

My name is Joan Abrams. I was employed in the biotech industry for several years as a bench scientist before transitioning to education within the RSTA Biotechnology program at CRLS in 2004.

In the past 11 years, I've observed pockets of great success toward the goals and objectives outlined here. But these efforts serve only a small fraction of our student population. A STEAM coordination office is vital for connecting our city's young people with mentors and exposing them to a variety of prospective work environments. Real world exposure is vital for inspiring and engaging students, for igniting passion, and expanding perspectives.

STEM jobs are in high demand and projected to increase by 27% in Massachusetts between 2010 and 2020. Here in Cambridge, we are poised to mobilize our corporate, academic, economic, and community resources to allow *all* students to explore their interests, to cultivate skills, to access opportunities, and to actively participate in our booming innovation economy.

Opportunities for engagement can take many forms. For example, the RSTA biotech program and the biology department at CRLS are currently involved in a collaboration with a biotech company and another high school to investigate genetic pathways and to identify genes involved in human disease. Students will be engaged in high-level research with real world tie-ins. And it is offered as part of several science elective courses and open to a range of student experience. It is funded through a MLSC grant and involves comprehensive professional development for teachers.

A dedicated STEAM coordination office is necessary to:

- Serve as an interface between students, schools, businesses, academia, community programs, and the city
- Promote student training and exposure to various professional environments
- Formalize objectives of internships with realistic expectations
- Devise a scalable system with entry points for a wide range of student abilities
- Coordinate professional development and externships for teachers, guidance, and administrators

We have momentum now. We need commitment and cooperation from all stakeholders to realize this vision. Thank you.

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