

Shrewsbury Public Schools

Digital Conversion for Student Achievement: Recommendations for the Next Iteration of the Shrewsbury Public Schools Technology Implementation Plan

To: School Committee

From: Joseph Sawyer and Mary Beth Banios

Re: Recommendations for Adjustments to the SPS Technology Implementation Plan

Date: December 14, 2014

In December 2011, as part of its voted strategic priorities, the School Committee charged the school district with developing a program that would provide a personal electronic learning device for all students in grades 5-12. Since this initial vote, three years have passed and our district has successfully implemented 1:1 models in grades 5-8. In anticipation of a 9-12 adoption in the 2015-16 school year, our administrative team has explored the unique requirements of a high school 1:1 program, has spent focused time reviewing lessons learned from our first three years of implementation, and has evaluated the changing landscape of personal technology programs in the educational setting.

As a result of this analysis, the following recommendations are put forth for the Committee's consideration:

We recommend using the iPad as the device for the high school 1:1 program, with the caveat that it must have a robust keyboard case. We recommend continuing to use the iPad at Grades 5-8 for 1:1, and we are piloting the use of the iPad at a 1:2 device to student ratio in Grade 4. The iPad recommendation is being made based on what we perceive is the best value proposition for the district relative to what educational opportunities the device provides vs. the cost. (separate report included)

We recommend that the entire high school program move to a 1:1 device model for the 2015-2016 school year. Our assessment is that too many courses include students from multiple grade levels and that too many educators teach courses at various grade levels for a partial roll out to be successful. Additionally, it is more cost effective to train all teachers at the same time, and it is important that they apply what they are learning in order to gain the benefits of that training, and that will not be possible for all staff if we don't include all grade levels together at once.

We recommend that the district move to a district-owned device program that would enable all 5-12 students to use their device both at school and at home with no fee required. This recommendation would include a phase-out of the fee program where families in the midst of that program would have a choice of how to continue. This

recommendation reflects the next iteration of our approach to digital learning and represents a significant improvement, as it is based on the lessons learned during our first few years and also benefits from the possibilities that this digital conversion is enabling, such as shifting costs away from traditional materials towards less expensive digital ones and being able to access the many free resources that exist in the digital environment. (separate report included)

We recommend using a leasing model to fund the 5-12 district owned device program. Given the number of devices required next year, the district would need to purchase approximately 2,200 iPads which would cost an estimate of \$1.04 million. This type of expenditure is not feasible through the appropriated budget for FY16 if we were to purchase the devices outright. However, our district does have a long history of utilizing the AppleEquity leasing program for financing hardware; this is the program we have used for about a decade for our teacher laptop program. Based on preliminary discussions with AppleEquity, we could finance this amount over four years for four equal payments of about \$269,000 per year, a cost that could be absorbed by existing funds, which could be redirected for the FY16 appropriated budget. (Separate report included.)

We recommend that the high school utilize one "learning management system" for all classes. A learning management system, or LMS, is an online interface where teachers post and collect assignments; post links, documents, videos, etc.; host student online discussions; etc. Given that SHS students are enrolled in as many as eight courses at once, all with separate teachers, it is important to have a single LMS instead of navigating among multiple systems for various courses. (Separate report included.)

We are very proud of the work our district has done over the past three years to implement our 1:1 technology device program at the middle level, and are very excited about the next big step, which is to bring a 1:1 model to our high school. The recommendations in this memo advocate for an approach that we believe is more equitable than our current approach both regarding students' access and families' financial participation in public education, significantly easier to manage, clearly in compliance with evolving state regulation, and sustainable due to its financing model and the cost efficiencies it will drive elsewhere in our program.