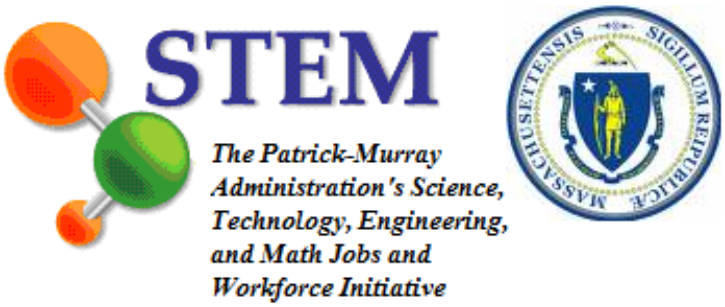

STEM Council Accomplishments

Massachusetts has been recognized by the National Governor's Association's Center for Best Practices, Change the Equation, and Innovate+Education as a top STEM state and we were rated number one by the U.S. Department of Education on the nationwide Race to the Top Competition. The @Scale initiative created by the STEM Council has been hailed as a breakthrough model for public/private funding to replicate and bring to scale transformative, system wide improvements in STEM education.

Together in three and a half years we have achieved so much:

1. Massachusetts statewide ***STEM initiative and STEM plan*** is recognized by the National Governor's Association and referenced by many state STEM leaders as a top example for convening government, education and private sector resources to govern and attain quantifiable outcome improvements for students, educators and the STEM workforce.
2. Massachusetts long-standing model system of ***Regional STEM Networks*** which convene K12 school districts, higher education, businesses, not-for-profit organizations and local government agencies, aligning core strategies of the statewide STEM plan to local education and economic needs, is recognized as "best practice" and is being adopted, nationally.
3. Massachusetts ***@Scale Initiative***, designed to identify and promote a portfolio of emerging "best practice" in-school and out-of-school projects spanning the STEM disciplines and grade levels from pre-K to college has been hailed as a breakthrough model for public/private funding to replicate and bring to scale transformative, system wide improvements in STEM education.
4. The ***Massachusetts Afterschool Partnership*** program was recently selected among a cohort of only four states nationally to infuse STEM into expanded learning, afterschool and summer programs and build systems-capacity in collaboration with our Regional STEM Networks to increase STEM opportunities in afterschool and out of school time, statewide.
5. Massachusetts ninth annual ***STEM Summit,*** the longest running in the nation, hosted 1,200 attendees at Gillette Stadium, home of the New England Patriots, in the fall of 2012 to promote awareness of the importance of STEM education for all children and engage a broad and diverse constituency of educators, business leaders, government officials, parents and students.
6. Massachusetts received 15 of 15 points, a 100% score on the STEM component on the ***Race to the Top*** application. The creation of the STEM council within the Executive Branch was recognized as a reason for the top score.

Governance - In the two years after the Commonwealth's first STEM Plan was released, the Lt. Governor's Office and the Executive Branch Agencies have moved quickly to establish and execute a governance system to implement the plan and have made progress in numerous key other areas to support the six overarching goals of the STEM Plan.

- The STEM Operations Board was created in February 2011 as an operational unit of the STEM Council to increase capacity for the Regional STEM Networks and review project proposals
- The Executive Committee of the Governors STEM Council was created in May 2011 to facilitate decisions on proposals and recommendations brought before the Council.
- The Fundraising Task Force was created in August 2011 to support the @Scale initiative.

Public Awareness Campaigns - Through the work of the Public Awareness Subcommittee we initiated and completed the selection of high profile STEM professionals to be promoted as role models through the WOW Campaign. Lt. Governor Murray unveiled this initiative at the 2011 STEM Summit. This work continues and a public awareness campaign is in the works to be launched in the fall of 2013.

Strengthen Data Collection and Analysis - Worked with our partners at the UMass-Donahue Institute to strengthen the data collection and analysis pieces and created a Data Dashboard to inform the design, evaluation and outcomes assessment of STEM projects, policies and strategies statewide

Creation of a Boston Regional STEM Network - Lt. Governor Murray announced the formation and $40,000 in seed funding for the Boston Regional STEM Network at the 2011 Summit. The Network has been effective and students in the Boston Public Schools have higher interest in STEM than the statewide average.

Launched the @Scale Initiative - At the June 2011 STEM Council Meeting, Lt. Governor Murray announced the STEM Council's first six Promising Practice Programs as part of the @Scale Initiative. $500,000 in funding for the @Scale projects was secured in October 2011 and required private sector or non-profit matches. Phase II grants went out successfully as well and Phases III and IV are in the works for 2013. @Scale Endorsements include projects that represent a strategic focus on specific promising programs to achieve quantitative gains defined in the STEM plan in student interest and readiness. This approach has been presented to and supported by representatives of the Massachusetts business community.

Promoted the Benefits of Vocational-Technical Schools - During his time in office, Lt. Governor Murray has visited all 64 vocational technical programs in Massachusetts representing more than 44,000 students. The Lt. Governor has promoted these programs as ones that offer hands-on learning in a number of innovative educational programs to support a range of career fields, especially growing sectors including advanced manufacturing, clean energy, and information technology.

Action Steps for 2013-2014

- Together with our new STEM Council Chairman Congressman Joseph P. Kennedy who is also the state's only member serving on the House Committee on Science, Space, and Technology, the secretaries of Education, Housing and Economic Development, Labor and Workforce Development, the President of UMass, and all of our other administration partners, we will continue to strive to promote Massachusetts' advantages and continue to drive forward our STEM, workforce development, and job creation strategies and will deepen the ownership of the STEM goals by state departments and agencies.

- Building off recommendations from the Executive Committee, we will work with our legislative partners on legislation to sustain the STEM initiative. We will combine the STEM Council's Executive Order with previous legislation on the Goddard Council to codify our governance system and practices and keep the level of leadership within the Executive Branch.

- We will continue to strive to the goals in our nationally recognized five year STEM Plan. This plan is referenced by many state STEM leaders as an exemplar for convening government, education and private sector resources to govern and attain quantifiable outcome improvements for students, educators and the STEM workforce. We must continue these efforts and will release Version 2.0 of the STEM Plan at this November's STEM Summit to outline what we must focus on to reach our goals.

- Complete our full menu of @Scale program's endorsements. @Scale has been hailed as a model for public/private funding to replicate and bring to scale transformative, system wide improvements in STEM education. To date, two rounds of @Scale projects have been granted approximately $900,000 of state funding leveraging $2.5 million of private sector funding and has reached at least 170 teachers and 8500 students across the state. We must use the completion of this project to breakthrough with private sector partners complementing public sector investment to achieve full-scale with "best practice" initiatives such as @Scale. Together the STEM Operations Board and Executive Committee will rigorously research, evaluate and assess outcomes of the @Scale portfolio to affirm this strategy, supported by evidence and quantified through data.

- Using lessons learned from the successful WOW Initiative, we will broadly implement the Public Awareness campaign and messaging to inform all communities (especially parents and employers) of the importance, value and excitement of STEM.

- Build broader communities of interest among the 1,000 points of light to foster even more widespread alignment to the goals of the STEM plan.

- Celebrate our success!