



## Connecting Activities: Making the workplace a learning place

*By Keith Westrich, Director, Connecting Activities and  
Jennifer Leonard, Consultant, The Skills Library*

Connecting Activities was launched more than ten years ago to expose students to the world of work and help them see the relationship between what they are learning in school and their career aspirations. By linking education to worksite learning experiences, Connecting Activities provides a real-world context for teaching a more relevant curriculum.

Connecting Activities is integral to the Massachusetts Department of Elementary and Secondary Education's student support strategies related to dropout prevention and student engagement, particularly for those students who are at risk of not earning their Competency Determination.<sup>1</sup> It also plays a key role in the Department's college and career readiness agenda. Connecting Activities serves students across the state, including students with disabilities, English language learners, and low-income students, particularly from urban high schools.

When students recognize the connection between their schooling and the impact that it has on their success in the workforce, they tend to become more focused and engaged learners. Research on dropout prevention shows that one of the most common reasons that students give for leaving school is that their classes are not interesting and that access to more real-world learning opportunities would have improved their chances of graduating.<sup>2</sup> A recent study by Northeastern University's Center for Labor Market Studies cites research that found that teens from economically disadvantaged backgrounds, particularly black and Hispanic teens, are less likely to drop out of high school if they participate in a paid work experience.<sup>3</sup>

A national survey conducted in 2005 for Achieve, Inc. showed that among the high school graduates surveyed who joined the workforce without getting a college degree, 39 percent said that there are gaps in their preparation for what is expected of them in their current jobs. Ninety-seven percent of these graduates said that real-world learning opportunities

---

<sup>1</sup> Massachusetts 10<sup>th</sup> graders need a score of 220 or higher on both the mathematics and ELA sections the MCAS in order to earn their Competency Determination and graduate from high school.

<sup>2</sup> Bridgeland, J. M., DiIulio, J. J., and Morison, K. B. "The Silent Epidemic: Perspectives of High School Dropouts." Civic Enterprises, March 2006.

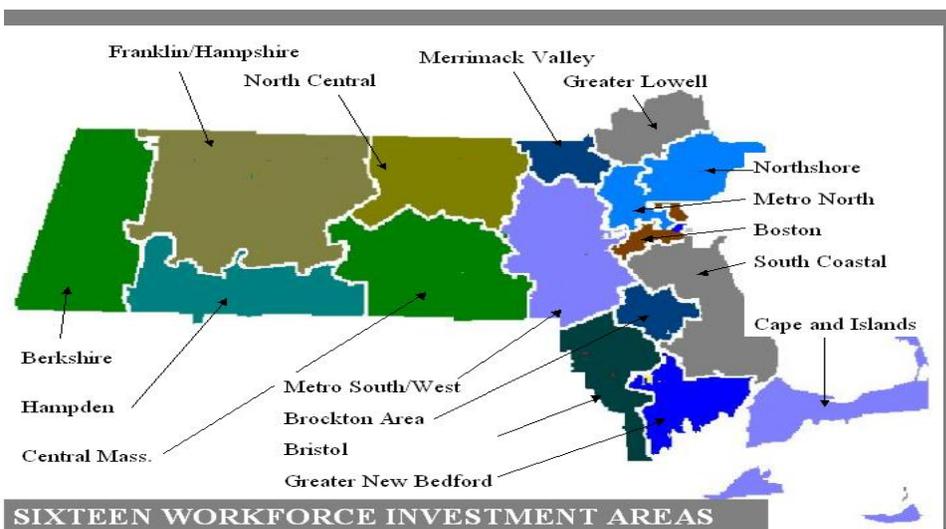
<sup>3</sup> Sum, A., Madjarov, K., and McLaughlin, J. "The Deterioration in the Labor Market Fortunes of Massachusetts High School Students and Young Dropouts, 2000-2004: Implications for the Connecting Activities and Other Workforce Development Programs to Boost Teen Employment Prospects." Center for Labor Market Studies, Northeastern University, April 2006.

and more relevant coursework during high school would have improved their preparation.<sup>4</sup> A recent survey of 301 employers conducted for the American Association of Colleges and Universities shows that employers also value applied learning that integrates academic and real-world skills.<sup>5</sup>

## What is Connecting Activities?

The Connecting Activities initiative in Massachusetts sustains work that was originally launched with a \$33 million federal grant under the 1994 National School to Work Opportunities Act (STWOA). STWOA provided five years of grant funding for states to create school-to-work systems organized around three primary goals: (1) improve the school experience; (2) expand and improve work-based learning; and (3) build and sustain public/private partnerships.

