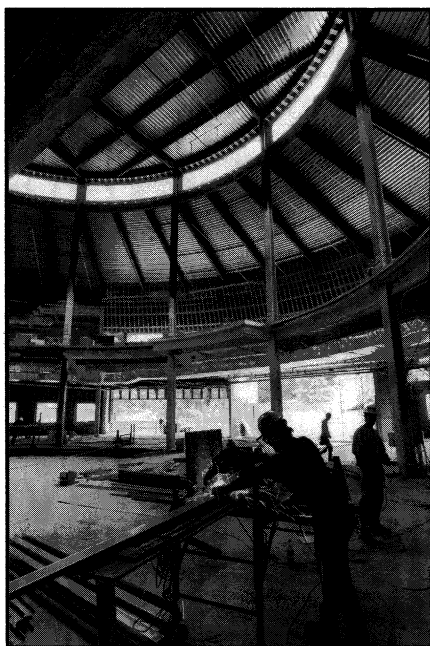
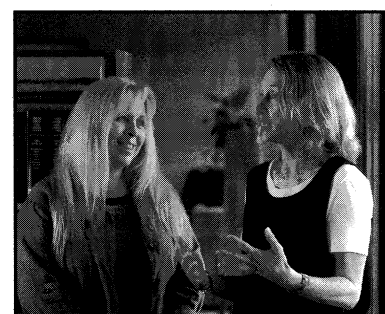


A ROUNDTABLE POLICY BRIEF



BECOMING “The Knowledge State”

*The Vital Importance of Higher Education
in Vermont's 21st Century Economy*



Higher education is an enormous contributor to Vermont's quality of life and cultural vitality — but less well-recognized is how much higher education brings to the Vermont economy. With more than 10,000 employees and over \$856 million per year in direct spending, the state's flagship university, its five state colleges, and its 18 independent colleges are a mainstay of our state's marketplace. However, state support for higher education and student financial aid remains among the nation's very lowest.

To download the complete version of the Roundtable's report, *Becoming “The Knowledge State”* visit our website: www.vtroundtable.org or call our office to request a hard copy: (802) 865-0410

“We Don’t Know What We’ve Got”

Higher Education in the Changing Vermont Economy

In strictly practical, economic terms, how important is higher education to Vermont? There are not one but, in today’s economy, three answers to that question.

The first is straightforward. With more than 10,000 employees and over \$856 million per year in direct spending, the state’s flagship university, its five state colleges, and its 18 independent colleges are a mainstay of our state’s marketplace — and one whose budgets and good-paying jobs are especially stable.

“These are high-quality jobs that we’re bringing to Vermont,” notes Richard Schneider, president of Norwich University.

Add in the additional business that higher education generates — through its students, visitors, parents, and alumni, its athletic and cultural events, and its construction projects — and this sector’s overall, annual fiscal impact on Vermont can be estimated at more than \$1.71 billion. (See table) Also, the Vermont Student Assistance Corporation is making loans and grants to Vermont students that total \$397 million this fiscal year.

This sector’s fiscal impact on Vermont can be conservatively estimated at more than \$1.71 billion every year.

The second answer digs both deeper and wider. Higher education is an enormous contributor to the cultural vitality and general quality of life in Vermont, which is so much a part of our state’s well-being and economic attractiveness. And as Vermont’s economy evolves speedily toward knowledge-based businesses, with even our most traditional enterprises — farming, manufacturing, and travel and recreation — requiring ever more sophisticated skills to compete in a globalized marketplace, higher education is increasingly vital. It is the primary supplier of well-educated, well-rounded young graduates, who are far more likely than non-graduates to be active citizens throughout their careers, contributing to both their communities and Vermont’s economy. It is also the main resource for meeting the learning needs and desires of working adults — and it’s the partner that businesses must have to meet their workforce education and training requirements, which will only increase in the coming years.

“We are by no means a monolithic economy,” notes Bill Stenger, president and CEO of Jay Peak Resort and chair of The Newport Workforce Development Board. “Each of the

components are interrelated — and the education that provides stability for each of those components has its foundation in higher education.”

