

Leadership Initiatives for Teaching and Technology (LIFT²)

Externship Experiences Informing Classroom Practice

Program Description Summary

Massachusetts, and indeed the country, is experiencing a “pipeline problem.” Too few high school students are prepared for and attracted to post-secondary majors in science, technology, engineering and math (STEM), the essential academic preparation for many 21st century careers. Companies in many industries are already challenged to source candidates for entry professional jobs, and this situation is projected to worsen.

To significantly increase the education/workforce pipeline a more diverse spectrum of students, particularly under-represented females and minorities, must be engaged in programs that increase their awareness and interest in scientific, technical, and engineering fields of study.

Through direct engagement with secondary school teachers, companies can offer important insight into careers that have high relevance for students and the communities in which they live. This perspective has been shown to provide a critical motivation for students to pursue STEM college majors and ultimately careers in engineering fields. As teachers affect hundreds of students per year, professional learning programs offer the most highly leveraged investments to address this challenge.

Joint Public, Private, and Education Sector Partnership

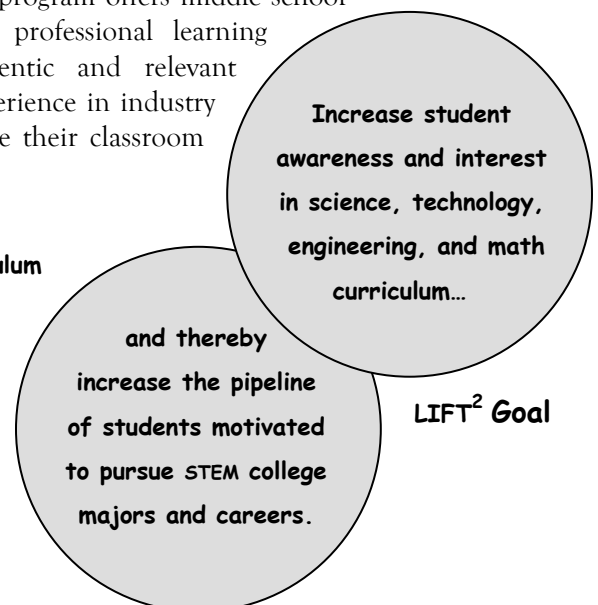
LIFT² has been sponsored through three pilot cycles by the Massachusetts Department of Education (DOE) and funded through the *No Child Left Behind Act*. The LIFT² program is currently completing its third round of grant funding representing a total commitment of \$650,000, an unprecedented vote of confidence. More than twenty-five corporate sponsors have provided equipment grants and sponsored teacher externships for sixty teachers during the pilot program. LIFT² teachers have completed externships in biotechnology, nanotechnology, information technology, process manufacturing, environmental services, financial services, and more.

In 2005, the State Educational Technology Directors Association recognized LIFT² as one of eight programs nationally that is “representative of the doors opening to learning through technology”.

Professional Learning, Graduate Courses, and Externships

The Leadership Initiatives for Teaching and Technology (LIFT²) program offers middle school and high school math, science, and technology teachers a professional learning experience that integrates graduate course-work with authentic and relevant *externships* in industry. Through this combination of work experience in industry and a formal program of graduate level study, teachers improve their classroom instructional practice and school leadership abilities in four areas:

- **Project and inquiry-based teaching and learning**
- **Application of information technology to STEM curriculum and instruction**
- **Integration of 21st century workplace skills career awareness into classroom culture**



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Externships

LIFT² is currently seeking sponsors for teacher externships in STEM industries. These placements will take place in the summer of 2008.

Externships range from 5–8 weeks beginning at the end of June and continuing through mid-August. Like college interns, teachers are expected to work on authentic projects that provide measurable benefit to the sponsor organization while offering a valuable learning opportunity to teachers.

Company Mentors

Companies assign a mentor to plan the work assignment and guide the teacher. Past mentors report their involvement required less than 10% of their time, an investment that is generally recovered through the teacher's contribution to the project.

Prospective mentors have the opportunity to consider up to three qualified teacher candidates who are pre-screened on the basis of education and experience requirements.

Sponsorship Fee Schedule

The sponsorship fee has two components:

1. Weekly stipend paid to the teacher at the rate of \$800/week. (*\$4000 for five weeks: up to \$6400 for eight weeks*)
2. Fixed fee of \$3,500 to support graduate coursework tuition, program events and functions, corporate and teacher recruitment materials.

The LIFT² program or the company may pay the weekly stipend to the teachers. The organization paying the teacher secures Workers Compensation insurance, and provides Federal and State tax reporting (1099's). Teachers receive medical and other benefits coverage through their school district contract.

Sponsorship Timetable

Teachers applying for the first time in the LIFT² program and intending to participate in the graduate academic course-work must secure an externship prior to enrolling in the program (February 1st). Therefore, companies that sponsor teachers must confirm the placement opportunity no later than December 31, 2007.

Between August and December 2007, the LIFT² Director will meet with company leaders to discuss potential externship assignments and letters of commitment.

For more information about sponsoring a teacher externship, please contact:

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LIFT² is a flagship program of The Technology Initiative.