

For the Finance Committee  
January 27, 2009

What issues face our teachers that can be addressed by the use of technology and more specifically, by teachers having their own laptops, and how will this improve teaching and learning?

**OUR TEACHERS:**

- The Commonwealth requires schools and teachers to keep and provide data on individual students has increased. The district has a data management system, iPass, that teachers need to access on a regular basis.
- The MA Statewide Educational Data Warehouse and Reporting System is database with MCAS results that educators need to access in order to identify strengths and weaknesses of their students and then adapt their instruction appropriately to improve teaching and learning.
- Technology is redefining educational delivery.
- The availability of professional development, assessment, and curriculum has burgeoned through the use of technology - lesson plans, web-based information, simulations, wikis, etc. are all accessible to improve teaching and learning.
- Collaboration with educators, as well as specialists and even students, throughout the country and world is now easily possible through the use of technology.
- Research has underscored the importance of home-school communication – email facilitates this communication as do wikis, teacher websites, and programs such as SchoolNotes.
- Given the full schedules teachers have during the school day, many teachers do prep work at home. Given the need to incorporate technology into the lessons, teachers need to have a computer at home that can go back and forth to school with lessons, links, presentations, etc. ready for class.
- Many teachers share classrooms, so having their own laptop prepped for classes, to take from classroom to classroom facilitates teaching and learning.
- There are many software-based resources that assess student work and provide immediate feedback to both students and teachers. Such programs also can provide robust remediation and instruction in the area of instruction for all disciplines.
- Project Based Learning is a way to incorporate real life, interdisciplinary learning into the classroom and is facilitated through the use of technology.
- Research supports teachers moving from transmitter of knowledge to coaches while students do the work constructing knowledge. Again this is facilitated through the use of technology.
- Teachers have access to on-line assessments and also can create on-line portfolios for students.

## OUR STUDENTS:

- Students need to be prepared with 21<sup>st</sup> century skills to live and work in a highly technological world.
- As the student population in schools becomes more diversified, the need to meet every child is more challenging – technology can aid in providing the necessary differentiated instruction, assessment and feedback.
- As technology has grown, in particular as embodied by the Internet, so has the body of knowledge available at the touch of a button. There has been and needs to continue to be a shift in the classroom from memorizing facts to using higher order thinking skills to collect, organize and analyze data.
- With the advances in technology, the world is becoming ever more interconnected and our students need to learn how to be a part of this global society.
- Students come to the classroom more proficient in technology and also accustomed to the pace of a technological world.
- Computer-based learning provides a way to engage and develop intrinsic motivation for this generation of digital learners .
- The first Technical Literacy NAEP test is currently being developed and is expected for 2012.