gorillas in their industries, began to face competitive pressures from new technologies and foreign challengers. Around the same time, many of these foreign competitors set up shop in the United States. Because of cultural differences—especially in Japan and France—foreign firms were willing to do more intensive CI than their American counterparts.

Since its founding in 1986, the Washington D.C.-based Society of Competitive Intelligence Professionals has seen its membership grow to nearly 7,000. But it admits that one of its main jobs remains raising the profession above corporate “spy vs. spy” stereotypes. Economic espionage, as SCIP sees it, represents a failure of competitive intelligence, which utilizes “open sources” and ethical inquiry.

FROM INFORMAL TO FORMAL

Given the interaction of “peer groups” among various institutions and the availability of statistics from third parties such as the College Board, colleges are usually aware of what other schools are doing in enrollment management, if not development and other administrative areas. So, in a sense, they already gather information about their business environment. It's only recently, however, that they



have begun doing so in the formal, purposeful way that many corporations do.

James Forest, director of strategic analysis at Franklin Pierce College, looks for information pertaining to pre-defined strategic goals that can also be used to help measure outcomes. The goals cover

enrollment, academics, technology and student culture. The enrollment goal, for example, is to make Franklin Pierce the first choice of an ever-larger percentage of the freshman class.

No one knows what the academic equivalent of “foreign competition” will be. It may be distance learning, which uses a business model that is very different from traditional higher education. Distance-learning operations like the University of Phoenix enlist the best professors from all over the country and eliminate “underenrolled” courses faster than a Broadway producer dropping the curtain on a bad play. Forest continually asks how “virtual” institutions like the Western Governors University will affect his school, which has six commuter locations for adult learners in addition to a small residential campus.

Competitive intelligence may not have much of a curriculum, but many of its war stories are arresting in their intuitive insight. One CI pioneer used to retreat to his bathtub with an armful of trade magazines and business journals. During one soak, he read a number of stories about the then-novel trend of

women entering the workforce. A day or two later he sent his clients a memo predicting the rise of the fast-food industry and the decline of the Singer Sewing Machine Co.

Jerry P. Miller, a professor at Simmons College in Boston and member of SCIP, notes that for higher education, CI is ultimately a game of “brand image,” which is determined by the comparative quality of faculty, students and curriculum. “If any one of those fail,” he says, “you lose the image.”

Since colleges compete for the best students and the best faculty, it makes sense for them to know how their competitors are going about their jobs. Consultants report that more and more colleges are looking to the corporate sector for approaches and processes.

Corporations have learned that they need to understand what happens outside their own buildings. Focusing on internal operations is no longer enough. The external environment can be defined not only in terms of competitors, but also government, customers, suppliers and the overall economic landscape. These players are often valuable sources of information, along with journals, conferences and other information that is acces-



If competitive intelligence is struggling to get in the front door of academia, it seems to be having little trouble walking in through the back.

sible to the public. But the real intelligence lies in human contacts—talking to people inside the industry.

Finding and analyzing primary information depends on librarians skilled in navigating databases, research managers who understand their enterprise and analysts willing to ask hard questions. “A lot of people are ignorant of the law and need education as to the limits on how far they can push, but within those lim-

its there is actually quite a bit of latitude,” says one industry expert.

Colleges are likely to find themselves echoing the concerns of marketing research managers in business. Says one Hartford insurance executive: “We need to know how our competitors are communicating their sales story to our prospective customers so we can best leverage our strengths against what we perceive their weaknesses to be.”

While competitive intelligence techniques cannot predict definitively what the world will look like in the future, they can help managers to assemble reasonable assessments of what it might look like. Competitive intelligence works when it provides early warning of significant change. “The biggest thing we hear from CEOs is, ‘I don’t want to be surprised. That’s what keeps me up at night,’” reports one CI practitioner. As higher education becomes more competitive, it’s not hard to imagine similarly sleepless college presidents. ■

David N. Giguere is founder and managing director of Boston Research & Communications in Belmont, Mass., a research and analysis organization. He was editor of CONNECTION from 1981 to 1983.



University-Community Relations

Doing the Tango with a Jellyfish

CHRISTINE MCKENNA

It takes an entire campus to foster a good or bad relationship with the larger community. Faculty members and students (groups who pride themselves on independent thinking) are often out conducting their own brand of town-gown relations in ways that may delight or dismay the Community Relations Office. The community side, of course, is even more unwieldy, featuring elected officials, community activists, staffs of public agencies and nonprofits, local media, business people and just plain folks who live in the neighborhoods where students also live and occasionally misbehave.

In other words, managing community relations is a little like doing the tango with a jellyfish. You can get stung. Here are a few things we've learned about the dance.

- Housing college students in apartments alongside long-time neighborhood residents is a recipe for community relations disaster. Alcohol at a late-night student party leads to yelling and possibly fighting in a frontyard. Campus and city police arrive on the scene to round up unruly students. Angry neighbors offer the police eyewitness accounts. They tell their story to local reporters too. Tensions simmer.

But it turns out this classic town-gown problem can be managed. After a few too many of these incidents, the University of Massachusetts at Lowell embarked on a strategy of *friendly prevention*. The Student Services Office began inviting neighbors in regularly to voice their complaints and brainstorm solutions. At the same time, Student Services staff would explain the university's efforts to head off trouble by offering alternative

student activities on traditional "party" nights and promising strict sanctions if students misbehaved. The campus also diffused tensions by hosting a neighborhood block party where residents and students could get to know each other in a positive atmosphere.

Some students will still act up on occasion, but not as often. And just as important, neighbors know who to call on campus when there's trouble and they know that their complaints will be taken seriously.

- Despite widely acclaimed revitalization efforts, downtown Lowell, like other old business districts, has been drained by competition from suburban shopping malls. A few years ago when the downtown faced especially tough times, longtime UMass-Lowell Chancellor William T. Hogan saw an opportunity to help. The contract for the campus bookstore was being sent out to bid. Hogan proposed a downtown location for the new campus bookstore—a Barnes & Noble franchise. Not only would this plan place a national chain store in a recently renovated downtown building, reasoned Hogan, but it would also bring students to the city's center where they might shop in other stores.

Only problem was the students hated the idea. They protested loudly that they should not have to travel several blocks to buy their textbooks. Some faculty members agreed with the students and let the local media know how they felt. Still, there was pressure on the campus to be a good neighbor to the city and, as a public university, to support Lowell's economic development.

After some tense moments, student leaders, campus administrators, Barnes & Noble and the city sat down

and forged a compromise that worked for everyone. In a nutshell, the Barnes & Noble store went downtown, carrying general books and UMass-Lowell clothing and insignia items. But textbooks would still be sold at smaller branch stores on

College Towns, Mill Cities

The Bay State's third largest city is a college town.

Colleges in Springfield, Mass., had combined fiscal 1999 budgets of \$265 million and a total economic impact on the region of \$557 million, according to a recent report by the Cooperating Colleges of Greater Springfield, a consortium of eight public and private institutions enrolling more than 31,000 students.

With support from the U.S. Economic Development Administration, the state, the city and private foundations, Springfield Technical Community College is developing the Springfield Enterprise Center. The center will include an incubator for small startup businesses and entrepreneurial training institute. Incubator tenants will have access to benefits ranging from joint clerical services to *pro bono* consulting before they "graduate" to outside sites, according to college planners.

STCC already hosts the Northeast Center for Telecommunications Technologies, the National Science Foundation-supported collaboration with the New England Board of Higher Education and others to develop telecom curriculum.

Institutions farther north along the Pioneer Valley also have an impact on Springfield. The University of Massachusetts at Amherst, for example, has supported a collaborative biomedical research program at Baystate Medical Center since 1996, and the UMass Center for Economic Development has conducted a \$40,000 study of Springfield's strengths and weaknesses in attracting biotech companies.

Springfield's Union Station is being recreated as a state-of-the-art multimodal transportation center. And one college dean tells of Hartford undergrads routinely fleeing the Connecticut capital for Springfield's nightlife.

University projects are bolstering some of New England's other old industrial cities. UMass-Dartmouth is building a 60,000-square-foot Advanced Technology and Manufacturing Center with incubator space at an old mill site in Fall River. And the Worcester Municipal Research Bureau recently hosted a forum titled "New England's Other College Town."

—J.O.H.

campus. The lesson was that when interested constituencies collaborate, they can find viable solutions.

- The 13-acre Lawrence Mills site, purchased by the state for expansion of UMass-Lowell, has sat empty since a 1987 fire. Funds to redevelop the site dried up in the economic bust of the early 1990s. At the same time, the university's needs changed. Nonetheless, the property sits on prime real estate along the banks of the Merrimack River, tucked between two brand new sports and entertainment facilities: the Tsongas Arena and LeLacheur Park baseball field, which itself sits on land donated by UMass-Lowell. Surely, some kind of use of the burned-out mill property would benefit both the campus and the city.

The answer will come through partnerships which are as common as red brick in the old industrial city of 100,000. Indeed, both Tsongas Arena and LeLacheur Park, named for two political leaders who helped make Lowell synonymous with urban revitalization, were built with resources from the city, the state and the university.

Special legislation has been enacted on Beacon Hill to turn most of the Lawrence Mills property over to a private developer to create a mixed-use development including residential, retail, office and hotel space, as well as facilities for entrepreneurial spinoffs related to university research. For more than a year, city, state and campus officials have been meeting to work through environmental, legal and preservation issues related to the project. The development promises to bring the city jobs, taxes, housing and social amenities. The university will get academic, research and entrepreneurial space as well as revenue from the private development.

Time will tell whether the Lawrence Mills project will be successful. If it is, part of the reason will be good fundamental relations with the community that starts with, say, communicating with neighbors over partying students, and moves to a willingness to appreciate how the needs of the community overlap with those of the campus.

Partnerships have helped UMass-Lowell redefine the role of the urban land-grant university of the 21st century. It is no longer enough to make sure students behave well in the neighborhoods and volunteer with charitable organizations. Universities must bring their full physical, intellectual and creative resources to bear on the economic, social and environmental

challenges facing their host communities. Among the rewards are an understanding of how regional economies work and what makes them economically and socially robust—knowledge that is shared with researchers, policymakers and students.

For example, the UMass-Lowell Center for Family, Work, and Community works extensively with Southeast Asian immigrants in Lowell. Center faculty, staff and students must coordinate with public agencies such as the Lowell Division of Planning and Development, as well as nonprofits in the city such as the Cambodian Mutual Assistance Association and the Coalition for a Better Acre. These partnerships have allowed the center to help determine the needs of immigrant-owned small businesses in Lowell and the best ways to communicate with recent arrivals about health issues such as lead paint poisoning. These hands-on, practical projects are often written up as cases in academic journals, thereby adding to the body of knowledge about urban issues. For the psychology, sociology, economics and political science students who work on the projects, the experience is invaluable.

UMass-Lowell two years ago established the Department of Regional Economic and Social Development, a graduate program that teaches entrepreneurs, community activists, technologists and others to understand, analyze and intervene in the economic and social development process of a region. The strong relations that the campus has forged with public agencies and nonprofits makes it easier for the department to work in partnership with the community.

To be sure, UMass-Lowell's hand in the city's economic development is not only a matter of goodwill. Market research suggests that the economic vitality, cultural offerings and safety of a community are important factors when students and their families choose a college. Lowell's resurgence has had a direct impact on campus recruitment and development efforts. When UMass-Lowell makes its pitch to prospective students, campus officials also pitch Lowell—a job that has become much easier in recent years as the city has blossomed. Prospective investors in the campus are also impressed by the city and the campus's role in its revitalization.

