



**Joint Committee on Education  
October 6, 2005**

**H.1175/S.303 – An Act Establishing Early Education for All**

***Testimony submitted by: Alan Macdonald, Executive Director***

Chairman Antonioni, Chairwoman Haddad, Members of the Committee, thank you for this opportunity to testify in support of H.1175/S.303, An Act Establishing Early Education for All.

This past summer, the national Business Roundtable released a call to action to business leaders to unite with government officials at all levels to create the momentum necessary to achieve their goal – double the number of science, technology, engineering and mathematics graduates with bachelor's degrees by 2015. Virtually every major respected organization representing business, research and education have documented the critical situation in U.S. science, technology, engineering and mathematics. The indicators range from measurable declines in U.S. innovation, such as patents and scientific articles, to soaring numbers of students in Asia majoring in these fields, to U.S. students' lagging interest and measured performance in math and science.

In Massachusetts, though our students score well on state and national standardized tests, there are warning signs. In 2002, 22% of Massachusetts high school students who took the SAT identified STEM fields as their probable education and career path. In 2003 and 2004, that figure dropped to 19%. Of these students, the percentage of females picking computer science and engineering is less than 15%. Even more disturbing, in 2002, at 14 high schools where 70% or more of the 10th graders scored proficient or advanced on the Math MCAS, only four had students selecting STEM fields at a rate equal to or higher than the 22% statewide level. In 2004, there were only five. These are the very students who one would think would have an inclination toward STEM fields and should be nurtured to be the next generation of innovators. At a time when our economy is shifting to be more globally competitive and innovation based, these are troubling trends.

The Roundtable's report, "Tapping America's Potential: The Education for Innovation Initiative" recognizes that "*Past national efforts to improve U.S. math and science achievement clearly demonstrate that they cannot be isolated from the need to improve the overall quality and results of the entire U.S. education system, pre-K through 16. That is why the business community supports high-quality early childhood education...*" If we are serious about maintaining our preeminence in

innovation and competitiveness – nationally, regionally, and statewide – it is imperative that we build an education system with high-quality early childhood education as its foundation.

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Research supports this claim. Recent neuroscience findings confirm the important link between early experience and subsequent achievement in math, science and technology. Math and science concepts elaborate on young children's natural curiosity by giving them tools to ask questions, make predictions and investigate problems – skills that are important both in the early years and later in the workplace.

The Massachusetts Business Roundtable is a member of the Early Education for All Campaign because we share in the belief that for Massachusetts to remain competitive in an increasingly global economy, we must make targeted investments in the education of our children that yield the most positive returns. Research has conclusively shown that early childhood education is one of these areas. The Legislature clearly understands this, and is to be commended for its leadership and commitment it has made in creating the new Department of Early Education and Care. To continue to build on this commitment, and achieve EEA's vision of high-quality universal early childhood education, MBR respectfully urges you to give a favorable report to H.1175/S.303.

Thank you.