When Massachusetts' STWOA funding began to sunset in 1997, the Commonwealth created the School to Career Connecting Activities line item in the state budget to help sustain the work-based learning component of the federal program. The Department, working in collaboration with the Executive Office of Labor and Workforce Development, now provides competitive grants to the 16 local workforce investment boards (WIBs) in Massachusetts to fund worksite experiences for students within their respective regions. WIB membership includes private-sector businesses working in concert with labor, non-profits, school districts, and other public sector organizations to design effective demand-driven workforce development services for job seekers and employers.<sup>6</sup> The Department of Elementary and Secondary Education's role is to shape statewide policy and programmatic priorities for the initiative, supporting students who are most in need by integrating structured work and learning programming with academic teaching and learning.



<sup>4</sup> "Rising to the Challenge: Are High School Graduates Prepared for College and Work? A Study of Recent High School Graduates, College Instructors, and Employers." Peter D. Hart Research Associates, February 2005.

<sup>5</sup> "How Should Colleges Assess and Improve Student Learning? Employers' Views on the Accountability Challenge." Peter D. Hart Research Associates, January 2008.

<sup>6</sup> For more information about the WIBs go to: <http://www.massworkforce.org/>.

Connecting Activities links students and teachers with local employers to create applied learning opportunities through structured internships and career exploration activities in a number of areas, including health care, engineering, finance, journalism, web design, and public safety. The goal of Connecting Activities is to help students graduate from high school with the academic, technical/technological, and workplace skills needed for success in college and careers. Upon graduation, students are able to make a more informed decision about the education they will need to be successful in a variety of career paths, including college, technical training, apprenticeships, and more. Students participate in worksite learning experiences during the school year and summer.

Programmatically, all worksite learning experiences, particularly student internships, are structured by using the Massachusetts Work-Based Learning Plan (WBLP), a tool developed by a statewide interagency group of educators, workforce development partners, employers, community-based organizations, and others to help facilitate academic achievement and workplace skill acquisition.<sup>7</sup>

Students participate in Connecting Activities in one of three different work and learning levels—levels A, B, and C—which represent students' MCAS performance and the level of academic support that they will receive. Priority is given to students whose MCAS scores are in the Needs Improvement or Warning/Failing ranges.

### Connecting Activities Program Models: Four Examples

**Classroom in the Workplace:** Boston students participate in paid summer and school year internships with several major Boston employers in health care, financial services, and other industries. Students receive 8 to 10 hours per week of instruction in English language arts and mathematics that integrates themes from their workplace experiences in an effort to help them earn their high school Competency Determination. A Massachusetts Department of Elementary and Secondary Education Academic Support grant provides funding for teachers to provide this instruction at the worksite.

**Mount Greylock Internship Programs:** At Mount Greylock Regional High School in Berkshire County, the internship program is connected with the school's senior project curriculum. Participating students are required to complete a daily journal reflecting on their work experience and attend weekly internship meetings with the program coordinators. Every senior in the school must submit a senior project, and those participating in the internship program develop their projects around their internship experience and future career interests.

**Learning for Life:** Students from Haverhill High School who have multiple barriers to success gain workplace experience as customer service representatives, construction laborers, and dietary aides. Students gain entrepreneurial and practical experience through a student-run café located at the Haverhill City Hall. Students are responsible for café operations, collecting and delivering orders, cooking lunch and breakfast items, checking inventory, and ordering items as needed. All students involved in this program have a Work-Based Learning Plan.

**Public Safety Internship Program:** Students from Boston's Monument High School, which was established in 2001 as the first public safety/criminal justice-oriented secondary school in New England, work in public safety internships after school during the school year. Students are placed in internships with the Boston Police Department, Boston Fire Department, Boston EMS, college and hospital police departments, municipal courts, and other participating public safety organizations. Interns also meet one day per week after school as a group to work on resumes, goal-setting activities, leadership and advocacy skills, and other internship-related projects. The Boston Police Activities League supports the program with annual funding.

## Program participation and funding

The number of students and employers involved in Connecting Activities has fluctuated over the years, as shown in Table 1. Between 1999 and 2003, over 20,000 students participated, and the number of sponsoring employers ranged between 8,000 and 11,000. The number of students served declined to about 12,000 students per year in 2004, reflecting a policy decision to provide more intensive services for students at risk of not earning a Competency Determination. Student participation increased to 17,500 in fiscal year 2007 when additional funding was provided through the economic stimulus bill and is projected to return to about 12,000 students per year in 2008.

