

# Governor's Science, Technology, Engineering & Math Advisory Council

On October 14, 2009 Governor Deval Patrick signed an [Executive Order creating the Governor's STEM Advisory Council](#) and appointed Lt. Governor Timothy P. Murray the Chairman. The Lt. Governor's goal is to ensure that all students are educated in STEM fields, which will enable them to pursue post-secondary degrees or careers in these areas, as well as raise awareness of the benefits associated with an increased statewide focus on STEM.

The Council serves as a vehicle for STEM advocates from the public and private sectors, as well as legislators and educators, to engage in meaningful collaboration with the Governor and Lt. Governor's Office, the Executive Office of Education and their agencies, the Department of Higher Education, the Department of Elementary and Secondary Education, and the Department of Early Education and Care, the Executive Office of Housing and Economic Development, and the Executive Office of Labor and Workforce Development.

At the first meeting on January 28, 2010 at Boston's Museum of Science, and with the Lt. Governor's leadership, the Council began drafting a statewide STEM Plan that includes:

- Clearly defined goals and objectives for the next five years;
- Strategies on how best to bring to scale the most effective STEM programs in Massachusetts,
- What needs to be done to develop activities to fill unmet needs, and
- Recommendations for a campaign to build public support across the Commonwealth for the STEM disciplines.

The Council's first plan, A Foundation for the Future: Massachusetts' Plan for Excellence in STEM Education was released on September 28, 2010 at the 7th Annual STEM Summit.

## ATTACH NEW DOCUMENT

With a little more than two years behind us since the release of the Commonwealth's first STEM Plan, the Lt. Governor and the Executive Branch Agencies have moved quickly into implementation mode to execute the strategies of the STEM Plan towards the advancement of its five overarching goals.

Accomplishments to date by the Council, led by Lt. Governor Tim Murray Massachusetts include:

- The establishment and execution of the identified **Governance System** that serves as a structural framework to prioritize, align and recommend funding for STEM education

policy proposals and best practice programs to ensure whole-system transformation, regional adaptations and high quality implementation for achieving the goals of the plan.

- **Increasing Funding for Schools, Teacher Development, and STEM Initiatives:** Lt. Governor Murray has consistently and successfully advocated for the STEM Pipeline fund to receive funding each year. The Governor's FY 2013 Budget included \$1.5 million in funding for the STEM Pipeline Fund, an increase of \$500,000 from the previous year. Additionally \$2.4 million dollars in new funding is proposed for an AP Math and Science Initiative.
- **Increasing Public Awareness:** Lt. Governor Murray and the Public Awareness Subcommittee initiated and completed the selection of high profile STEM professionals to be promoted as role models through the WOW Campaign. The Council is also working to educate parents, guardians, businesses, and others on the benefits of careers in the STEM fields.
- **Strengthening Regional STEM Networks:** Lt. Governor Murray announced the formation of the Boston Regional STEM Network at the 2011 Summit and has focused on building up and supporting Networks in all regions of the state.
- **Promoting and Scaling Up Best Practices:** Lt. Governor Murray directed the STEM Council to focus on six Promising Practice Programs as part of the @Scale Initiative. \$500,000 in funding was secured by Lt. Governor Murray in the 2011 Supplemental Budget to fund @Scale projects. @Scale Endorsed projects represent a strategic investment focused to achieve quantitative gains in student interest and readiness (goals defined in the STEM plan) to pursue STEM post-secondary majors and careers. This approach has been presented to and endorsed by representatives of Massachusetts business community and we believe will receive financial support from businesses, non-profits, foundations, and other grant providers. This first round of @Scale endorsement sought to increase the number of students who are both prepared and interested in STEM. Successfully reaching all the students in the two categories of near interested and near prepared would increase the pipeline of students who are both prepared and interested in STEM by 40 percent. This first round of @Scale grant funding was followed by Phase II of @Scale. This phase includes \$400,000 in state funding for the next round of @Scale projects that will be approved this winter. Projects in Phase II of @Scale will focus on workforce development and STEM retention amongst college graduates, Goals 4 and 6 of the state's STEM Plan and will require a \$1.2 million private sector match. The additional \$250,000 in state funding will support Phase III and Phase IV of @Scale projects that will be approved in early 2013, and will require a \$750,000 private sector match. To address Goals 2 and 5 of the state's STEM Plan, Phase III will focus on Science Inquiry and Applied Mathematics and address Student Academic Achievement and Educator Effectiveness. To address Goals 1 and 5 of the state's STEM Plan, Phase IV will focus on Pre-K, Elementary and Out-of-School programs addressing Student Interest and Educator Effectiveness.

- **Helping Secure Race to the Top Funding:** Massachusetts received 15 of 15 points, a 100% score on the STEM component on the Race to the Top application. The creation of the council within the Executive Branch was recognized as a reason for the top score. \$6 million dollars from this award will or has already been directed to STEM from the Massachusetts Race to the Top award.
- **Encouraging the NASA Summer of Innovation:** Massachusetts was one of the four states NASA chose to focus on for their Summer of Innovation Initiative. Lt. Governor worked with our partners in education to draft the proposal and lobby for this funding. This Initiative provides students with NASA's technology programs in NASA's robotics, Earth and space science, astrophysics and engineering missions to boost summer learning, particularly for students who are underrepresented and underperforming in STEM. As a part of this initiative, \$1.5 million has been granted to six different colleges who have partnered with local schools.