It's well worth the effort of doing the tango with a jellyfish. ■

Christine McKenna is executive director of communications and marketing at the University of Massachusetts at Lowell.



Civic Life in Gray Mountain

Sizing up the Legacy of New England's Blue-Collar Middle Class

CYNTHIA MILDRED DUNCAN

When President Clinton took Congressional and business leaders on a tour early this summer to places where chronic poverty has persisted despite the nation's booming economy, they visited Appalachia's coal-fields, the Mississippi Delta, the Pine Ridge Indian reservation and inner-city neighborhoods in East St. Louis and Los Angeles. They did not visit New England. Not that New England's inner cities aren't plagued with poverty and social problems; they are. And many poor families are struggling to get by in rural Maine, New Hampshire and Vermont. Yet the notoriously bad conditions that took the president to the nation's "poverty pockets" are exceedingly rare in the six-state region. Why? Why have poverty rates stayed so high in the South compared with New England? And what can the region expect in the future?

The answers lie in the kind of civic culture generated by each community's economy and social structure. Chronically poor places are divided by race and class and saddled with corrupt politics, ineffective schools and self-interested elites. Distrustful of one another, people in these places look out for their own families only. Escaping poverty is possible only for the lucky few who have a kind relative, caring teacher or coach who pushes and inspires them to finish school and aim high. But most stay trapped in the same poor conditions their parents and perhaps grandparents knew.

In contrast, when communities have a large middle class, the poor are less likely to be cut off from the mainstream. And they are more likely to have the set of contacts, habits and skills—the cultural *tool kit*—they need to leave poverty behind. More importantly, the community institutions that poor families rely upon are more likely to be effective because the middle class is committed to them. The poor can get ahead without relying solely on personal intervention from a mentor or other benefactor.

During the 1990s, I studied poverty and community change in three remote, rural communities: a poor Appalachian coal county I call "Blackwell," a poor Mississippi Delta plantation community I call "Dahlia" and a more stable and economically diverse northern New England mill community, "Gray Mountain." The idea was to learn why poverty persisted generation after generation in Appalachia and the Delta, what made the difference when people did achieve upward mobility, and why it was so hard to bring about change. I examined 100 years of Census data detailing changes in population, patterns of work, income distribution and education. I read histories of each region, as well as the local weekly newspapers. But the heart of the study is the 350 in-depth interviews colleagues and I conducted with people living in these communities—not only the poor, but also the rich and those in between. These open-ended conversations revealed how each community's civic culture—its level of trust, participation and investment—shapes opportunities for both individual mobility and social change.

SEGREGATED, CORRUPT

Impoverished communities in Appalachia and the Delta are divided into *haves* and *have-nots*—"the good rich people and the bad poor people," as one young Appalachian woman put it. The *have-nots* live worlds apart from the *haves*, socially isolated outside the mainstream. Stigmatized and blamed for their poverty, the *have-nots* are often deliberately blocked from opportunities because of their family's class. "If I see those names, I trash the application," one employer said of the poorer families.

A laid-off coal miner observed: "If you have a rich name, they'll take you—otherwise you can't get no work."

A struggling black field worker said: "If you colored—and you ain't got no money, all they want to hear is 'yes sir' and 'no sir.'"

When the poor are cut off from the mainstream, they do not develop the habits, skills and ambitions needed to get steady work. Often they "mess up," dropping out of school, drinking or using drugs, having children out of wedlock and setting the stage for a lifetime of struggle.

But it is not only the mistakes the poor make that matter. Equally important is the fact that the community institutions that might help the poor—namely, schools, churches and youth groups—are segregated by class and race. While children of the *haves* go to college-prep-style independent schools in Appalachia and private white academies in the Delta, *have-not* children are relegated to schools that are chaotic and ineffective. The states and communities invest little in public schools, recreation programs and libraries that are available to everyone. One white woman said: "There is a standing rule that whites don't want to have anything public because the blacks might come."

Worried about their children associating with "bad, poor kids," middle-income families ally themselves with the rich and powerful and, as one community leader put it, "look out for themselves." They accept the corruption and patronage that pervades their community and do not challenge the status quo. In short, inequality has eroded the community social fabric, fostered undemocratic politics, destroyed trust and blocked the cooperation needed to build the community institutions that are crucial for helping poor families achieve the American Dream.

These class and race divisions, along with the atmosphere of distrust and pat-

terns of corruption, emerged in the 1800s when coal operators and plantation bosses established tight control over workers, deliberately discouraging both education and participation in community life. Workers became indebted to company and plantation stores, lived in company housing or plantation shacks and were vulnerable in every aspect of their daily lives to the powerful men who controlled the only work available in the county. The combination of ignorance and justifiable fear of repercussion made the poor prey to, and often participants in, a corrupt system. Those who challenged the status quo found themselves ostracized, blackballed or openly encouraged to leave—forced to choose exit over voice, as noted development economist Albert Hirschman has



*Community leaders in
Gray Mountain—business-
people and professionals as
well as mill workers—
support community projects
with time and resources.*

described outmigration and political activism. In both Blackwell and Dahlia, the potential middle class left. The inequality and political hegemony of the powerful remained, blocking mobility and change.

A very different history unfolded in northern New England.

RICH CIVIC CULTURE

Gray Mountain is a paper mill town in northern New England where social life is dominated by a large, blue-collar, middle class. Unlike Blackwell and Dahlia, the area has benefited from substantial income equality, relatively high educational attainment and, until the late 1980s, stable work opportunities. Nearly 40 percent of families have had incomes around the national median since 1960, compared with 23 percent in Blackwell and 14 per-

cent in Dahlia. In 1960, fewer than 20 percent of Blackwell and Dahlia adults had completed high school, compared with more than 40 percent in Gray Mountain. By 1990, the percentage of adults with high school diplomas was edging toward 50 percent in Blackwell and Dahlia, and reached 77 percent in Gray Mountain.

Moreover, income differences that do exist in Gray Mountain appear to have little effect on lifestyles and everyday interaction. "There's really no sense of class," one community leader said. "There's a kind of bond, a membership of the valley and the region, that is more important than other kinds of distinction." People appreciate that doctors and truck drivers golf together at the public course, that surgeons and maintenance workers eat together in the hospital cafeteria. One teacher noted that people he plays "broom hockey" with might earn half what he makes or twice what he makes. One woman receiving public assistance explained: "We're not called 'welfare people.' We didn't have a lot, but some of my friends' parents were quite well-off. It doesn't really matter about your social standing."

In Blackwell and Dahlia, those who "run things" are known for their greed and feared. In Gray Mountain, leading local businessmen are known for their community involvement. "There are a few people that are outstanding, that are always doing volunteer work and leading things and doing things." But they do not hold themselves apart: "It's not like some people are higher than the rest of us. Our kids play baseball together. They're probably in scouting together. They talk and get along."

Community leaders in Gray Mountain—businesspeople and professionals as well as mill workers—support community projects with time and resources. When community problems arise, they meet and haggle over the issues in public forums. Among the tangible results have been a family planning initiative that brought the rate of teen pregnancy down in the 1970s, a public playground and hockey arena built with materials donated by local businesses and community labor, youth programs that make room for the kids "at the end of the road," and numerous programs to help struggling single mothers get an education and find work.

Just as the divisions and distrust that mark Blackwell and Dahlia have 19th century roots, the rich civic culture of

Gray Mountain, and the equality in income and relationships underlying it, has origins in the late 1800s when the mills were established. Industry leaders lived in town next to the workers and sent their children to the same schools. They invested in education and brought cultural performances to the community, in part because it fit their sense of community responsibility and in part because they saw it as good for business. Importantly, the workers in the mills and surrounding timber forests came from diverse ethnic backgrounds—Italian, Russian, French-Canadian, Irish, and German—and they brought cultural traditions and organizations with them. Groups like the Masons, Knights of Columbus, Scottish Clan and Fraternal Order of Eagles, ski and hockey clubs and churches provided social cohesion and identity, but also real services and resources. Workers acquired habits of participation in these organizations.

Northern New England offered steady work in the forests and pulp and paper mills, and later in manufacturing enterprises and recreation-related jobs. Shoe factories closed, but new electronic or stitchery businesses opened in the 1960s and 1970s. In Blackwell and Dahlia, coal operators and plantation bosses had consistently and deliberately blocked new enterprises that might threaten their absolute control over the workforce. In contrast, Gray Mountain had long hosted small manufacturing plants in addition to the mill, and sustained a citizen's committee to foster further industrial development.

Steady work in a stable industry—combined with community-wide commitment to education under mill leadership—laid the foundation for a broad, independent blue-collar, middle class. The middle class, in turn, created a rich civic culture. Children of all income levels attend the same public high school—an orderly, clean place where teachers boast about the lack of vandalism. Public recreation and child care programs are the norm. The poor are not isolated, and when young people who have “messed up” are ready to settle down, they have options. They received a relatively good education while they were in school, and they do not dress or speak differently from those in middle-class families with steady work. They know the people who do the hiring at local businesses, and may be friends with their children. And a committed group of women—some long-term residents, some “from away”—have created programs to

help them get on their feet, including special training at the community college, subsidized child care programs and mentors to help them out. In Blackwell and Dahlia, a young woman who “runs wild,” drops out of high school and has a child out of wedlock is probably destined to live out her life in poverty, no matter how much she regrets “messaging up.” In Gray Mountain, community programs, as well as the young woman's relationships with locals who are not poor, will give her a second chance.

Can life in Gray Mountain really be this good compared with life in Blackwell or Dahlia? All three rural communities are remote from metropolitan centers. All share an emphasis on family, a familiarity and small-town scale that inhabitants appreciate. People in all



Greater equality not only nurtures democratic institutions, but also leads to greater economic prosperity.

three communities tend to choose work that enables them to stay put rather than get ahead in a career. So why are there such notable differences in civic culture? Why do people in Gray Mountain create ladders for the poor, while the majority in Blackwell and Dahlia distrust and distance themselves from the poor?

For starters, poverty was *never* as severe in this northern New England community as in the two other communities. Jobs have always been more plentiful and stable, and educational attainment has long been higher. In addition, early mill owners displayed a sense of community responsibility, while diverse ethnic groups established vital organizations run by working people. The mill owners were powerful, but not all-powerful. Recreation interests moved in early, and summer residents have made the community less isolated and more diverse.

Yet while all these factors played a role, the single most important difference between Gray Mountain and the more impoverished communities elsewhere is the large blue-collar, middle class, which cared about building strong community institutions for their own families and then drew their less fortunate neighbors into them.

Today, however, the good manufacturing jobs that nurtured and sustained this middle class are disappearing in Gray Mountain, as they are across the United States. In the 1960s, manufacturing accounted for more than 40 percent of total employment in Gray Mountain; by 1990, it accounted for less than 15 percent. Mill employment has been declining since the late 1980s, and more and more young families must rely on a patchwork of service-sector jobs that often pay low wages and do not provide health benefits. The rich civic culture and strong institutions that Gray Mountain established will be tested over the next few years, as manufacturing jobs continue to decline, federal programs shrink, in turn, placing greater reliance on community-level resources, and an aging population shows little appetite for tax increases and expanded school funding.

With its blue-collar, middle class an endangered species, Gray Mountain will have to build a sustainable economic base in a new restructured economy, and capture knowledge-based information industries, which unlike their resource-based predecessors, can locate virtually anywhere.