In fiscal year 2007, 1,922 students participated in level C programming, in an intensive work and learning model that integrates work-based learning experiences with classroom instruction in mathematics and ELA. Another 5,197 students participated in level B programming that provides work and learning programming connected to academic or career development, while 10,458 students participated in level A programming that provides brokered internships to any student. Of the 17,547 fiscal year 2007 participants, 73 percent or 12,762 students had a Work-Based Learning Plan (WBLP).<sup>8</sup>

Table 1: Key trends in Connecting Activities

Fiscal Year	State Funds	Total Wages Paid	Student Internships	Participating Employers
1998	\$3,000,000	\$17,788,585	6,030	3,486
1999	\$4,500,000	\$32,522,787	20,206	7,985
2000	\$5,000,000	\$36,847,721	22,614	8,591
2001	\$5,000,000	\$42,418,956	22,239	11,233
2002	\$4,653,000	\$43,508,097	23,142	10,028
2003	\$4,129,687	\$45,306,969	20,129	7,903
2004	\$4,129,687	\$39,705,514	12,907	6,879
2005	\$4,129,687	\$34,762,571	12,656	5,610
2006	\$4,129,687	\$36,804,581	12,612	5,288
2007	\$7,129,687	\$42,139,183	17,547	6,590
2008	\$4,129,687	Not Available	11,636 (est.)	5,093 (est.)

Source: Massachusetts Department of Elementary and Secondary Education and The Skills Library

Since the state began funding Connecting Activities in fiscal year 1998, total annual spending on the program has been between \$3 million and \$7 million, with the peak occurring in fiscal year 2007. While Connecting Activities internships may be paid or unpaid, most are paid, with employers contributing more than \$42 million in wages to students placed in structured internships in fiscal year 2007.

<sup>7</sup> More information about the Work-Based Learning Plan can be found at <http://www.doemass.org/connect/>.

<sup>8</sup> For a complete definition of Work-Based Learning Levels A, B, and C go to: <http://skillslibrary.org/mstc/workandlearninglevels.htm>.

The 6,590 employers who provided internships in fiscal year 2007 included private, public, and nonprofit employers. A sample of employers who were involved that year showed that the most common employer industries included educational services (35 percent), restaurants (17 percent), health services (11 percent), social services (9 percent), retail (8 percent), recreational services (3 percent), and public safety (2 percent).

Employers provide many other benefits in addition to worksite learning experiences. They collaborate with schools to provide workshop and seminar presentations, classroom speakers, career fairs, field trips, tutoring, mentoring, e-mentoring, interviewing practice and mock interviews, and teacher externships, which provide teachers with short-term work experiences in industry to support their curriculum development efforts. Employers are also active participants in planning and strategy groups for Connecting Activities and other youth programming and support the initiative through a variety of financial and in-kind contributions.

## Student Outcomes and Benefits

### *Workplace Skill Acquisition*

During 2007, WIBs collaborated with the Department to produce a skill gain study using the Work-Based Learning Plan (WBLP). The study analyzed a sample of 433 WBLPs from programs across the state. It was the first systematic look at outcomes from the new, redesigned version of the WBLP, which was introduced in May 2006.

The WBLP focuses on a set of basic foundation skills that are common to all jobs and on additional workplace- and career-specific skills that are germane to the participant's internship placement (see Figures 1 and 2). The WBLP requires an initial baseline review and a second review to assess skill gain, using a scale of 1 to 5, with ratings for each skill.<sup>9</sup> Using this information, the study analyzed the average rating at the initial review, the average rating at the second review, and the average change. Based on these ratings, participants showed skill gains during their work-based learning experiences. Average ratings for all of the foundation skills and workplace and career specific skills increased from an average of 3.43 the first review to an average of 3.94 at the second review, an increase of 0.51 points.<sup>10</sup>

Looking at foundation skill gains, students on average moved consistently from the lower end of the competent range (between 3.0 and 3.5) to the upper end (between 3.5 and 4.0), or closer to proficient. Workplace- and career-specific skill gains were larger and more varied. The largest increase occurred in the equipment and operation category, where on average students started out at the upper end of the needs development range (2.99) and improved by 0.68 points to move into the upper end of the competent range. With the exception of reading, students moved into the upper end of the competent range in five categories and

---

<sup>9</sup> A rating of 1 means that the student is not demonstrating the skill and that a performance improvement plan is needed, 2 means needs development, 3 means competent, 4 means proficient, and 5 means advanced.