The third answer digs deeper still. As both the business and the higher education communities seek to meet the challenges of a fast-changing world, they are learning to work together. A diverse array of campus-based business incubators has sprung up in the past few years, where the two communities often partner to nurture entrepreneurship — and that’s only part of the picture.

In a much broader way, there is a new scale of collaboration, built on a shared awareness that in today’s world, with knowledge and technology advancing constantly, business and higher education need each other.

Estimated Overall Economic Impact of Higher Education in Vermont

The following figures use a multiplier of 2.0 to estimate the overall economic impacts of Vermont’s institutions of higher education on the state’s economy, using data from fiscal 2002. According to a recent economic-impact study by Rutgers University, “a multiplier of two is the most commonly reported among studies estimating the economic impact of institutional spending. This multiplier assumes that for every dollar spent, another dollar is generated and spent within the state.”

University of Vermont, Total Direct Expenditures:
x multiplier (2)

Estimated Overall Economic Impact = \$691,220,000

Vermont State Colleges, Total Direct Expenditures:
x multiplier (2)

Estimated Overall Economic Impact = \$202,743,338

Independent Institutions, Total Direct Expenditures:
x multiplier (2)

Estimated Overall Economic Impact = \$818,535,958

Public & Private Institutions, Total Direct Expenditures:
x multiplier (2)

Estimated Overall Economic Impact = \$1,712,499,296

*Source for expenditure data: Vermont Higher Education Council. Research source for multiplier, as cited by Rutgers study: Elliot, Donald S., Stanford L. Levin, and John B. Meisal. “Measuring the Economic Impact of Institutions of Higher Education.” *Research in Higher Education*, 28:1 (1988): 17-33.*

“Part of the Solution”

The Multiplying Links Between Higher Education & Vermont Business

Eight out of 10 new technology companies that were started across the U.S. in fiscal 2000 were located close to the university that developed their foundation technology, according to the Association of University Technology Managers.

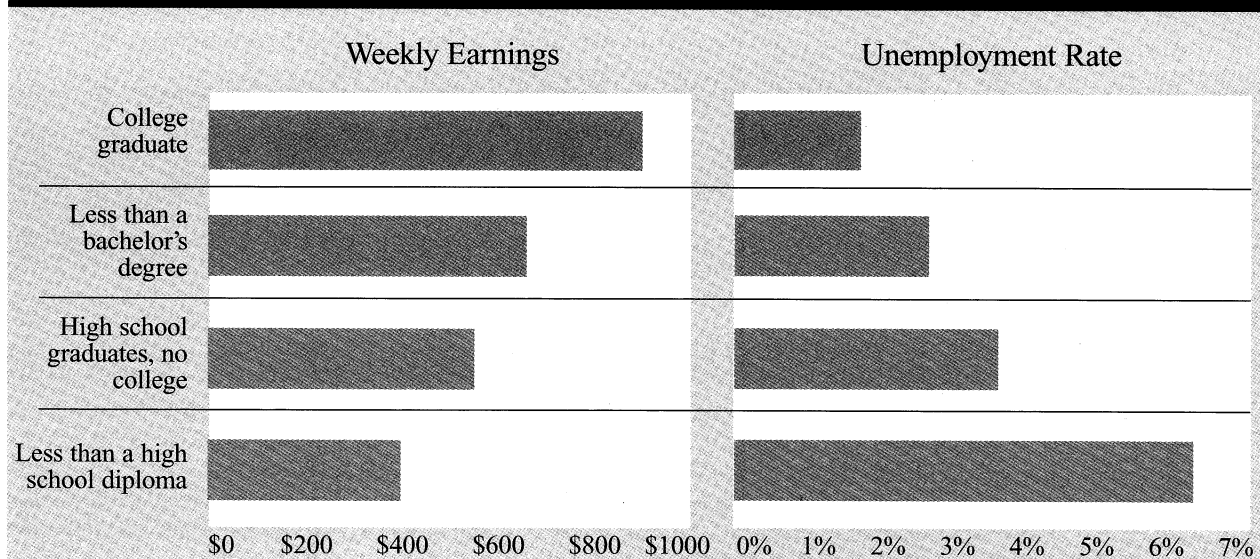
Not only UVM but the whole Vermont State College system and, indeed, many of Vermont's independent colleges are working with businesses to build active learning connections that benefit both partners.