In approaching this new economy, Gray Mountain again will enjoy big advantages over America's Blackwells and Dahlias with their corrupt civic practices and low educational attainment. But Gray Mountain will also want to preserve its relative equality and community norms of inclusive participation and cooperation. Harvard political scientist Robert Putnam found that prosperity followed good government in northern Italy, not vice versa. Numerous studies in developing countries confirm that greater equality not only nurtures democratic institutions, but also leads to greater economic prosperity. Gray Mountain, like many places in New England, has its work cut out. ■

Cynthia Mildred Duncan is associate professor of sociology at the University of New Hampshire and author of "Worlds Apart: Why Poverty Persists in Rural America."



Will New England Become Global Hub or *Cul de Sac*?

KIP BERGSTROM

New England is in danger of becoming a giant *cul de sac* in the global logistics system. The region is largely oblivious to the threats and opportunities represented by the historic changes taking place in the pattern of world trade. Smugly complacent about their place as a center of the digital economy, New Englanders forget that much of the digital value they create is embedded in physical goods and is sold by real people face-to-face in the physical world. Goods and people still move in physical space. In fact, the flow of goods and people is accelerated, not reduced, by the flow of information. The Internet, in particular, makes it easier to work in partnership with suppliers around the globe and to reach world markets. This, in turn, leads to more international shipment of goods. But it also creates more international plane trips as global partners meet to cement Internet relationships.

Even more troubling, New England is allowing itself to become a two-class economy of low-wage, low-skill jobs and high-wage, high-skill jobs with little in between. The middle-wage, middle-skill jobs that in the past enabled families to climb the economic ladder are disappearing. My immigrant grandfather made enough money as a plumber to help put my dad through college, who in turn, helped put me through graduate school. Today's low-wage service workers, including most recent immigrants, cannot save enough to send their children through college and enable them

to access the software, management consulting and other innovation services jobs that the region's much-touted "knowledge economy" has been creating.

Indeed, Boston metropolitan area jobs are more concentrated in high-wage clusters than are jobs nationally, but less concentrated in middle-wage clusters and about the same in low-wage clusters. And the Boston area is becoming more polarized as the highest job growth is occurring primarily at the extremes: in software and innovation services at the top, and in temp agencies at the bottom. The exception is postsecondary education—a middle-wage, high-skill cluster.

New England's slippage off the global logistics grid on the one hand and increasing polarization on the other are very much related. The solution to the polarization is to hang onto and even expand the region's middle-tier of jobs, most of which are in manufacturing and logistics services, namely transportation and wholesale trade. In an increasingly globalized economy, manufactured products will be made by many partners in many places. Manufacturers who are located on one of the world's transportation trunk lines will have significant cost advantages over manufacturers who are not. It will be cheaper for them to source parts from their global partners and to ship final products to worldwide markets. The logistics firms that service the new global manufacturers will also be concentrated on the world's transportation trunk lines.

PHOTO COURTESY OF RHODE ISLAND ECONOMIC DEVELOPMENT CORP.

OTHER REGIONS GET IT

New England's greatest strength as a region is the quality of its higher education institutions. The region's universities give it the capacity to turn ideas into jobs, to create whole new industries and to produce the knowledge workers to run them—but this strength also blinds New Englanders to their vulnerabilities in global trade.

Regions of the country that don't have New England's advantages in higher education understand their disadvantage and are aggressively trying to catch up by investing in their own universities. But New Englanders don't appreciate what their region is lacking—a more balanced economy with a middle tier of jobs reinforced in part by better connections to the continental and global logistics systems. These other regions—because of their strength in the middle-tier jobs—are more focused on the changes taking place in trading patterns and are investing to exploit these changes to their advantage. They have figured out how to walk the *higher education/knowledge worker* walk and chew the *middle jobs/global linkage* gum at the same time. New England needs to figure out how to do that too.

Just a decade ago, nations competed within the Free World and against the Communist Bloc. Because the Soviet Union separated Europe from Asia, Free World shipping traffic was largely divided into an Atlantic trade between Europe and the East Coast of the United States and a Pacific trade between North Asia and the West Coast of the United States. Several forces have combined in the past 10 years to create new patterns of trade, among them: the political disintegration of the Soviet Union, the shift in manufacturing from North Asia to South Asia, new cost imperatives in the shipping industry, much larger container ships and, especially, the accelerating globalization of the economy. In the new world order, the pattern of connection is based on trading blocs rather than ideological blocs, and the fundamental competitive unit is the metropolitan region, not the nation.

TRADE ROUTES

The world's fastest growing trade route, called the Suez Express, links South Asia, the Indian subcontinent, the Mediterranean and the U.S. East Coast. Goods reaching the East Coast from South Asia via the Suez Express take one day longer than goods shipped by sea to the U.S. West Coast, then across the country by rail, but cost only *half* as much to ship. Moreover, this single trade route links the 3.5 billion people of

Asia, the 800 million people of Europe and Russia and the 400 million people of North America with multidirectional, multilateral trade along the entire route.

The fastest growing continental trade route is the NAFTA Corridor linking Canada to Mexico through the U.S. Midwest and including the North American trading bloc's major north-south rail and highway connection. Until the creation of NAFTA, the primary highway and rail connections were national rather than continental and ran east to west.



The fundamental competitive unit is the metropolitan region, not the nation.

Most of the new growth in middle-skill, middle-wage manufacturing and logistics jobs will be along the NAFTA Corridor and ports and rail lines connecting the corridor to the Suez Express. The routes and connection points are still in flux, but absent immediate intervention, the trade network will evolve to the north of New England at Halifax, N.S., and to the south at New York, Norfolk, Va., and Charleston, S.C., thus rendering New England a giant *cul de sac* on the global grid.

PORT AT QUONSET POINT?

A proposed container port at Rhode Island's Quonset Point is New England's last chance to get back on the global logistics grid, and thereby help protect and grow its middle-skill, middle-wage manufacturing and logistics jobs. Again, manufacturers who are on one of the world's trunk lines have cost advantages over those who are not. A sea lane to Quonset Point with a double-stack rail connection to the NAFTA Corridor would be such a trunk line.

Quonset Point is now the *only* port location in New England offering a combination of three critical factors: 1) proximity and deep-water access to the North American sea lanes; 2) on-dock rail; and 3) double-stack rail access to the NAFTA Corridor. The rail connection would fol-

low the Providence & Worcester line to Worcester, Mass., and then run west on the CSX line through Springfield, Mass., and the cities of Upstate New York, forming a new industrial corridor linked to both the industrial spine of North America and the outside world. This would foster new logistics services jobs to aid the movement of goods along this corridor and would create a transportation advantage for manufacturers located along the trunk line, helping to protect and grow not just Rhode Island's industrial base, but many of the manufacturing centers of New England and Upstate New York.

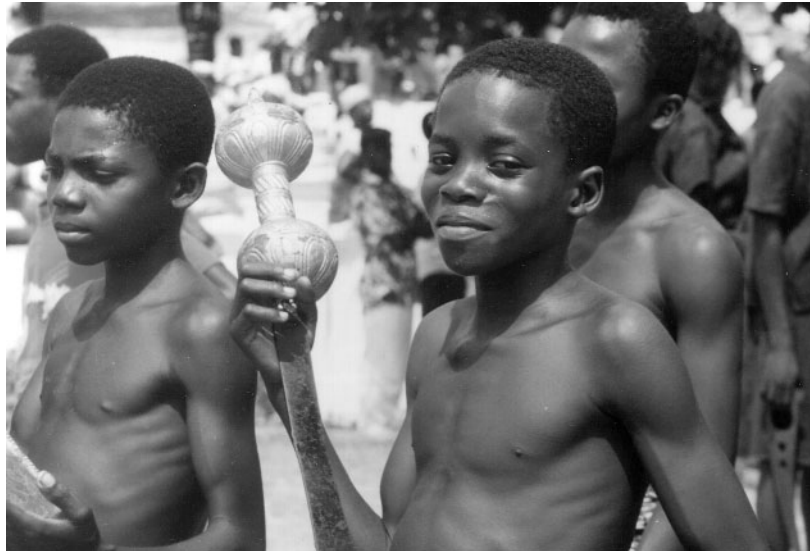
SOCKED IN AT LOGAN

As bad as New England's sea links are, the region is in even worse shape in terms of international air links. New England's one major airport, Boston's Logan International Airport, has one of the smallest land envelopes of any international airport. Whatever happens with the proposed third runway at Logan, the airport's capacity will not be able to keep up with the increased demand for international passenger and freight service resulting from the increasing globalization of the economy.

Unlike shipping, airport capacity affects not only middle-tier manufacturing and logistics jobs, but even more so high-end knowledge jobs—making New England less competitive in its key strength at the same time as the region becomes increasingly vulnerable in terms of middle-tier jobs. New Englanders need to start viewing the region's four largest airports—Logan, T.F. Green in Rhode Island, Manchester in New Hampshire and Bradley in Connecticut—as parts of a whole, and plan jointly to meet the region's future air demand.

If New England is to compete with other regions for position in the global economy, it must stop being blinded by the success of its information economy, and work to build strong rail links to the continent and strong air and sea links to the world. While certainly not the only economic drivers, these links are vital to sustain growth in software and innovation services jobs while stabilizing and expanding those vanishing middle-tier manufacturing and logistics jobs. ■

Kip Bergstrom is executive director of the Rhode Island Economic Policy Council, a 20-member board of business, government, labor and higher education representatives formed in 1996 to give strategic focus to Rhode Island's economic development efforts.



Is Africa the Future of New England?

Yes, If We're Ready for It

NATHANIEL BOWDITCH WITH KATE POMPER

The Asian miracle had an extraordinary impact on the U.S. West Coast. The African miracle, quietly underway now for a decade, could have a similarly profound effect on the U.S. East coast—especially for those states that anticipate and embrace it.

America failed to recognize the beginnings of the Asian miracle because in the 1960s, our mindset equated Asia with struggling, developing countries. We also held uncomplimentary preconceptions about Asians; we weren't convinced they were capable of economic leadership. Now history is repeating itself and, even though free-enterprise democracies have taken hold all across the African continent and despite the fact that many of them are achieving rapid annual growth rates reminiscent of the early years of Asia's emergence, our mindset stands in the way: a color-laden mindset, reinforced by our own tormented American racial preconceptions, of a "dark continent" and a "Black Africa" paralyzed by disease, drought and dictatorship.

Most Americans, including most New Englanders—be they bankers, investors or educators; secretaries, carpenters or construction workers—imagine Africa as a monolithic land of despair. They don't think about a continent of 53 countries, 48 of them the so-called sub-Saharan African nations, each with its own distinct culture, economic base and aspirations. We must change our mindset because the 700 million citizens of those African nations, joined by millions of highly educated,

successful overseas Africans—and backed by the descendants of slaves throughout the African Diaspora (more than 1 billion people in all)—are beginning to achieve an African miracle which over the next 30 years will rival the Asian miracle.

As this happens, simply because of our geographic proximity to the African continent—especially West Africa—the economy and the universities of New England stand to gain hugely and disproportionately just like the West Coast economy and universities did as the Asian miracle unfolded. Consider this:

- Kwesi Botchwey, Ghana's former minister of finance and now director of Africa research and programs at Harvard's Center for International Development, recently told me: "If you look at the economic performance of the past three or four years, the numbers are encouraging. There are countries (Uganda, Botswana, Mauritius, Ghana, La Cote D'Ivoire, Mozambique for example) with a good policy environment, which are stable from a macroeconomic point of view and are also politically stable."

