Education by the Numbers

Why education is a smart investment in an uncertain economy

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As a receding economy contributes to public anxiety about jobs and an uncertain financial future, education becomes a target of state and local cuts. Reducing education funding does not help solve economic woes, however. According to the most recent economic impact report of the New England Association of Schools & Colleges (NEASC), cuts in expenditures for K-12 education have a reverse effect: they slow the growth of education as an economic engine and harm the higher education community as students progress through the pipeline.

NEASC's economic impact assessment, the only known study to explore the economic impact of New England K-12 schools and higher education institutions in combination, finds that investment in New England schools and higher education institutions reaps tremendous *short-term* returns to the regional market. Yet these short-term benefits are ordinarily overlooked by the public and even by elected officials. Perhaps this is inevitable since most studies and news features emphasize long-term returns in education investments, such as lower taxpayer spending on crime and welfare, higher personal wages and, in turn, a rise in state income. While the long-term returns to educational investment are undoubtedly significant, the short-term rewards are less frequently studied, and therefore not known or valued by most people.

Economic impact assessments typically highlight positive short-term returns from a given financial investment (e.g., job-growth, increase in innovation, rise in inter-industry commerce, revenue growth for local businesses, etc.). It is for this reason that economic impact assessments are a useful tool for educational institutions. By shedding light on the immediate rewards brought about by educational investment, educational institutions can garner financial support from the public and elected leaders. After all, the education sector not only provides jobs to thousands of New Englanders; it also propels substantial inter-industry commerce through expenditures on a vast array of goods and services.

Perhaps the most notable finding from NEASC's study is that the collective economic impact of accredited public and independent K-12 schools together with higher education institutions amounted to $114.7 billion in fiscal 2006 (the latest year that comprehensive audited school financial data are available). This is a significant increase from the previous study, which found that,

Economic Impact of NEASC-accredited Schools & Higher Education Institutions, Fiscal Year 2006

	K-12*	Higher Education	Total
Conn.	$4,333,831,789	$23,898,163,309	$28,231,995,098
Maine	$805,627,098	$2,559,180,457	$3,364,807,555
Mass.	$6,685,000,576	$63,401,995,243	$70,086,995,819
N.H.	$1,953,464,467	$4,666,527,797	$6,619,992,264
R.I.	$825,128,608	$3,052,221,444	$3,877,350,052
Vt.	$422,241,001	$2,072,508,598	$2,494,749,599
Total	$15,025,293,539	$99,650,596,848	$114,675,890,387

**Includes public and independent schools*

just two years earlier, accredited educational institutions in the six-state region had an economic impact of $93.5 billion. Thus, in two years, the identifiable economic impact of our member schools, colleges and universities rose by $21 billion or 23 percent.

The economic impact of accredited schools, colleges and universities in New England even exceeds the total combined public expenditures of these states, which totaled $85 billion in the fiscal study year of 2006. NEASC's figures are conservative because a "multiplier" to measure the additional secondary impacts produced by offshoot spending was avoided intentionally. The incorporation of a multiplier would easily double or triple the economic impact of our institutions. However, NEASC favors focusing strictly on the direct and short-term impacts on the economy because this enables the public and policymakers, with whom the association regularly shares this information, to grasp the impact of educational institutions more concretely. In other words, for many people, multiplier impacts are ambiguous or theoretical — even viewed with skepticism, since they are thought to inflate economic impact estimates.

In the years ahead, NEASC anticipates that the economic impact of schools, colleges and universities and the subsequent ripple effects on employment will continue to expand, especially since higher percentages of the population are enrolling in postsecondary education and many of the region's schools are aging, so significant amounts will be spent on construction, capital improvements and technology upgrades.

Indeed, educational spending has a significant impact on industries like construction, transportation, multimedia, sports, healthcare, publishing and others that supply goods and services to schools on a large scale. Analyzing data from the U.S. Census Bureau, NEASC found that expenditures on everyday K-12 school operation and maintenance amounted to more than $2.4 billion in fiscal 2006 while expenditures on instructional supplies were more than $525.6 million.

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The same year, these schools spent more than $1.1 billion on student transportation and nearly $782 million on school food services. New England's schools spent more than $5.7 billion providing employee benefits. According to *School Planning & Management's* 2008 *Annual School Construction Report*, roughly 30 percent of New England's school districts finished or planned to initiate construction projects in 2007. *School Planning & Management* also reports that New England's K-12 school districts spent nearly $1.1 billion on school construction projects finished in 2007, and nearly half of this ($529.8 million) was spent on new school construction. Approximately $189.4 million was spent on building additions and $357.1 million spent on renovations.

Education Stimulus Package

Not surprisingly, New England's higher education institutions are a major financial stimulus in the region. NEASC's study makes a clear case for investment in higher education to stimulate regional economic development, citing that the economic impact of NEASC-accredited higher education institutions amounted to $99.7 billion in fiscal 2006. Note that NEASC accredits more than 95 percent of higher education institutions in the six-state region. Within New England's 71,992 square miles, 255 NEASC-accredited institutions of higher education enrolled 884,894 students in fiscal 2006, representing 6 percent of the New England population. The sheer number of students concentrated in the region makes New England a hub of student (and visitor) spending.

The presence of many world-class institutions attracts thousands of foreign students to New England each year. The Institute of International Education (IIE) reported that New England attracted 43,136 foreign students in academic year 2005-6. IIE reports that through their spending on tuition, living, transportation and other expenditures, foreign students had an estimated economic impact of $1.3 billion on the region's economy.

Fueling the Knowledge Economy

The staggering number and density of colleges and universities fosters the growth of human capital to feed an increasingly knowledge-driven economy. The cluster of teaching hospitals, medical centers and engineering and biotechnology firms are, in effect, the offspring of a thriving higher education sector. This might explain why Boston, the city that boasts the highest concentration of college students nationally, outranked all other U.S. cities in the amount of grant money won from the National Institutes of Health, snagging $1.6 billion in fiscal 2006.

New England's higher education institutions are responsible for generating considerable employment in the region. In fiscal 2006, the 484,340 people employed in education exceeded the number of people employed as healthcare practitioners (399,680) or as business and financial services employees (333,700) regionally. Education not only employs thousands, but is also one of the fastest growing sectors. The Federal Reserve Bank of Boston reports that the sectors that have created the most jobs in New England from December 2006 to December 2007 are education and health services.

On their own, New England's higher education institutions are responsible for generating considerable regional employment, probably more than the average citizen recognizes. In fiscal 2006, NEASC-accredited higher education institutions employed 137,014 people on a full-time basis. In fact, NEASC's report, which incorporates data from the U.S. Census Bureau, finds that the number of full-time employees at these institutions is greater than the *combined* total of doctors, police officers, construction laborers, dentists, pharmacists, and computer programmers in New England.

When education budgets are cut, a ripple effect hits other businesses that produce goods and services purchased by schools. A recent report issued by the Massachusetts Department of Education states per-student expenditures on instructional services have remained stagnant from 2002 to 2007, while inflation has risen. Insufficient investment in human capital has significant long-term consequences on growing a knowledge-based economy. The strength of New England's economy is unequivocally affected by the region's investment in K-12 schooling because the preparedness of high school graduates impacts their performance in college and subsequently in the labor force.

In other words, we all gain when we invest in our educational institutions; we all lose when we do not invest enough. As New England's economy becomes ever more reliant on the knowledge capital of a college-educated workforce, the need to have robust educational institutions through the K-through-postsecondary pipeline is more imperative than ever before.

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