THE STEM MASTER TEACHER CORPS ACT

Improving Science, Technology, Engineering, and Math (STEM) education is essential to maintaining the United States' competitive technological edge. According to the Bureau of Labor Statistics (BLS), there will be 6.75 million total job openings in the U.S. in STEM disciplines by 2020. These include jobs in some of the fields that are most critical to the future of our country – healthcare, energy, and national security. Yet international benchmarks show our students are not prepared to compete in these fields. According to the 2011 Trends in International Mathematics and Science Study, 60% of U.S. eighth graders failed to meet the intermediate international benchmark in mathematics and 27% failed to reach the same benchmark in science.

Retaining effective STEM teachers is critical to improving STEM education. President Obama has proposed recruiting and training 100,000 new STEM teachers in the next decade and has directed some funds towards doing so. To meet this worthy goal, we must address the fact that many STEM teachers leave the profession within their first few years, often drawn away by far more lucrative salaries elsewhere in STEM fields. Increasing professional development and career advancement opportunities for STEM teachers will increase retention and ensure that investments in recruitment and training will have an even greater pay off.

The STEM Master Teacher Corps Act will offer career advancement opportunities and higher pay to the top 5% of K-12 STEM teachers in a participating area. Corps members will, in turn, mentor other STEM teachers and share best practices with the STEM education community to improve the ability of *all* teachers to impart strong STEM skills and an eagerness to learn to their students. Corps members will also serve as role models for other STEM teachers, demonstrating the opportunity for continued professional growth if they stay in teaching. The bill is based on a proposal by the President's Council of Advisors on Science and Technology.

<u>The bill includes the following elements:</u>

- **Competitive Regional Grants.** The bill will provide competitive grants to states or large consortia of districts, in partnership with universities or non-profits, to plan and implement a Master Teacher Corps program.
- **An Emphasis on Leading, Mentoring, and Impacting the STEM Community.** Corps members will receive specialized training in leadership, mentorship, and content and pedagogical skills relevant to STEM. Corps members will also network with one another to share resources and best practices. In addition, they will lead, mentor, and share the best practices they've learned from the Corps with other teachers in their schools and districts.
- **A Focus on High-Need Schools.** Many minority, low-income, and rural students score significantly lower on standardized tests, particularly in math and science, than their more advantaged peers. To better reach these students, the bill requires that 75% of Corps members teach at high-need schools and that there is a fair distribution of Corps members to rural areas.
- **Increased Pay.** In recognition of their increased leadership responsibilities, and the fact that STEM experts can typically earn more lucrative salaries outside of the teaching profession, this bill will provide for significant salary increases for STEM Master Teacher Corps members.
- **A Voice in Policy.** The STEM Master Teacher Corps program will provide opportunities for Corps members to inform the development of STEM education policy.
- **Report and Evaluation.** The bill provides for the evaluation of the impact of the program and the dissemination of best practices for developing and retaining STEM teachers based on lessons learned from the program.