- The chief economist of the International Finance Corp. observed in a speech last fall: "A dozen economies whose markets add up to \$170 billion or 60 percent of Africa's total, are showing definite signs of progress. Their combined GDP has been growing at nearly 5 percent a year during the past five years [and] their exports have been expanding at 7 percent annually."

PHOTOS BY NATHANIEL BOWDITCH.

• In March 1998, “to help the American people see the new Africa” President Clinton visited six countries: five economic high-flyers—Senegal, Ghana, Uganda, South Africa and Botswana—and Rwanda, where he apologized for American inaction during that country’s dreadful ethnic cleansing. During that trip, the *Boston Sunday Globe* reported that “burgeoning stock markets ... a rise in exports and a 5 percent annual increase in the continent’s gross domestic product for the past several years are shattering Africa’s stereotype as a financial basket case.” *The New York Times* said about President Clinton’s visit to Uganda that he “will be entering a country that is a far cry from the dirt-poor and oppressed nation ruled by Milton Obote and Idi Amin in the 1970s and 1980s. Uganda has seen an average growth of 6.7 percent for the 12 years of President Yoweri K. Museveni’s tenure.”

• The fastest growing world economy in the three decades leading up to 1997 was not in East Asia. It was Botswana, whose per-capita income grew at an average rate of 9 percent annually during that period, according to the World Bank.

• Ghana’s stock exchange is “one of the world’s best performing stock markets,” according to *The Economist* magazine. “Building, tourism, technology and financial services provide more than 46 percent of national income and are usually cited for the country’s average annual growth of nearly 5 percent for more than 12 years.”

• South Africa is the Japan of Africa. The *Harvard Business School Bulletin* recently quoted Harvard Business School Professor Richard H.K. Vietor as saying, “The driving force behind the region’s growth is South Africa. South Africa produces 20 percent of Africa’s GNP.” The *Bulletin* quotes his B-School colleague, Associate Professor Robert J. Robinson, as saying: “South Africa is a regional superpower. For those who can access it, the country has a First World infrastructure—financial institutions, health care and transportation, for instance—and it is rich in natural resources.”

The countries that America and New England should be watching carefully are: South Africa, Botswana, Namibia, Mauritius, Mozambique, Uganda, Lesotho, Mauritania, Ethiopia and, in West Africa—closest to New England’s shores—Ghana, Senegal, La Cote D’Ivoire, Benin, The Gambia and Nigeria (with its brand new democratic government). But so far,

America is not taking much notice and neither is New England.

When members and guests of the New England Economic Project gathered in May to hear Zurich Financial Group Chief Global Economist David Hale meticulously describe the state of world markets, they heard valuable inside information on Europe, Asia and South America, and they heard exactly what they expected to hear about Africa: nothing.

Among the 33 Yale seniors “pursuing research projects in far-flung corners of the globe” through Yale Summer Traveling Fellowships, only one is headed for Africa, based on an eyeballing of itineraries published recently in the *Yale Bulletin and Calendar*.

Hundreds of New Englanders (almost all of African descent) did gather at Boston’s John F. Kennedy Library in July 1999 for a regional conference organized by the Boston Pan-African Forum to explore issues around education, economic development, quality of life, democracy and peace on the African continent. The event was organized as the New England Regional Forum of the multiyear National Summit on Africa project, whose goal is to heighten the interest of Americans in a continent with which most have no personal or financial connection. That this event was even held in New England is a testament to the leadership and determination of MIT Professor Emeritus Willard Johnson. Notably, however, New England’s African Summit was held on a Friday night and Saturday, probably because most participants couldn’t justify attendance as part of their *real* jobs.

ASIAN PARALLEL

Asian matters weren’t seen so differently through American eyes 30 years ago. Since then, the Asian miracle—led by postwar Japan and joined by Hong Kong, Taiwan, China and a handful of “Asian tigers” (Singapore, Thailand, Indonesia, South Korea, Malaysia)—has transformed a continent. The formula was simple. These nations provided low-cost manufacturing to an increasingly global economy, fueling the creation of an indigenous middle class whose consumer demand opened huge new markets for a wide assortment of products: CDs, telephones, life insurance policies, roads, sewer systems, Stephen King novels, home loans and mutual funds, razor blades, computers and fast food restaurants.

As that happened, New England certainly benefited. In 1998, every single

New England state featured at least five Asian nations on its top 20 list of export buyers. Maine had nine; Massachusetts and Connecticut, eight; Rhode Island and Vermont, six; and New Hampshire, five. But the real American beneficiaries of the Asian miracle were the West Coast states, in particular, California.

A geographically large, economically diverse state—not unlike New England’s six states taken together—California has positioned itself carefully vis-a-vis Asia, invested heavily and benefited greatly from the Asian miracle.

How much did Asian growth over the past 40 years contribute to the growth of the U.S. West Coast states? Did this West Coast growth come perhaps at the expense of the Northeast’s longstanding leadership in research and development, high technology and manufacturing?

In its December 1988 issue, *The Economist* gushed about Asia and its impact on California, blaring:

• “America’s shores are washed by the Pacific as well as by the Atlantic, and some people think that American interests lie more with the countries of East Asia than with those of Western Europe.”

• “The rise of Asia is one of the biggest stories of this half-century. ... In the quarter century that began in 1960 the East Asian economies grew at an average real rate of 6 percent a year. ... East Asia’s share of gross world product more than doubled during 1967-87, from 8 percent to 20 percent. Its share of manufactured exports went from 8 percent to 18 percent, of imports of all kinds from 12 percent to 17 percent.”

• “Californians of Asian descent already make a bigger splash in the state’s university system. They account for 25 percent of this year’s entering class at the University of California at Los Angeles. ... Asian money is contributing along with Asian people. Japan has, after Canada, the biggest single stake of foreign capital in California; its companies are, bar none, the biggest foreign source of employment in the state.”

• “Californians do know more about Asia and pay more attention to it than New Yorkers—as well they might, considering where so much of their money is coming from.”

If California’s head was already turning West in 1988, consider these more recent statistics from the California Trade and Commerce Agency.

In 1996, California was the national leader in foreign direct investment with

3,500 foreign affiliates (accounting for more than \$100 billion in assets). Not one New England state ranked in the top 10 in terms of foreign direct investment. In 1996, 48 percent of California's foreign investment came from Asia versus 26 percent nationally.

In 1996, Asian and Pacific Rim countries accounted for a majority of all foreign-owned commercial property in California: \$18 billion, of which Japan accounted for \$14 billion.

Meanwhile, the Organization for International Investment reports that the 549,000 California workers employed by U.S. subsidiaries of foreign companies in 1995 constituted 5 percent of California's total workforce, up from 3.2 percent in 1987. And between 1980 and 1995, California employment at U.S. subsidiaries of foreign-owned companies increased more than four times faster than all jobs in California.

It isn't just California. *The Tacoma News Tribune*, under the headline "NUMBER OF WORKERS EMPLOYED BY NON-U.S. COMPANIES GREW NEARLY 300 PERCENT OVER 15 YEARS" reported as follows: "With Japanese and Taiwanese investment in Washington plants and factories booming ... the number of workers employed in Washington state by foreign companies and their subsidiaries grew from 21,100 to 81,500 during the 15-year period from 1980-1995." Oregon's foreign subsidiary employment was up by 365 percent between 1980-1995!

The Asian miracle seems also to have left its mark on higher education on the U.S. West Coast, particularly California.

In 1996, according to the U.S. Department of Education, Asian-Americans and Pacific Islanders accounted for 328,000 of California's college and university students, or 17 percent of the state's higher education enrollment.

In the same year, all New England enrolled 36,114 Asian-Americans and Pacific Islanders, or just 5 percent of its higher education enrollment.

Even with these low numbers, four of six New England states enrolled more Asian-Americans and Pacific Islanders than they did African-American students in 1996.

NOW RUSSIA

I recently went to the Russian Far East on an assignment in support of five Russian small business associations. I traveled aboard Aeroflot #855/856, a twice-weekly flight connecting Seattle

and Anchorage with the Russian Far East cities of Vladivostok, Khabarovsk (just north of Vladivostok) and Yuzhno Sakhalinsk (on the Island of Sakhalin, just North of Japan). Though huge, the Russian Far East is not well-known and its economy has been declining for years. Nevertheless, Alaska has a sister state relationship with Sakhalin Island. The president of the Anchorage Chamber of Commerce recently completed a business association technical assistance mission to the cities of Yuzhno Sakhalinsk and Khabarovsk. And an executive of the Greater Seattle Chamber of Commerce (40 percent of all U.S. trade to and from Russia enters the country through Seattle) did the same three months ago. Portland, Ore., has a sister city relationship with Khabarovsk. And the list of connections goes on.

There are two reasons for all this exchange activity. First, our fellow West Coast American citizens have learned how (and where) their bread is buttered. Second, a few years ago—with prodding from U.S. Sen. Ted Stevens (R-Alaska)—Vice President Al Gore and the then Russian Prime Minister Victor Chernomyrdin signed a long-term agreement establishing a number of U.S. government programs to foster a new relationship between the U.S. West Coast and the emerging Russian Far East. This has made it possible for legislators, mayors, businesspeople, professors, venture capitalists and various Russian Far East project directors to travel back and forth and to implement an assortment of special initiatives. All this because U.S. policymakers take Russia and Asia seriously, and U.S. West Coast leaders have learned from the Asian miracle growth years how important it is to leverage their political clout in Washington into special programs to grow new global connections.

Enough of the parallels between Asia and Africa. So how will New England catch the African wave?

FIVE STEPS

First, we need to significantly raise our awareness of sub-Saharan Africa and understand more about the emerging African economies, what they need to continue their advance and how New England resources—especially the region's private sector and education resources—can best respond.

Second, we need to learn a lot more about the impact of the Asian miracle on the West Coast, particularly how states

such as California leveraged the Asian miracle into opportunities for their states.

Third, we need to talk to our Congressional representatives, inform them of this strategic *new* New England global perspective and ask that they start paying attention to African issues and opportunities, learning new tricks from their West Coast colleagues and fighting for resources to support a New England (or U.S. East Coast) Africa initiative.

Fourth, we need to concern ourselves anew with preconceptions about race and geography, lest the Africans conclude they would rather do business with Southern states whose African heritage and more aggressive relationship-building programs make them more attractive partners.

Fifth, the six New England states need to resolve not to go it alone on this one. Each New England state is too small, its resources too limited to make the necessary impact on those 15 or so emerging African economies that are leading the way. Connecticut is off to a great start with its "Demystifying Africa" initiative. But the region needs to open relationships *together*.

In the words of Kwesi Botchwey: "New England is a hub of liberal democratic thinking and practice, has a unique concentration of schools and universities, a long tradition of student connections [with Africa], a substantial group of African professionals, respected African studies programs and thriving African communities. New England can harness these resources, provide a political forum for debate and mobilize civil society. The seeds are here. They just need to be watered."

Where to focus?

Education. America's Western governors have joined forces to create a virtual university to respond to the lifelong learning needs of their widely dispersed populations. New England's distance education resources, though less developed, could be harnessed to meet the African continent's huge demand for education.

Investment. The 1998 World Bank annual report states: "Long-term private capital flows to Africa have increased from \$4 billion in 1996 to \$8 billion in 1997 but remain a fraction of the \$256 billion total flows to developing countries. Africa must attract more investment [and] not only from foreigners. ... Some 37 percent of African assets are held abroad ... higher than for any other region." Equator Bank of Hartford, Conn., is focused entirely on sub-Saharan Africa. But it is virtually alone.

