The Honorable Brian Joyce
Chairman
Senate Committee on Bonding, Capital Expenditures and State Assets
State House Room 109D
Boston, MA 02133

May 14, 2014

I would like to express my support for the provision included in H.3770, which would make available $38 million for school network infrastructure. I also recommend that the bill include a provision to create a task force to study comprehensive digital learning needs in Massachusetts, such as professional learning opportunities for educators, digital materials and devices, instructional uses of educational technology and broadband connectivity sufficient to support next-generation learning to maximize this capital investment and the opportunity to prepare students for their future.

I am a Special Advisor to Massachusetts Computer Using Educators (MassCUE) and a member of ISTE. I serve on the MA and Iowa Governor's STEM Advisory Council. I was a high school principal and Superintendent of Schools and an administrator and faculty in Higher Education in MA. I formed the MASS Technology Task Force. I was also part of BEST (Business and Education for Schools and Technology), a coalition of business, education and labor organizations advocating with legislators and other public policy makers for educational technology to enhance teaching and learning in Massachusetts K-12 schools and thereby to strengthen the Massachusetts economy) which ran the first email campaign in the Commonwealth and contributed to NetDay during 1996-1998.

I also participated in developing the first IT standards for students when I headed up the Instructional Technology Advisory Council to the MA Commissioner of Education in the first decade of this century.

There are two reasons why we need this support for schools:

1. School districts throughout the Commonwealth of Massachusetts are transitioning from the pencil-and-paper MCAS assessments to the online PARCC assessments. However, because they have limited broadband and outdated networks, many school districts are not prepared to meet the minimum PARCC infrastructure readiness requirements, let alone the recommended infrastructure requirements. The IT school infrastructure bond provision in H. 3770 would create a matching grant program to support these school districts in upgrading their internet infrastructure so they will be able to meet the speed requirements for the PARCC assessments

2. Digital learning has not reached the level many educators believe it should be at. In part that is because we have not developed the instructional knowledge base and disseminated it to educators, helping them to understand what to do and how to do it. It is

also because the infrastructure in schools is not up to the task.

Based on the PARCC guidelines, only 77% of Massachusetts schools have the minimum level of external internet bandwidth required, while only 71% have the recommended level of external bandwidth. This means that over 100,000 students—or essentially 1 in 4 of all students tested in the state—will be in schools that may have to shut down all other digital learning and administrative uses of the network during testing. Almost 52,000 students will be in schools that do not even meet the minimum levels of external connectivity to administer the assessments, let alone use the network for other critical purposes.

Massachusetts has been in the forefront of many educational advances and improvements but needs to invest in the infrastructure in order to create the "Next Generation Classroom." The creation of a Task Force to study the comprehensive digital learning needs in Massachusetts including digital materials and devices, professional learning for educators and additional connectivity needs sufficient to support next-generation learning is definitely in order. By looking at the entire digital learning ecosystem and engaging in a thoughtful planning process, Massachusetts will be able to better leverage this initial $38 million broadband investment.

It is critical that the classroom reflects the technology rich environment that students will experience in college and the workplace. The classroom cannot be the place we ask students to power down. Today 50% of jobs require some technology skills and by the end of the decade that figure will rise to 77%. When I was Superintendent in Lexington in the last century, the shoemaker used a computer.

Our students must learn how to collaborate, communicate, exhibit creativity, engage in critical thinking, and become responsible digital citizens.

Many of my colleagues and I have known for many years that high quality digital tools and resources can engage students in new ways and make learning relevant and teaching effective.

I encourage you to pass H. 3770 with the $38 million investment to upgrade school networks and to include a provision that creates a task force to study comprehensive digital learning needs throughout the state.

Sincerely,

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