<sup>10</sup> For a complete summary of findings go to: <http://www.skillslibrary.com/wbl/report.htm>.

moved in to the proficient range in four, including collecting and organizing information, computer technology, interacting with customers or clients, and teaching and instructing.

Figure 1: Foundation Skill Gains (N=433)

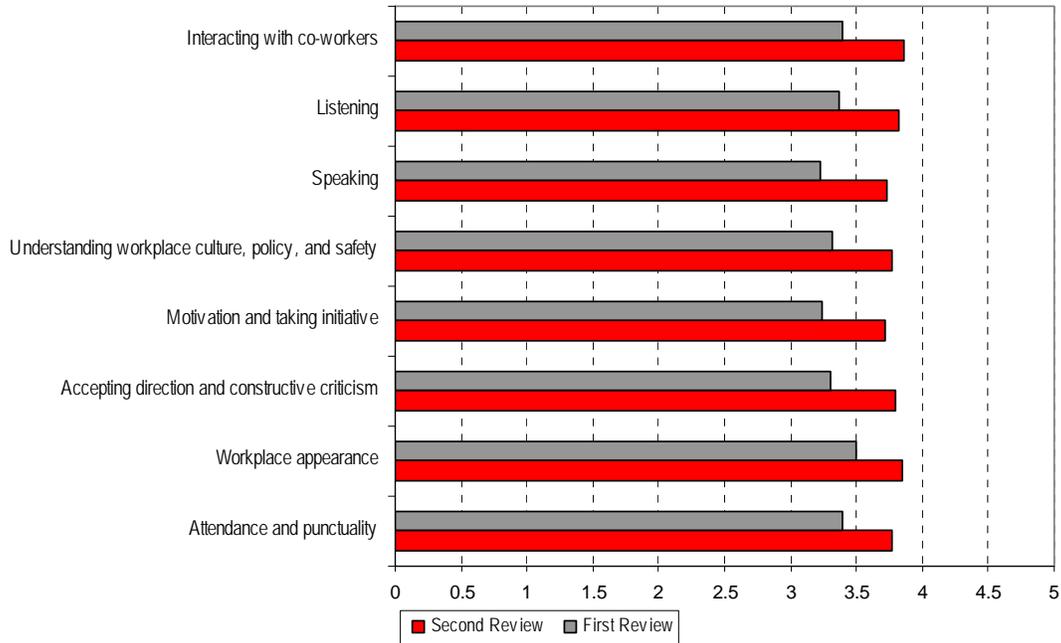
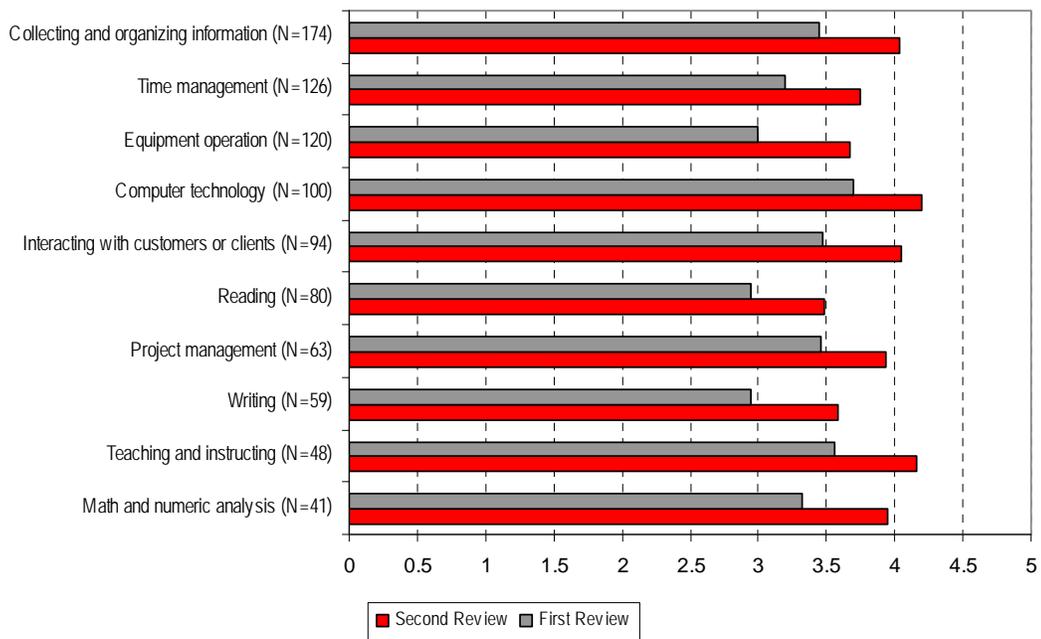


Figure 2: Career and Workplace Specific Skills



Source: Massachusetts Department of Elementary and Secondary Education and The Skills Library

Note: Not all students were reviewed on all Career and Workplace Specific Skills since relevant job skills varied by placement.