Yet New England is the mutual fund capital of the world, a venture capital center and probably the repository for much of these African assets. Special investment packages—possibly with the support of the federal government—could be mobilized to underwrite infrastructure and private sector initiatives in the most rapidly emerging African nations.

Infrastructure. Roads, water, sewer systems, airports, electricity and telecommunications are the backbone of economic growth and development. Raytheon has longstanding relationships with African countries, building methanol plants, airports and radar systems. Prodigy operates an Africa Online

Internet Service. Are other New England companies getting their fair share of infrastructure projects targeted to the most rapidly emerging African nations? And shouldn't at least one airline offer at least one scheduled flight from New England to at least one African destination?

AIDS. Despite all the good news coming out of Africa, AIDS is a tremendous problem and a serious challenge to development. New England is the health care



capital of the United States and a major biotechnology center. Couldn't a New England-West Africa AIDS coalition be created as a partnership between that expertise and the region's philanthropic leaders?

Are we ready for it? Are we up to it? If so, Africa may indeed be the future of New England. ■

Nathaniel Bowditch is a senior fellow at the New England Board of Higher Education and author of "The Last Emerging Market: From Asian Tigers to African Lions? The Ghana File," from Praeger. Kate Pomper is an economics major at the University of Virginia.

New England and Africa

The Higher Education Connection

LAURA GHIRARDINI

African nations need sound educational systems to foster development and participate in the global economy, but most lack the academic infrastructure to educate their fast-growing young populations. As a result, an increasing number of African college students will turn abroad for education. At the same time, "educational institutions in the United States have much to gain from collaboration with Africa," according to education experts behind the New England Regional Forum of the National Summit on Africa held in Boston in July 1999.

Who will Africa's education partners be? Where will African leaders look for models?

New England—with its world-famous higher education institutions and proximity to Africa—is a natural choice. The region, home to 260 colleges and universities, lies just 4,000 miles from Dakar, Senegal—that's not much farther than Paris, and several thousand miles closer than Tokyo, with whom New England enjoys thriving academic relationships.

FOREIGN ENROLLMENT

New England has been a magnet for foreign students, according to data from the

New York City-based Institute for International Education (IIE). In 1997-98, New England enrolled 40,000 foreign students—almost 9 percent of all foreign students in the United States. Boston University enrolled 4,603, ranking second nationally. Harvard enrolled 3,249, ranking 10th. The region also attracted more than 7,000 foreign research scholars—11 percent of the U.S. total. Harvard University ranked first among U.S. universities in foreign scholars; MIT ranked sixth; and Yale University ranked 20th.

Most foreign students and scholars are from Asia and Europe. In the 1980s and early 1990s, the Asian economic miracle brought prosperity to both "Asian tiger" nations and American college towns, as more than 250,000 students from Japan, China, South Korea and other Asian countries flocked to U.S. campuses annually, bringing hard cash and invaluable diversity, while inspiring lasting Asian studies initiatives.

Could an African miracle bring similar benefits?

Already, African exchanges are becoming more common. In 1997-98, more than 23,000 African college stu-

dents traveled to the United States for study, up 5 percent from the previous year. More than 1,800 of those students—about 8 percent of all African students in the United States—studied in New England.

Meanwhile, just 2,500 U.S. college students studied in Africa in 1996-97, according to the latest IIE study-abroad data. But that number was up 27 percent from a year earlier. Nearly 350 New England college students studied in Africa, most of them in Kenya or South Africa.

PROGRAMS PROLIFERATING

A 1987 New England Board of Higher Education report on *The Impact of Economic Globalization on Higher Education* examined a wide range of foreign language and area studies programs on New England campuses.

At that time, both foreign enrollment and study abroad were growing rapidly. But the region's new enthusiasm for international issues focused on East Asia and Canada. And the 1987 study revealed few area studies programs and partnerships between New England higher education and Africa, save the

African Studies Center at BU, one of the nation's largest and oldest.

Since that time, the number and scope of New England programs involving Africa have grown dramatically, and others are in the works.

Suffolk University, for example, recently established a campus in Senegal, at the far western tip of Africa. The campus at the Ecole Nationale d'Economie Applique in Dakar will offer a bachelor's degree program in business for African students. The program is unique in that it enables African students to begin their undergraduate education in Africa, perhaps saving two years of room and board, before going on to earn degrees from Suffolk or another U.S. institution.

"With the globalization of higher education, it makes sense for a university to have a global strategy," says Suffolk President David J. Sargent. "We are responding to a demand for American-style business education that combines practical and theoretical approaches to learning. In turn, we have much to learn as our faculty members teach in Senegal and Senegalese students take part in classroom discussions here on Beacon Hill."

Jim Sintros, an international consultant to Suffolk, notes that Senegal's political stability made the former French colony particularly attractive for such an exchange. In addition, says Sintros, the Senegalese minister of higher education is committed to leaving an American-style educational system as his legacy. "The minister is eager to change from the current French system to the American system of education, which he feels is superior," Sintros says.

The Suffolk exchange will also feature a summer educational and cultural tour on Dakar's Goree Island, the historic departure point for Africans captured for the slave trade, which has become an important cultural site for African-Americans.

VIRTUAL AFRICA?

Links between New England colleges and Africa may get a boost from new information technologies. As New England Board of Higher Education President John C. Hoy noted recently at a Boston conference on distance learning: "The Information Revolution adds a new dimension to the global appeal of going to college in New England."

The University of Massachusetts at Amherst has been transmitting courses on circuit analysis to students in Africa via satellite since 1996. Working through

the African Virtual University, UMass and several other U.S. and European institutions provide live and videotaped engineering courses via satellite to students in more than 40 countries. Recently, the UMass Video Instructional Program has expanded its African distance learning endeavors to include other engineering and computer science courses, and additional courses in computer science and French are planned.

Faculty at Central Connecticut State University and Manchester Community-Technical College are exploring development of on-line courses for Ghanaian students, who sometimes wait up to six years for a slot at a local university. "There is a need in Ghana, because many students have passed requirements and been accepted to college, but there is not enough space in universities there," says Evelyn Phillips, coordinator of African studies at Central Connecticut State.

A distance learning program would cater to students who cannot afford to travel abroad to study. Most students in Ghana have access to computers in public places if they do not have a computer at home, says Phillips.

ABROAD IN AFRICA

A growing number of New England institutions—ranging from Brown, Yale, Tufts and Boston universities to the School for Field Studies in Beverly, Mass.—offer study-abroad programs in Africa. Vermont's School for International Training (SIT), meanwhile, is a major sponsor of African programs for students from a variety of institutions in New England and beyond.

In 1982, SIT sent the first group of 10 students to Africa for a Kenya upcountry program. By 1998-99, 543 students from throughout the United States were enrolled in 17 SIT programs in Africa, ranging from Biodiversity and Conservation in Tanzania to Arts and Social Change in Zimbabwe, according to Associate Director of Admissions Laurie Black. With 37 percent of SIT study-abroad students already destined for Africa, the school has planned new ventures in La Cote d'Ivoire and Senegal.

Elsewhere, Central Connecticut State College last year signed a formal student and faculty exchange agreement with the University of Ghana, Legon. Colby College is joining Bowdoin and Bates colleges to establish a consortium for study abroad with a site in Cape Town, South Africa. About 15 students drawn from the three

colleges will take classes at the University of Cape Town, while working on community service projects.

DIVERSE CONNECTIONS

New England higher education's Africa connections are diverse, running the gamut from Maine Maritime Academy's work with marine oil-spill response officials from South Africa, Namibia and Mauritius, to a University of Connecticut professor's work training villagers and professionals in Madagascar in conservation techniques.

The Amherst and Worcester campuses of UMass were recently awarded \$460,000 from the U.S. Agency for International Development to fund a range of health-related collaborative teaching, research and community services projects in South Africa. One reason UMass was selected for the grant, according to project director John Cunningham: South Africans haven't forgotten the university's relatively early opposition to apartheid and its decision to divest.

Last March, UConn capitalized on its connections with prominent African figures when campus officials signed an agreement making the university the official North American depository for materials related to the African National Congress (ANC) and its struggle for human rights in South Africa.

As part of the agreement, UConn plans to open a Center for Oral History whose staff will interview more than 200 ANC leaders including South African President Nelson Mandela. In addition, UConn and the University of Fort Hare in South Africa agreed to exchange faculty, staff and students, conduct an annual conference on comparative human rights and co-publish the first journal on comparative human rights.

"The partnership is a strategic decision because of the commonality of the history of race relations in the United States and in South Africa," said Amii Omara-Otunnu, associate professor of history and head of the project. "We can learn a lot from them, and they can learn a lot from us."

UConn was selected for the project because of the high-caliber archival facilities at UConn's Thomas J. Dodd Research Center as well its established linkages with African notables. Narissa Ramdhani, director of the ANC historical archives project, received a master's degree from UConn in 1990, and Naomi Tutu, daughter of Nobel Peace Prize winner Archbishop Desmond Tutu, taught at UConn's School of Education.

The human rights theme is prominent in New England's Africa programs.

The New England School of Law operates the Rwanda Genocide Program, providing legal research and analysis to the United Nations International Criminal Tribunal for Rwanda in Kigali, Rwanda.

With a grant from the Oak Foundation, Colby has established a fellowship enabling practitioners in human rights to spend a semester at the college as scholars-in-residence. The 1999-2000 Oak Fellow is Dydier Kamundu, a 29-year-old human rights activist who fled from the Democratic Republic of Congo to protect his family and himself. Kamundu, a baker before ethnic strife turned his homeland into a battleground, taught himself law and began a human rights organization in a small shack in Goma, where he documented legal protests of arbitrary arrests and other abuses.

AFRICA THINK TANKS

New England's think tanks also have their eyes on Africa. The African Studies Center at Boston University, established in 1953, was one of the first U.S. graduate programs to offer a multidisciplinary

African studies curriculum. The center has formal links to universities in Niger, Ethiopia and South Africa, where more joint research and exchange programs are being developed, according to center director James McCann.

Harvard's W.E.B. DuBois Institute for Afro-American Research recently released a CD-ROM on the history, geography and culture of Africa and people of African descent. DuBois, himself, believed that cataloging blacks' contributions would help fight racism. The AIDS Institute at Harvard's School of Public Health has undertaken projects in Senegal, Tanzania and Ethiopia. And the Harvard Institute of International Development is involved in strengthening market systems and women's education in South Africa.

Since 1989, the Yale Center for International and Area Studies has been convening teachers in New Haven for a two-week "Teaching of Africa" program designed to improve curricula on Africa. The goal is to expose stereotypes and myths about Africa that perpetuate prejudice, according to Maxwell Amoh, the center's director of outreach. Yale also sends graduate students in African studies

to public schools throughout Connecticut to share their knowledge of Africa.

Other New England colleges are engaged in projects to raise awareness about Africa. In early 1998, Brown and Brandeis universities, Bates, Dartmouth College and others participated in the annual "African Peace Tour," an American Friends Service Committee program which allows African dignitaries to share views on African policy issues with college students in different regions of the United States.

The 11-day New England tour was timed to coincide with President Clinton's 1998 visit to Africa. A team of African activists and artists made 35 stops as part of the six-state program to promote citizen action on U.S. foreign policy issues such as slavery in Mauritania and the African arms trade. The enthusiasm of New England participants has prompted organizers to plan another "mini-tour" for the region.

