

Testimony on Governor Patrick's Education Reform Package
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My name is Dennis Berkey and I am President and CEO of Worcester Polytechnic Institute (WPI). I wish to testify in support of both bills in the Governor's Education Reform Package: The "Smart Cap" bill concerning the charter schools cap, and the Readiness Schools bill.

I have worked in higher education in Massachusetts for 35 years. I hold three degrees, including a Ph.D., in mathematics. I have taught college level mathematics to thousands of students, I am the author of several calculus textbooks, and my published research in applied mathematics and mathematics education.

I care deeply about the quality of public education in Massachusetts. Presently I serve as a member of Leaders for Education, the Massachusetts High Tech Council, the Massachusetts Mathematics and Science Initiative (MMSI), and the Worcester Education Collaborative, a newly-formed advocacy group in support of the Worcester City Schools. I personally raised funds to ensure that Worcester's North High School was included in the first round of grants from the MMSI for the enhancement of Advanced Placement Programs, and I chaired the search committee for the recently appointed Superintendent of the Worcester Public Schools. My three children were educated in the public schools of Newton and Weston.

My testimony is simple. The nation needs many more well-qualified engineers, scientists, mathematicians and computer scientists to provide the intellectual capital that will drive our innovation economy. Strong math, science, and English language skills are necessary qualifications for admission to our high quality colleges and universities. While many of our public schools are doing an excellent job in preparing students for these challenging college curricula, many others are simply failing to do so, especially in the urban areas. We are especially concerned with the teaching of mathematics and science in the elementary and middle grades, where far too many students are "turning off" to math and science due to poor teaching of these subjects, even before they get to high school.

The two bills before you today address directly the problem of underperforming schools by providing tools and support for the necessary turnarounds, including increased autonomy in governance for the schools, support for excellent teachers, choice for parents, and equity for students.

Three examples from public schools in Worcester demonstrate the effectiveness of less traditional, more innovative approaches to public education:

The Massachusetts Academy of Mathematics and Science is an upper-division, public high school sponsored jointly by the Commonwealth of Massachusetts and WPI. Students complete a two-year curriculum, the first year of which is an intensive, project-based program at the Academy, with the second (senior) year being direct enrollment in freshman-level courses at WPI. Despite the strong focus on math and science, students engage in a broad range of creative pursuits, from drama and music to entrepreneurship. Teachers and students alike extol the advantages of the creative approach to learning and the chance to put ideas and knowledge to work on challenging problems and projects. Mass Academy students are admitted to top colleges and universities.

Similarly, Clark University has partnered with the Worcester City Schools to develop the University Park School serving Clark's immediate neighborhood. Students from a broad mix of economic and ethnic backgrounds achieve at a very high level, and go on to excellent colleges and universities. Key to success at the University Park School is strong leadership and outstanding teachers, drawn there by the opportunities for creative approaches to education and an ethic of high achievement throughout the school.

Finally, the recent enhancement of the Advanced Placement Program at Worcester's North High School, through participation in the MMSI, brought additional training and support for the teachers, and financial incentives for both teachers and students. Recently announced results for the first year of the program reveal dramatic increases both in enrollment in AP courses and in passing scores on the AP exams, with the largest gains among minority and low-income students.

These three examples of non-traditional approaches to public education demonstrate the powerful effects of *increased autonomy, flexibility, and innovation* on the quality of teaching, learning, and school leadership. They reflect the values and principles of Governor Patrick's education reform package and give us hope for closing the achievement gap and bringing our underperforming schools into the mainstream of high quality public education in Massachusetts. I urge your support for both bills presently before you.

Thank you.