

Summary of Major Technology Purchases

2009/2010

Hardware Acquisition Goals

- Technology integration into core curriculum at all levels and in all subjects
- Instructional labs to support current and planned future classes - both technology classes and those that already integrate technology
- Midterm goal - 21st Century classroom with interactive learning technology, teacher having laptop to access resources and PD, and student access to computers, web and internal resources.

Teaching Labs

- HMHS 501 - Deferred from 08/09, last replaced 2004
 - 26 replacement desktops - monitors bought 08/09
 - Bob has expressed interest in building - tech staff is reluctant
 - Prime example of technology integration into core academic curriculum - frequently used for research, short- and long-term projects
 - Also used by other middle school staff by arrangement, as well as HS classes
 - Outgoing machines to HMHS 205 (English lab)
 - Approx. \$20,000 for 26 machines

Labs, cont.

- HMS computer lab - 25 desktops, last replaced 2004
 - Used by all K-3 classrooms at least weekly
 - Only machines used for NWEA MAP testing
 - Lab visits are key component to early technology familiarity
 - We have good early-ed software for Macs
 - Sunburst “Learn About” series, Neighborhood Map Machine
 - Outgoing machines go to HMS/MSS classrooms to replace obsolete iMacs (c. 1999-2001)
 - Approx. \$26,000 for 25 machines

Labs cont.

- HMHS 224 - Project Lead the Way
- 21 Dell desktops, last replaced 2008
- Advances in system requirements have left machines very slow for primary uses
- Used for all PLTW classes, MS pre-engineering
- Replace with machines that exceed current req. for Inventor, AutoCAD and MultiSIM
- Outgoing machines go to HMHS library, MS Science
- Approx. \$26,000 for 21

Labs

- HMHS 218
- 24 iMacs, last replaced 2007
- Normal rotation year
- Primary lab for Foundations, Digital Media
- Other classes as schedule demands
- Approx \$25k for 24 machines

Libraries

- Tech in libraries - 2nd line gear
- Need to be on par with media labs, esp. at MSS & HMHS
- HMHS plan - 12 current machines
 - 6 from PLTW lab to replace WinXP machines
 - 6 new iMacs as media machines
- Library teaching lab - 10 Linux netbooks
 - Research, light use, data collection

Elem. Libraries

- MSS - 12 c.2004 desktops
 - Replace with 12 new desktops
- HMS - mix of older desktops
 - Update with replaced machines
 - Add 4 netbooks for small group research

Interactive whiteboards

- Of those classrooms employing these boards and using the voting technology, there was an immediate 17-percentile gain in scores - Marzano study on IWB
- The "Sweet Spot" he says, the perfect storm of student achievement according to his findings, was when the technology was used by an experienced teacher, having had it for 2 years, using it 75% of the time in class, who has had training. That teacher shows a whopping 29% gain in scores.
- Student response system allows immediate, anonymous (to student) feedback
- Fair way to allocate? Teacher must write proposal, be endorsed by principal
- Add 2 / building, ~\$5000 each = \$30,000 total

HMS Classrooms

- Have capacity in lab and working on library
- Need technology that can be integrated into classes
- Solution - classroom sets of laptop/netbooks
 - Start with single mobile cart with netbooks and spare laptops
 - Goal is to have 1 / grade

Budgetsense

- 2 current servers - one from 2005, one from 2003
- Planned replacement deferred from 08/09
- Replace with single server - new architecture more powerful/efficient
- Current servers can go to schools for new Active Directory project
- \$7500 for hardware, \$7000 for software, services

Tech & Administrator laptops

- 5 administrator laptops (4 building admins, business admin)
- 5 tech laptops
- Sign-out machines at elementary level - use for digital portfolios, classroom activity, teacher PD

Key Software

- Adobe Creative Suite 4 - site license for HMHS
 - Used for DTP, digital media, and Yearbook
- MS Office - can we cut back and use OpenOffice? (\$55 / computer for Office)
- iWork for HMS lab? (\$250 / school)
- Apple OS X maintenance, MS Software Assurance - upgrade subscription, good for 3 years

Operational infrastructure upgrades

- Budgetsense - server & backup - Websense in future?
- Network upgrades, most critical at MSS
 - 2 48-port L2 managed switches,
- System directory system - one central user database between schools
 - Easy transitions between buildings
 - Plan to tie future authentication to directory - library, phone, email, possibly SIS
 - Software costs in 09/10 - licensing
- Food service system - upgrade being investigated now
- Further out - phone system, just beginning investigation
- Upgraded wireless system to support additional mobile learning