That level of enthusiasm suggests that New England colleges and universities are ready to reap the benefits of a strengthening U.S.-Africa relationship. ■

Laura Ghirardini is a NEBHE research analyst.



An Economic Engine Overlooked

JAMES T. BRETT

Research and development (R&D) funding may have the dubious distinction of being New England's most overlooked economic driver. Though New England scientific research has created thousands of entrepreneurial ventures and countless jobs—as well as such transformative technologies as the Internet—the profound role of R&D in New England is a well-kept secret. Indeed, when the New England Board of Higher Education (NEBHE) recently asked 1,000 New England “opinion leaders” to rank pressing policy issues, only Maine and Rhode Island leaders ranked “maintaining research & development funding” among the five policy issues most in need of attention.

As New England continues its transition from a manufacturing-based economy to a knowledge-based economy, the strategic importance of R&D and its ripple effects will become more pronounced.

A POWERHOUSE?

The story of New England's once-peerless research universities is by now familiar. Those institutions conducted nearly \$2 billion in R&D in 1997, according to the most recent academic R&D data available from the National Science Foundation (NSF). But their share of all U.S. university research declined from 10.1 percent of the U.S. total in 1983 to 8.3 percent in 1997—still significant for a region that boasts less than 5 percent of the U.S. population.

Universities account for less than half the total R&D performed in New England. The region's busi-

nesses, government labs and teaching hospitals are also research powerhouses. Taken together, these New England entities now perform approximately \$17 billion in R&D annually, according to a new NEBHE analysis of unpublished NSF data. (See table.)

Moreover, Massachusetts is among just a half dozen states that together account for fully half of the nation's total R&D, according to the NSF.

As R&D investment funds new ideas and technological advances, it also bolsters long-term economic health. At least 50 percent of the nation's economic growth derives from R&D investments.

One often-cited example of how R&D activity creates spillover effects in New England is the 1997 BankBoston study showing that alumni and others associated with a single, powerful research institution, the Massachusetts Institute of Technology, had founded more than 4,000 firms responsible for 1.1 million jobs and \$232 billion in sales. Massachusetts alone could claim 125,000 MIT-related jobs.

BE VIGILANT

If New England is to maintain and enhance its position in R&D, the region needs to be vigilant—particularly in Washington, D.C.

New England's universities, businesses, government labs and teaching hospitals receive about \$5 billion annually in *federal* R&D funds alone, most of it from the Department of Defense, which funded \$2.8 billion in New England R&D during fiscal 1997, and the National Institutes of Health (NIH), which funded about \$1.6 bil-

PHOTO COURTESY OF UNIVERSITY OF CONNECTICUT.

lion in the region, primarily at teaching hospitals. Moreover, the federal government funds a whopping 69 percent of R&D at New England universities, compared with 60 percent nationally, according to the NEBHE analysis of NSF data.

The New England Council, founded in 1925 as many New England companies were leaving the region in search of lower operating costs, has included R&D funding among its top priorities for many years. The council's alliance of large and small businesses, educational institutions and nonprofits have consistently placed R&D near the top of a regional agenda because they know R&D investments promote productivity and create new products and new businesses. The health, biotech and software companies now driving New England's economy are thriving as the direct result of technologies developed with R&D funding.

Four years ago, a proposed 30 percent cut in the federal R&D budget was narrowly averted. Last year, R&D funding was threatened again. Though the Clinton administration recommended significant growth in federal R&D spending, the increase would be paid for by proceeds from the passage of a tobacco bill. When that legislation died, the outlook for federal R&D appeared bleak.

In June 1998, New England's entire House delegation signed onto a New England Council letter demanding that no cuts be directed at R&D funding. The co-chairs of the New England Congressional Caucus at the time, U.S. Reps. Richard Neal (D-Mass.) and Nancy Johnson (R-Conn.) kept up the pressure, and in the closing hours of the 105th Congress, federal R&D funding was preserved and, in many cases, increased.

Among the key changes in the federal R&D budget:

- The NIH R&D budget rose by \$2 billion to nearly \$16 billion in fiscal 1999—a 15 percent increase over 1998. With its wealth of medical schools and teaching hospitals, New England has historically benefited disproportionately from federal health research funding.

- The NSF's R&D budget rose to \$2.8 billion in fiscal 1999, up \$216 million or 8 percent over 1998. NSF is second only to NIH in funding basic research awards and university R&D, and New England's rich network of educational institutions captures a significant share of NSF grants.

- Defense basic research rose to \$1.1 billion in fiscal 1999—a 7 percent increase over 1998. The hike, the first since 1993, exceeded the increase requested by the president. Defense basic research is performed mostly by universities, but also supports such major New England businesses as Raytheon and General Electric.

Indeed, federal funding of civilian R&D has increased for seven straight years, and support for basic research has grown by 36 percent since 1993. But these funding levels are not maintained or increased in a vacuum. Congress increasingly debates budget allocations more from a geographic perspective than along partisan lines. It is imperative then that New England's voice be heard on Capitol Hill.

President Clinton has proposed a 1.7 percent *decrease* in total R&D funding for fiscal 2000, with outyear R&D budgets flat through fiscal 2004. Modest increases are proposed for some areas of R&D, including a rise of 2 percent for NIH, 7 percent for NSF and 6 percent for the Department of Energy. The budget proposal also addresses some critical education issues, including a collaborative Education Research Initiative, in which the NSF and the Department of Education are developing

new approaches to research on education.

R&D not only inspires innovation and creates new business. By enabling undergraduates and graduate students to work side-by-side with leading scientists from academia and industry, R&D activity also provides the region's future scientific and engineering talent with the skills and knowledge needed for work in the 21st century. The knowledge created in New England university research labs is passed down through education at all levels. This function of R&D will only become more critical. Neal Lane, the president's assistant for science and technology, has estimated that by the year 2020, 60 percent of new jobs will require skills possessed by only 22 percent of today's workers.

While New England needs to encourage national leaders to maintain the federal commitment to R&D, the region also needs to strengthen investment from other sources. The federal government funds about one-third of the more than \$200 billion spent on R&D nationally, with industry supporting most of the balance, according to the NEBHE analysis of NSF data.

Tax credits offer one incentive for more nonfederal investment in R&D. A temporary federal R&D tax credit, enacted in 1981 and renewed nine times since, provides businesses with a tax credit for incremental increases in annual R&D expenditures. A bill introduced in Congress this year would extend the credit for five years—the longest continuation yet. A *permanent* federal tax credit for businesses that invest in R&D would be even more beneficial.

In short, R&D advances knowledge and enhances education as it fuels New England's economy. That's a lot to overlook. ■

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

R&D SCORECARD: NEW ENGLAND AND THE UNITED STATES, 1997

FUNDED BY:	N.E.	U.S.	N.E. as % of U.S.
Federal Government	\$4,931,000,000	\$64,913,000,000	7.6%
Universities	\$265,000,000	\$4,686,000,000	5.7%
Industry	\$9,756,000,000	\$135,384,000,000	7.2%
Others	\$209,000,000	\$3,694,000,000	5.7%
All Sources	\$15,161,000,000	\$208,677,000,000	7.3%
PERFORMED BY:			
Federal Government	\$646,000,000	\$16,814,000,000	3.8%
Universities	\$1,973,000,000	\$25,001,000,000	7.9%
Industry	\$12,999,000,000	\$157,539,000,000	8.3%
Others	\$1,235,000,000	\$9,322,000,000	13.2%
All Sources	\$16,853,000,000	\$208,676,000,000	8.1%

Note: New England figures for all sources do not match because data for industry and federal funding of R&D performed by industry were not available for Maine, New Hampshire, Rhode Island and Vermont. U.S. figures for all sources do not match due to rounding.

Source: New England Board of Higher Education analysis of unpublished National Science Foundation data.

BOOKS

America's Other Sector

Melvin H. Bernstein

Civil Society: The Underpinnings of American Democracy, Brian O'Connell, University Press of New England, 1999, \$14.95

The existence of a strong, vibrant civil society is what differentiates America from other nations. Alexis de Tocqueville in his classic study, *Democracy in America*, was the first to recognize this unique feature of American life. The concept as it has evolved in the United States means more than people simply acting decently and in a civilized way toward each other, and it should not be viewed as synonymous with the existence of the nonprofit sector, which is only a part of civil society, according to Brian O'Connell, the practitioner-scholar whose new book explores the much talked-about topic. Instead, the notion of a civil sector is essential to the effective functioning of democracy in America—that is the point of O'Connell's book.

With the publication of *Civil Society*, Tufts University and the University Press of New England have launched a promising new series building on the recent upsurge of interest in the subject around the world and domestically. "Civil society" is a centuries old concept of western political thought. In America, the term can be traced back as far as the Mayflower Compact of 1620. But it has been in the 1990s that interest in the importance of civil society has exploded among political and social thinkers in this country and in places such as Eastern and Central Europe, Russia, Asia and Latin America.

Spurred by the post-Cold War interest of former Communist countries in Western democracies in general, and the American democratic model in particular, America's thinkers, commentators, practitioners and policymakers have been compelled to re-examine the timeliness

CEO of the Washington, D.C.-based national association of nonprofit organizations for a decade and a half before becoming Professor of Public Service at the Lincoln Filene Center for Citizenship and Public Affairs at Tufts.

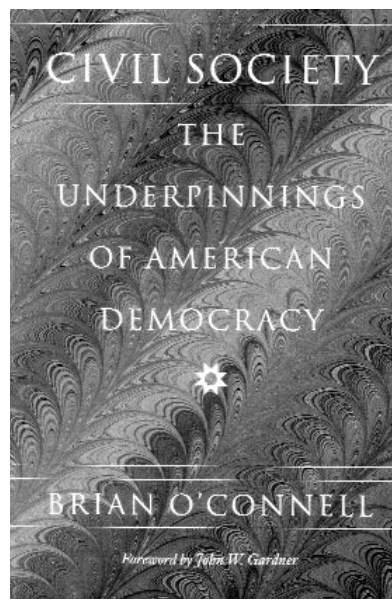
O'Connell explores the way our civil life interacts with American institutions of government, and why civil activity is vital to the American way of life.

At the outset, O'Connell acknowledges the growing confusion about what civil society is and what it does. As Rutgers political scientist Benjamin Barber observes: "The more the term civil society has been used in recent years, the less it has been understood."

This insight is borne out by the voluminous literature that has appeared in the 1990s, revealing a lack of precision about what civil society means, what it encompasses and how to measure its effectiveness. At mid-decade, the New York-based Council on Foundations queried six commentators from diverse nonprofit organizations about the meaning of civil society only to collect six different answers.

Rather than dwell on any grand definition of a term which few can agree upon, the core of O'Connell's insightful guidebook can be found in his chapter on volunteers, voluntary associations and philanthropy, and another on the limitations of civil society. These voluntary associations comprise what he calls the independent sector of society, sometimes referred to as the nonprofit or third sector. (Commerce is viewed as the first sector, government the second, with the private, nonprofit activities of individuals or groups accounting for the third.)

When de Tocqueville traveled to America in the 1830s, the infinite variety of associations he



and significance of civil life in America as it is experienced today. After the fall of the Berlin Wall in 1989, many leaders from the former Communist Bloc countries looked to the United States to find out what it is about grassroots community life in this country that accounts for the success of American-style democracy.

