

1:1 Pilot Program for Bedford High School

Presented to Bedford School Committee

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Specifications:

Why Pilot the iPad2?

- ◆ Changing Environment: To begin the exploration of the 1:1 Teaching/Learning environment of the future.
- ◆ Comparisons: Our instructional technology staff has been piloting various tablet devices during the 2010-2011 school year. Pilot included examination of the 1:1 capacity of:

Laptops; iPads, and Droids
- ◆ Curriculum Changes: The Common Core requires an even sharper focus on research and writing skills with an emphasis on technology as central to this work.
- ◆ Testing: New MCAS (2014) will focus on more authentic demonstrations of learning.

Preparation for the iPad2 Pilot Recommendation

- ◆ **2010-2011 Netbook Pilot at Lane School**
 - ◆ Represented our first pilot of 1:1 classroom.
 - ◆ Exploration this past school year has included examination of 1:1 initiatives in other districts at both the middle and high school level.
- ◆ **Current Limitations and Questions:**
 - ◆ Mobile labs have limitations in terms of both the time to boot up all the devices and the limited classroom access time.
 - ◆ Tablet Technology, we now have the opportunity to harness internet resources 24/7. We need to pilot this technology to make recommendations for future technology purchases.

Why the iPad2?

- ◆ Apps: iPads offer a wide variety of Apps including the ability to use word processing, spreadsheet, presentation software, and web based resources. The range of Apps enables the staff not only to access a wide range of resources for the whole class but also to individualize learning and address diverse needs more quickly and "in the moment" avoiding the delay and obvious differentiation that often makes students feel different.
- ◆ Built in camera/movie camera: Some Netbooks also have a built in camera, but the format of the device makes it hard to use. Netbooks do not have the horse power to run video editing programs. Speed and ease of iMovie on the iPad2 make it feasible to create short video projects.

Why the iPad2?

24/7 Access: Able to supply each student with ready access to technology on a 1:1 basis 24x7. The iPad2 fits that need the best of any available device at this time.

Comparative Devices: The technology staff has spent the last year looking at various devices. We already have laptops in house and a 1:1 pilot with Netbooks for comparison.

1. Battery Life: The iPad2 is very portable and provides 10 hours of uninterrupted use. Laptops only give a few hours.

Why the iPad 2 Pilot?

- ◆ Durability – The iPad has no moving parts to break
- ◆ Procurement of Apps/software: Unlike Droid, Apple has a system whereby we can purchase Apps without a credit card. This is not possible on Droid based units. The Apple Volume Purchase system already setup to give us 50% discount on apps purchased in quantities of 20 or more.
- ◆ Access to FirstClass & Aspen - Droid based tablets have very limited access to FirstClass. Aspen doesn't work correctly in Droid based browsers - works well on iPad.

Maintenance: Unlike laptops, which require significant staff support, the technology staff can safely allow students and teachers to install apps on iPads.. Mobile Device Management (MDM) solutions are available to ease delivery of apps and to manage volume purchase and licensing.

Professional Development

◆ Focus on Adult Learners:

- ⑩ Development of collaborative learning communities comprised of students, teachers, and administrators. Some will contain members of the Bedford Public School community and others will also involve participants from outside of the Bedford Public School System.
- ⑩ Developing, implementing and assessing technology infused lessons.
- ⑩ Review and adjustment of curriculum integration.
- ◆ Shifting technology use from students as consumers of information to students as producers of knowledge, content and creative expression

Focus on Student Learning and Engagement

- ✓ Use **Apps** and **Web 2.0 tools** to effectively communicate, collaborate and solve real-world problems in creative ways.
- ✓ Promote inquiry-based, problem-solving approaches to teaching and learning and **higher order thinking skills**.
- ✓ Provide opportunities for students to become successful members of a **global community** as students join a larger collaborative learning community, which extends beyond the walls of the physical classroom and beyond the walls of Bedford High School.
- ✓ Support students as self-directed, **creative problem-solvers**.

Financing Forecast

♦ Purchase vs. Lease: Add iPad2 to Grade 9-12 (over a four year period)

	» Purchase	Lease
♦ FY12	\$180,000	\$62,000
♦ FY13	\$180,000	\$124,000
♦ FY14	\$180,000	\$186,000
♦ FY15	\$180,000	\$186,000
♦ FY16		\$124,000
♦ FY17		\$62,000

The Digital Learner

"Students should be able to create, navigate, and grow their own *personal learning networks*, in safe, effective, and ethical ways. It's really about the ability to engage with people around the world in these online networks, to take advantage of learning opportunities that are not restricted to a particular place and time, and to be conversant with the techniques and methodologies involved in doing this. It's really something that looks profoundly different from what currently happens in classrooms."

Will Richardson's response to 21st Century Skills