### *Academic Gains: Students Earning their Competency Determination*

Some evidence suggests that Connecting Activities is helping students pass the MCAS and earn their Competency Determination. The first effort to use Connecting Activities to help students with the MCAS occurred in the summer of 2002 among a small group of students in the class of 2003, the first class that needed to earn a Competency Determination by achieving a score of 220 or higher on both the mathematics and ELA sections the MCAS in order to graduate.

Called *Project Success* or *Summer of Work and Learning*, these programs provided 577 students with work and learning experiences at 85 employer sites, closely integrating classroom academic support with paid internships. Eighty-eight (88) percent of the registered students completed the program and 57 percent of participants achieved a Competency Determination, as compared to 43 percent of similar students from across the state. Further analysis demonstrated that students who participated in more hours of instruction had the highest rates of success. Overall, the program had a positive impact on both English language arts (ELA) and mathematics achievement, with the most pronounced impact in mathematics.<sup>11</sup>

Due to the promising results of this program, Connecting Activities providers have been asked to model their programs after Project Success and give priority to students who must make significant progress in order to meet state graduation requirements, including those scoring 216 or less on the 10<sup>th</sup> grade MCAS, students with limited English proficiency, and students with disabilities. Additional state funding from the Department's Academic Support grants is provided to support these programs.

In fiscal year 2007, nearly 800 students participated in Work and Learning Academic Support programs. Thirty-four (34) percent or 272 students were members of the class of 2007, 61 percent or 488 students were members of the class of 2008, and 5 percent belonged to cohorts from previous years (classes of 2003-2006). An analysis of the November 2007 retest results shows that overall 57 percent of students who participated in Work and Learning Academic Support programs earned their Competency Determination compared with 39 percent of students who needed to earn a Competency Determination but did not participate.<sup>12</sup>

These results varied by high school class. Seventy (70) percent of participants from the class of 2007 and 51 percent of participants from the class of 2008 earned their Competency Determination by scoring in the Needs Improvement range. Participants from the class of 2007 earned their Competency Determination at a much higher rate, just over 20 percentage points, than other students from the 2007 cohort who did not participate, while

---

<sup>11</sup> Competency Determination attainment for participants in Project Success was compared to that of other students from the class of 2003 who had not earned a Competency Determination by the spring of their junior year, when the program participants were recruited. Comparisons were based on results as of the spring of senior year. For a complete summary of Project Success findings go to: <http://skillslibrary.org/mstc/projectsuccess.htm>.

<sup>12</sup> Students who complete local graduation requirements and have not earned a Competency Determination are counted as members of their graduating class even if they continue to take the MCAS after leaving high school (e.g., students from the class of 2007 taking the November 2007 retest).

participating students from the class of 2008 earned their Competency Determination at a lower rate, 6 percentage points lower, than nonparticipating students from the 2008 cohort. What the results suggest is that Work and Learning programs are important learning opportunities, especially for youth who are no longer enrolled in school and have not yet earned their Competency Determination, and for those who have not yet found success with traditional classroom-based remediation.

## Conclusion

An emerging area of research is whether participation in work-based learning experiences improves high school graduation rates and postsecondary education enrollment and, if so, how to maximize these effects. Following the graduation rate summit that took place in the spring of 2006, Connecting Activities providers are convening with their regional partners to begin to answer this question and to focus on raising graduation rates within their communities.

Connecting Activities provides a strategy that can help prepare high school students for careers and postsecondary education in response to the demands of today's economy. The program opens up a dialogue within the education community about ways to make learning rigorous while also relevant to the real world. By involving students in classroom and workplace activities in a variety of career areas—health care, engineering, finance, journalism, web design, public safety, and more—students can apply academic skills to real-world settings and learn about the postsecondary education and training needed for possible careers.

---

*Keith Westrich is the director of the Connecting Activities program at the Department of Elementary and Secondary Education and Jennifer Leonard is a consultant to the Department of Elementary and Secondary Education from The Skills Library, a Malden-based organization that provides data management, web design, research, and writing services for educational, career development, and youth development programs.*