With nearly 50 years of service as a community organizer and 12 books to his credit, O'Connell is a natural to kick-off this timely new series on civil society. The founding president of Independent Sector, O'Connell served as

witnessed in towns and villages convinced him that in “no country in the world has the principle of association been more successfully used or applied to a greater multitude of objects than in America.” For de Tocqueville, active participation by citizens in grassroots activities in their communities was the key to making democracy work.

Americans joining in a multiplicity of causes and interests—social, economic, educational, literary, scientific, medical or otherwise—account for the civil part of life in the United States that predates even the formation of government. Foreign observers still marvel at the size, diversity and involvement of America’s civil society noting that it is unlike anything they see in their own countries. For instance, America’s huge and rapidly growing independent sector generates an estimated \$700 billion in annual revenue and is supported by a greater proportion of U.S. citizens than in any other nation in the world. As much as half of all Americans donate time to nonprofit organizations—for an average of four hours weekly. An even greater proportion, an estimated 75 percent, give money regularly to nonprofit organizations.

Although recognizing the size and potential of the independent sector in American society, O’Connell readily acknowledges it is no panacea for addressing the pressing social, educational and health-care issues that confront the nation. He points out in a candid assessment of the limitations of civil society: “We already know a good deal about the size of the country’s independent sector, which is likely to be a large part of any measurement of civil society, and we know that the independent sector is very small compared with commerce and government.” The \$700 billion in nonprofit sector revenues account for only 6 percent of national income, compared with 79 percent attributed to commerce and 15 percent accounted for by government.

O’Connell cautions the reader about the importance of drawing reasonable boundaries around what civil society can accomplish and that it should not be seen as a substitute for the institutions of government, despite the disillusionment Americans have about the undue influence of money and special interests on the way government operates. O’Connell ends his analysis with a nine-point action agenda aimed at promoting civic education and civic engagement at all levels to bring about better under-

standing of civil society’s role in preserving and strengthening American democracy.

At least 10 commissions, centers and institutes have been established and funded during the past five years to study the health and future of civil society, according to the national magazine *Foundation News and Commentary*. They include: the Newton, Mass.-based Institute for Civil Society established in 1997 with a \$35 million anonymous gift; the National Commission on Civic Renewal, which is affiliated with the University of Maryland’s Institute for Philosophy and Public Policy; the Civil Society Project of the Pennsylvania-based Commonwealth Fund for Public Policy Alternatives; the Kettering Foundation’s Civil Investing Group; and the Council on Civil Society, affiliated with the Institute for American Values at the University of Chicago.

After some initial skepticism about the worthiness of studies in citizenship, values and public service, higher education is beginning to play a major role in the study of civil society. O’Connell reports more than 600 colleges and universities now belong to Campus Compact, a Brown University-based coalition of college presidents committed to helping students develop values of citizenship through practical experience in community service.

Nearly 50 universities have established academic centers for the study of civil society or its major components, such as the nonprofit sector and philanthropy. Nationally, a Nonprofit Academic Centers Council has been created. New England members include the Lincoln Filene Center, the Yale Program on Non-Profit Organizations, Boston College’s Social Welfare Research Institute and Harvard’s Hauser Center for Nonprofit Organizations. Across the country, the number of graduate programs in nonprofit management surged from as few as 17 at the beginning of the decade to 82 in 1999.

Brown University recently created a Web site on civic engagement in America, highlighting the work of Harvard University’s Robert Putnam and providing a context, commentaries and resources for examining the debate currently underway.

And during the summer, more than 50 U.S. college presidents issued a *Fourth of July Declaration on the Civic Responsibilities of Higher Education*, warning: “This country cannot afford to educate a generation that acquires knowledge without ever understanding how that

knowledge can benefit society or how to influence democratic decision-making.” The presidents found it particularly unacceptable that less than 15 percent of college-age citizens voted in the last presidential election, just one of the indicators that bears out the existence of widespread cynicism and lack of trust in political campaigns, elections, the act of voting and the responsibilities of citizenship.

Whether the issue is how to rebuild societies based on active citizen participation or reaffirming the worth of civic engagement as found in the United States, it can be expected that the explosion of interest, research and studies of civil society will continue. Brian O’Connell’s primer is an excellent place to start, both for the newcomer to the field and seasoned observers looking for fresh insights.

Melvin H. Bernstein is a senior fellow at the New England Board of Higher Education.

In the Midst of Yankees

Alan R. Earls

Thy Honored Name: A History of the College of the Holy Cross, 1843-1994, Anthony J. Kuzniewski, S.J., Catholic University Press of America, 1999, \$34.95

In 1843, just a few years after the Congregational Church was officially disestablished as the favored form of worship in the Commonwealth of Massachusetts and only nine years after the infamous burning by Nativists of the Catholic Academy in Charlestown, Mass., the College of the Holy Cross was getting a rather shaky start in Worcester.

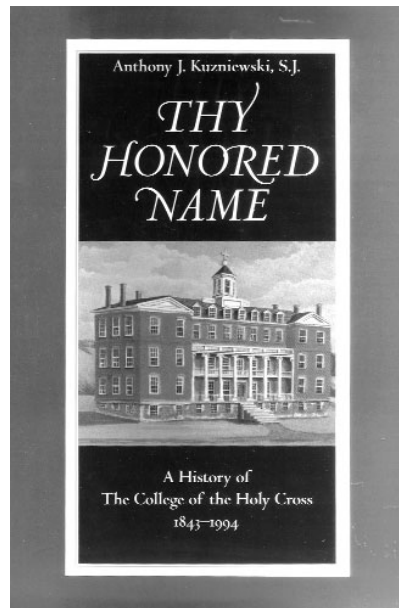
Despite the anti-Catholic bias of the time, the new college soon prospered, drawing strength from its surroundings and inspiration from its academic competitors.

Thy Honored Name reveals the confluence of two formidable educational traditions—Puritan and Jesuit—and a growing appreciation of their compatibility. It is also an account of efforts to promote academic excellence while maintaining an authentically Jesuit identity in a region where many former religious colleges have become largely or entirely secular.

Drawing on several earlier and less scholarly attempts at a history of the college, Anthony J. Kuzniewski, a history professor and rector of the Jesuit community at Holy Cross, has obviously labored hard to write a book that records the life and times of a single institution while documenting much of the larger story of Catholics in America. The book also provides a useful reference for any contemporary institution seeking to steer a path apart from the mainstream.

In its early years, Holy Cross was a pet project of Boston's second bishop, Benedict Fenwick. Indeed, the college almost became part of a Utopian Catholic Community called *Benedicta* that Fenwick established on 11,000 acres in Aroostook County, Maine. But advocates of a Worcester site prevailed, and the steep hill beside the Blackstone River eventually became the college's home—a perfect aerie for educating young Catholic men and perhaps encouraging some to enter the priesthood.

Holy Cross began as an exclusively Catholic operation offering a seven-year humanities program (including college preparatory-level courses)



es) and failed in its initial attempt to obtain a charter from the Massachusetts General Court in part because of its refusal to admit non-Catholics. The college even endured a humiliating examination by the Joint Special Committee on the

Inspection of Nunneries and Convents sent by the Massachusetts state Legislature, then dominated by the anti-Catholic Know-Nothing party.

In the more liberal tenor of 1865, Holy Cross finally won its charter. But this was not the end of battles between the separatist institution and the majority culture, for while the college conformed in many ways to American practice, the academic program was still based primarily on the *Ratio Studiorum*—a traditional plan of study developed in the 16th century by Jesuit founder Ingatius Loyola. The *Ratio* favored classical languages and religion to the detriment of mathematics, the sciences and contemporary subjects. Holy Cross leaders made compromises with modernity, but by the turn of the century, it was clear those compromises had not been enough to keep graduates competitive with young men from other institutions. Armed with comparative data on Holy Cross graduates who had attended Harvard professional schools, Harvard President Charles W. Eliot became a vocal critic of the Catholic system in general and of Holy Cross in

particular. “Boston College and Holy Cross have sent a considerable number of graduates to our schools of Law and Medicine, and they as a rule do not make high scores,” he sneered in a letter to the Holy Cross administration.

Despite these criticisms and a practical need to appeal to a broad base of students, many at Holy Cross were determined to maintain a focus on God, spirituality, Catholic practice and a deep core of traditional humanities. Finally, though, after 1900, the curriculum was altered to bring Holy Cross into fuller conformity with contemporary educational practice. College offerings were amplified and the prep school appendage was dropped, establishing Holy Cross as a four-year college in the American pattern, with many new subjects added to the curriculum. Despite an increasing number of lay faculty members, however, the Jesuit influence remained. Indeed, many Holy Cross men who served in the U.S. armed forces during World War I remarked on the similarity between military discipline and protocol and that which was maintained by the college.

When World War II came and students all

but disappeared, Holy Cross was rescued by government programs such as the Navy’s famous V-12 officer training effort, which filled the campus to near capacity.

Through the post-World War II period, Holy Cross retained its distinctive Catholic flavor while continuing to expand physically and academically, though it no longer ranked as the largest Catholic college in the United States as it had it in the 1920s.

Changing undergraduate tastes in the 1950s led to new majors such as business. And while the college continued to be regarded as the best Catholic institution in the country, concern about program quality laid the groundwork for later wholesale introduction of lay faculty.

The 1960s brought wrenching changes to Holy Cross, as the college embraced coeducation, a more open curriculum, increasing involvement of non-Jesuit faculty and administrators and the transition to a lay board of trustees.

Ultimately, Holy Cross emerges from *Thy Honored Name* as a place that is very much alive—informed by its traditions and still distinc-

tive—but no longer exclusive. It is a story that Kuzniewski tells in a way that is both readable and engaging. And it is a New England story, for Holy Cross clearly owes as much to its surroundings as it does to its roots in the ancient Jesuit order. From the Jesuits it drew a sense of purpose and independence that occasionally bordered on the heroic. But its New England environs offered a constant set of challenges and opportunities—some played out on the athletic field through famous rivalries and others manifested through the achievement of its graduates and the continued strengthening of its faculty and curriculum.

Despite his own ties to Holy Cross, Kuzniewski, starting with modest ambitions toward his subject in the 1980s, has ultimately crafted an ample, widely encompassing institutional biography that is balanced, fair and interesting. And in so doing, he reminds us that an academic institution can achieve excellence and relevance even as it remains proud of its antique beginnings. ■

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

CAMBRIDGE, MASS. — Harvard University's Kennedy School of Government introduced a World Wide Web-based "Smart Library on Urban Policy Research" making decades of academic research on the causes and consequences of urban poverty and related urban issues accessible on the Internet. The library, developed by Kennedy School Professor William Julius Wilson in cooperation with the nonprofit National Institute for Social Science Information, is available on the Internet at www.ksg.harvard.edu/urbanpoverty or www.societyonline.org/urbanpoverty.

PROVIDENCE, R.I. — Rhode Island College's Poverty Institute was awarded \$56,000 by the Rhode Island Foundation to support the one-year-old policy think tank's first full-time paid staff position and launch new initiatives to expand economic opportunities for low-income Rhode Islanders. Much of the institute's work has focused on implementation of welfare reform in Rhode Island.

BOSTON, MASS. — The Center for Corporate Community Relations at Boston College was awarded \$445,000 from the Ford Foundation to study partnerships between businesses and economically distressed communities and produce case studies of corporate community development partnerships to be used as teaching models.

