

## MEMORANDUM

To: Governor Deval L. Patrick

Cc: Doug Rubin  
Secretary Paul Reville  
Secretary Greg Bialecki

From: Lieutenant Governor Timothy P. Murray

Date: June 16, 2009

Re: Executive Order Creating the STEM Coordinating Council

---

You have made STEM (Science, Technology, Engineering, and Math) education a priority for your administration and rightly so. Progress on STEM is essential for creating a highly skilled and educated workforce in the Commonwealth that can support economic development in emerging areas. Currently, however, STEM activities in the state are disjointed and not functioning in ways that fully support your agenda and goals.

Many in the public and private sectors have realized this, and have called for higher-level leadership and better coordination of STEM activities to successfully implement a comprehensive STEM agenda statewide. For these and other reasons, I suggest that you take the approach that has already proven effective on matters of homelessness, domestic violence and veterans' affairs, and create a council that can cut across the various STEM silos and make sure we are maximizing our efforts to make progress. I propose that you issue an Executive Order to create the Governor's Science, Technology, Engineering, and Math (STEM) Education Coordinating Council.

This Council would further establish your administration's leadership on STEM and become a vehicle for advocates from the public and private sectors, as well as legislators, to engage in meaningful collaborations with

the executive branch at the highest levels. The goals of the Coordinating Council would be direct and achievable, even during challenging budget times. They could be to:

- Increase student interest and school programs related to STEM (K-12).
- Increase the number of college students majoring in STEM fields.
- Better coordination and leveraging of public and private resources devoted to STEM activities.

With the membership not to exceed 25, I or my designee would serve as the chair of the Council. Other members would include secretaries or their designees from the Education, Housing and Economic Development, and Labor and Workforce Development Executive Offices. Five educators and six members of the state legislature would also have seats on this Council, providing legislative buy-in and active participation. Other members would be representatives from the business and non-profit sectors, as many organizations such the Mass. Business Roundtable and the Mass. Tech Leadership Council, and companies such as EMC, Microsoft, and Raytheon are active with STEM education initiatives.

I have discussed this idea with Secretary Reville and David McCauley, Associate Commissioner for Workforce Development at the Department of Higher Education. Both are supportive and see an opportunity here to grow STEM activities in the Commonwealth consistent with your agenda.

If you approve this idea, I would like to announce it or give a preview of it at the STEM Business Leaders Breakfast on June 18<sup>th</sup> at the Museum of Science in Boston. This event is highlighting the release of a report on STEM in the Commonwealth. A coalition of 15 businesses led by the Mass. Business Roundtable drafted the report titled “A Call to Action.” One of the major recommendations included in the report is that the state “recommend and elevate a single STEM point person in the Administration by either creating a STEM Cabinet and/or an Undersecretary of STEM within the Secretary of Education.” Our announcement would show that we are listening to the concerns of businesses in the Commonwealth, that we are aware we have work to do, and that we are taking action.

Please let me know your thoughts on this matter. I would be happy to meet with you or your staff to discuss further.

### Additional Background on STEM in MA

- According to the College Board, 20.4% of Massachusetts' students who took the 2007 SAT test indicated an interest in pursuing a career in the STEM fields, well below the national average of 26.4%.
- The number of students from Massachusetts colleges and universities studying in STEM fields declined from 1993 to 2007, while the number rose nationally.
- Massachusetts is one of only 10 states without a Pre-K through college (P-16) STEM Council of any form.

There is currently a legislative STEM group, the 25 member Robert H. Goddard Council created by the legislature in 2006. The Goddard Council is made up of legislators, leaders in the technology field, business and non-profit representatives, and staff from the Department of Higher Education. The Secretary of Labor and Workforce Development is the only cabinet -level member of the Goddard Council from the executive branch. The Goddard Council meets quarterly and oversees the STEM Pipeline Fund. The Fund awards grants through regional networks in Massachusetts for STEM related programming run by K-12 schools, colleges and universities, businesses and non-profits.

While well-intentioned, the Goddard Council is not actively pushing STEM policy initiatives and lacks strong executive branch leadership. The new recommended Coordinating Council I am proposing could interface and advise the Goddard Council, or could work with the interested legislators to merge some of the Goddard Council's functions in with this new body. The key difference between the Goddard Council and the proposed Coordinating Council is the executive branch participation and leadership—both of which can make a difference both symbolically and substantively.