For this reason and many others, often aimed at connecting Vermont entrepreneurs with the support, knowledge, and financing they need, business incubators and similar programs have sprung up at a variety of Vermont colleges and universities. Here are two brief profiles on incubators created in the past several years:

National Center for the Study of Counter-Terrorism & Cyber-Crime, Norwich University: Created in 2002, the Center recently received a \$4.5 million federal contract to do research and technology development for the U.S. military in nanotechnologies, computer networks, and other areas. The Center has already contracted with three Vermont companies to work on the project, and has created six new jobs, with plans for more. In the future, “We will be competing for contracts to work with the federal government,” says university President Richard Schneider. “We will do some of the work in-house; much of the rest will be passed out to Vermont firms.”

Vermont Center for Emerging Technologies, UVM: In 2002, UVM passed the milestone of \$100 million in research funding, mostly from federal grants and contracts — but the university is challenged to connect more of its technology innovations with startup businesses that can develop them into products and create jobs. The Vermont Center for Emerging Technologies is in the process of becoming a self-sustaining nonprofit. It will offer selected early-stage businesses a menu of incubator services, linking client firms with UVM technology, specialized university laboratories, and a network of faculty, staff, student interns, and alumni — from not only UVM but other Vermont higher education institutions as well.

Earning and Unemployment Rates: Persons over 25, U.S.



Source: U.S. Department of Labor, Bureau of Labor Statistics

"The Challenge Is Cost"

Recommendations for Significant, Long-Term Positive Impact

This report has sought to make and to verify these key points:

- Higher education is an indispensable contributor to Vermont's economic well-being, its communities, its cultural and civic vitality, and its overall quality of life;
- Higher education is vital for Vermonters who wish to earn a good income and get the most desirable jobs;
- The economy of today and tomorrow needs a well-educated workforce, with the capacity to keep on learning and solving problems;
- The research and development work done by higher education provides important innovations, which lead to new business and new jobs; and
- Businesses and higher education increasingly need to connect and work together, to provide the graduates that businesses need, and to meet the ongoing education needs

of the adult workforce.

It follows, then, that all of Vermont has a very large stake in working to:

- make and keep higher education more affordable for all Vermonters;
- increase, within five years, Vermont's state ranking in terms of funding for higher education to 40th (top of the bottom quintile); and
- support and nurture the connections between higher education and the business community.

The sophistication of tomorrow's workforce, in terms of education, skills, and the capacity to create, communicate, and solve problems, is so vital that repeating its importance has almost become a mantra in the business and higher education worlds. Equally vital is that access to postsecondary education not stop at college graduation, but stay available as a lifelong opportunity.

Low state support for higher education has affected students at both public and private colleges and universities in Vermont. Low levels of state appropriations for UVM and the Vermont State Colleges have meant relatively high tuition at those schools.

In-State Undergraduate Tuition and Fees at Public Flagship Universities

	1989-90	1996-97	2000-01
UVM	\$3,986	\$7,229	\$8,288
% increase		81.4%	14.6%
U.S. Average	\$1,968	\$3,360	\$4,000
% increase		70.7%	19.0%

In-State Undergraduate Tuition and Fees at Resident State Colleges

	1989-90	1996-97	2000-01
Vermont State Colleges (CSC, LSC, JSC)	\$2,843	\$4,248	\$4,944
% increase		49.4%	16.4%
U.S. Average	\$1,599	\$2,645	\$3,168
% increase		65.4%	19.8%



Created in 1987 as a nonprofit, public interest organization, the Vermont Business Roundtable is comprised of 120 CEOs of Vermont's top private and nonprofit employers dedicated to making Vermont the best place in America to do business, be educated, and live life through collaboration, research and analysis, and communication and advocacy. Member businesses employ over 47,000 employees and are represented in virtually every county across Vermont.

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