AMHERST, MASS. — Researchers at the University of Massachusetts Political Economy Research Institute were awarded a two-year, \$400,000 grant from the Ford Foundation to study ways to spread the benefits of global economic growth widely by creating more egalitarian national and global financial institutions and developing new mechanisms to regulate the international flow of capital and investment. The year-old institute was also awarded a \$254,000 Ford Foundation grant to fund a 14-month project to explore the relationship between environmental protection and poverty.

WALTHAM, MASS. — A Brandeis University researcher was awarded \$600,000 by the National Institute for Occupational Safety and Health to study the impact of working part-time on quality of life among women doctors and unionized licensed practical nurses. Rosalind C. Barnett, a senior research scientist in the Brandeis Women's Studies Program, already studied Boston-area doctors and found that a reduced work schedule was a poor predictor of quality of life, partly due to fear of losing professional status and other stresses associated with part-time work.

WEST BARNSTABLE, MASS. — Cape Cod Community College unveiled a state-of-the-art fuel cell generator as part of a program aimed at saving the college \$192,000 in annual energy costs. The college joins just a handful of sites in the Northeast that meet nearly all their electrical power needs through the environmentally friendly technology in which the energy stored in natural gas is converted directly to electricity through an electrochemical process. A byproduct of the process heats and cools the college's library and learning resources center.

LOWELL, MASS. — The University of Massachusetts at Lowell was granted exclusive rights to plastic-forming technology that university officials say could transform packaging and car manufacturing. An agreement with the Valyi Foundation gives UMass-Lowell exclusive rights to 45 patents and disclosures issued to the late Emery I. Valyi, a leading materials-forming engineer who died in 1998 after declaring his intent to benefit the campus. Revenues generated by the development of Valyi's intellectual property will be used to establish the Valyi Institute for Plastic Forming, which will conduct research and development, provide services to sublicensees, appoint senior fellows and develop a liberal arts curriculum for engineering students.

DANIELSON, CONN. — Quinebaug Valley Community-Technical College won state approval to begin enrolling students in a new associate degree program in computer services, beginning in fall 1999. Students may specialize in software applications, hardware/technical support or a combination of the two in preparation for transfer to a four-year computer science program.

PROVIDENCE, R.I. — Johnson & Wales University announced it would open a branch campus in Denver in September 2000. Partly funded by \$3 million in matching gifts from the Adolph Coors and Castle Rock foundations, the new campus will be developed on a 13-acre portion of the University of Denver's Park Hill campus. The campus will initially offer two-year associate degree programs in culinary arts, food and beverage management and baking and pastry arts, and will incorporate the existing Johnson & Wales program in Vail, Colo. The university maintains campuses in Charleston, S.C., Norfolk, Va., North Miami, Fla., Worcester, Mass., and Gothenburg, Sweden.

BRISTOL, R.I. — Roger Williams University received \$50,000 from the Coca-Cola

Foundation to support its Bridge to Success Program in which university undergraduates serve as mentors to students at Rogers High School in nearby Newport. The program's goal is to encourage more minority students to graduate from high school and continue their education. Forty-five Roger Williams students have served as mentors to 150 minority students since the program began in 1993.

STORRS, CONN. — The University of Connecticut received a \$3 million commitment to establish scholarships for public high school graduates from about a dozen towns north of Hartford. Samuel J. Orr Jr., a Suffield lawyer and founder of the Bugaboo Steakhouse restaurant chain, said he made the gift in part because a UConn dean helped him out with a scholarship in the 1930s.

COLCHESTER, VT. — Saint Michael's College was awarded \$223,810 from the Henry Luce Foundation of New York to fund four two-year scholarships for female juniors pursuing science and engineering fields in which women have been underrepresented. The scholarships cover full tuition, room, board and fees for students in their junior and senior years.

NORTH DARTMOUTH, MASS. — The University of Massachusetts at Dartmouth signed a cooperative research and development agreement with the U.S. Army's Natick Labs in Massachusetts to develop improved protective clothing for military and civilian rescue personnel.

PROVIDENCE, R.I. — Rhode Island College opened an on-campus jewelry training and education facility aimed at bringing together art students and jewelry designers in the historical center of the American fashion jewelry industry. The facility houses \$80,000 worth of equipment, much of it donated by members of the Manufacturing Jewelers and Suppliers of America, a Providence-based trade association.

KEENE, N.H. — Antioch New England Graduate School initiated a leadership training program for members of local boards of selectmen in New Hampshire's Monadnock region. Two dozen local officials from 15 towns enrolled in Antioch New England's first Selectperson Institute to discuss common issues and explore collaboration. The institute was launched with support from Granite Bank and the Putnam Foundation. College officials hope to expand the program statewide.

Build New England's Agenda

Order *CONNECTION* Today!

CONNECTION SUBSCRIPTION

___ Please send me one year of **CONNECTION: NEW ENGLAND'S JOURNAL OF HIGHER EDUCATION AND ECONOMIC DEVELOPMENT**, including the special annual **FACTS** directory of New England colleges, universities and institutes, for just \$20.

CONNECTION BACK ISSUES

Back issues of regular editions of *CONNECTION* are available for \$3.95 each. Back issues of *FACTS* are available for \$14.95 each.

- | | | |
|--|--|--|
| ___ Economy, Community, Demography
<i>Summer 1999, Vol. XIV, No. 2</i> | ___ Taking Stock: 1955-1995
<i>Winter 1995, Vol. IX, No. 4</i> | ___ Made in New England
<i>Spring 1990, Vol. V, No. 1</i> |
| ___ The State of New England
<i>Spring 1999, Vol. XIV, No. 1</i> | ___ FACTS 1995
<i>Fall 1994, Vol. IX, No. 3</i> | ___ Budget Squeeze
<i>Winter 1990, Vol. IV, No. 4</i> |
| ___ FACTS 1999
<i>Winter 1999, Vol. XIII, No. 4</i> | ___ Telecommunications and Distance Learning
<i>Summer 1994, Vol. IX, No. 2</i> | ___ FACTS 1990
<i>Fall 1989, Vol. IV, No. 3</i> |
| ___ New England Works
<i>Fall 1998, Vol. XIII, No. 3</i> | ___ Coin of the Realm: Higher Education Finance
<i>Spring 1994, Vol. IX, No. 1</i> | ___ Campus 1990
<i>Summer 1989, Vol. IV, No. 2</i> |
| ___ Art For New England's Sake!
<i>Summer 1998, Vol. XIII, No. 2</i> | ___ FACTS 1994
<i>Fall 1993, Vol. VIII, No. 2</i> | ___ New England's Workforce
<i>Spring 1989, Vol. IV, No. 1</i> |
| ___ Impacts: Subsidies, Need-Based Aid
<i>Spring 1998, Vol. XIII, No. 1</i> | ___ Work and the Workforce
<i>Spring/Summer 1993, Vol. VIII, No. 1</i> | ___ Thinking About the Law
<i>Winter 1989, Vol. III, No. 4</i> |
| ___ FACTS 1998
<i>Winter 1998, Vol. XII, No. 4</i> | ___ Research & Development
<i>Winter 1993, Vol. VII, No. 3</i> | ___ FACTS 1989
<i>Fall 1988, Vol. III, No. 3</i> |
| ___ The Economic Condition of New England Higher Education: Indicators
<i>Fall 1997, Vol. XII, No. 3</i> | ___ FACTS 1993
<i>Fall 1992, Vol. VII, No. 2</i> | ___ Minority Access and Retention
<i>Summer 1988, Vol. III, No. 2</i> |
| ___ Distributed Learning
<i>Summer 1997, Vol. XII, No. 2</i> | ___ New England Regionalism
<i>Spring/Summer 1992, Vol. VII, No. 1</i> | ___ Biomedical R&D
<i>Spring 1988, Vol. III, No. 1</i> |
| ___ Building the Knowledge Economy
<i>Spring 1997, Vol. XII, No. 1</i> | ___ Working Smart
<i>Winter 1992, Vol. VI, No. 4</i> | ___ Confronting Illiteracy
<i>Winter 1988, Vol. II, No. 4</i> |
| ___ FACTS 1997
<i>Winter 1997, Vol. XI, No. 4</i> | ___ FACTS 1992
<i>Fall 1991, Vol. VI, No. 3</i> | ___ The Future of New England
<i>Fall/Winter 1987, Vol. II, No. 3</i> |
| ___ New England and the World
<i>Fall 1996, Vol. XI, No. 3</i> | ___ Higher Education's Shrinking Share
<i>Summer 1991, Vol. VI, No. 2</i> | ___ New England's Land Grant Universities
<i>Summer/Fall 1987, Vol. II, No. 2</i> |
| ___ Think Tanks
<i>Summer 1996, Vol. XI, No. 2</i> | ___ Thinking Environment
<i>Spring 1991, Vol. VI, No. 1</i> | ___ New England's Growing Ties to Canada
<i>Spring/Summer 1987, Vol. II, No. 1</i> |
| ___ Higher Education: Whose Investment?
<i>Spring 1996, Vol. XI, No. 1</i> | ___ Roads to Recovery
<i>Winter 1991, Vol. V, No. 4</i> | ___ New England in a World Economy
<i>Winter/Spring 1987, Vol. I, No. 4</i> |
| ___ FACTS 1996
<i>Winter 1996, Vol. X, No. 3</i> | ___ FACTS 1991
<i>Fall 1990, Vol. V, No. 3</i> | ___ FACTS 1987
<i>Fall 1986, Vol. I, No. 3</i> |
| ___ Changing Shape of Business and Management Education
<i>Summer/Fall 1995, Vol. X, No. 2</i> | ___ New England's Congressional Delegation
<i>Summer 1990, Vol. V, No. 2</i> | ___ Is There a Student Loan Crisis?
<i>Summer 1986, Vol. I, No. 2</i> |
| ___ Higher Education and Human Capital
<i>Spring 1995, Vol. X, No. 1</i> | | ___ Our Evolving Technocracy
<i>Spring 1986, Vol. I, No. 1</i> |

To order, indicate quantity at left of each title, complete below and mail this entire page (or a photocopy) with a check made payable to the **New England Board of Higher Education**, 45 Temple Place, Boston, MA 02111. Or call 617.357.9620.

Total Amount Enclosed: \$ _____

Name _____ Title _____

Organization _____

Address _____

City _____ State _____ Zip _____



The Gateway
to New
England on
the Internet!

New England is now online!

Check out www.newenglandonline.org

The New England Board of Higher Education is pleased to present *New England Online*, the gateway to New England on the Internet.

- *About New England* features general information on the six-state region;
- *Education* links New England's 260-plus colleges and universities as well as sources of student financial aid and K-12 resources;
- *Government* provides vital information on New England state governments and provides links to key agencies and legislative resources;
- *Business and Economy* features access to updated workforce data and links to trade groups and economic development organizations;
- *Civil Society* connects the region's rich array of community service organizations; and
- *Life* offers information on New England arts, communities, recreation, tourism, weather and more.

***New England Online
is sponsored by the
New England Board of
Higher Education with
cooperation from the
New England Council and
the New England
Governors' Conference and
the financial support
of AT&T.***

**Make www.newenglandonline.org
your one-stop Internet resource...**

"We must use the Internet to create the virtual region (metropolitan or multistate) that politics denies us—a home for all the reports, analyses, updates, benchmarks, citizen goals, commentaries and debates that a healthy and competitive society must have."

— Neal Peirce, syndicated columnist and chair of the Citistates Group

Also remember to visit the New England Board of Higher Education Web site at www.nebhe.org, for information on tuition savings through the New England Regional Student Program, the latest on NEBHE conferences and programs, abstracts of recent CONNECTION articles and much more.