



STEM Summit V: *Implementing the Plan*

Preparing Massachusetts students for careers in
science, technology, engineering and mathematics

The Rennie Center for Education Research and Policy
Opportunity to Learn Audit: Elementary School Science

Themes across top as opposed to low performing Schools • More time on science
• Teachers who specialize in science • Regularly scheduled support from district science coordinators • Science materials housed at the schools (rather than at the district)
• Professional development in science • School budgets for science • High levels of parent involvement in and advocacy for science • Accessibility to natural resources
• School leadership focused on science.

Recommendations: For school and district leaders:

Make science a high priority in schools and across the district • Promote the integration of science with math and literacy • Set and monitor guidelines for time on science.
• Develop and monitor adherence to science curriculum that is mapped to state frameworks • Support, document, and—if necessary—mandate science-related professional development for elementary school teachers • Identify teachers with high levels of interest in science • Solicit engagement of local business and community leaders in science.

For state policymakers (State legislators and the Department of Elementary and Secondary Education) • Support expanded school day initiatives and encourage more time for subjects like science, especially for low-income and minority students • Provide mentoring and support for elementary teachers to become school-based science resource specialists • Provide broad, fundamental professional development that is aligned with state frameworks in science for elementary teachers, giving preference to low-performing schools that agree to send a critical number of teachers • Provide technical assistance and training on integrating science, literacy and mathematics instruction • Support enrichment opportunities for low-performing schools that lack active parent and community engagement in science • Provide a supplementary materials budget to under-resourced schools.

For the full report:

http://www.renniecenter.org/research_docs/0806_ElemScience.html