

Long Range Plan for Technology

Technology to Support 21st Century Learning



A Little History

2002

- 4 Production Servers
- 350 Desktop Computers District Wide
- 267 Printers
- 132 Switches
- 1 Firewall
- 1 Router
- Single Mode Fiber Ring Connecting all Schools
- Multi-Mode Fiber Infrastructure in all Schools



Technology in D41 2011

- 1133 Desktop Computers
- 458 Laptops
- 32 Production Servers
- 182 Switches
- 379 Printers
- 2 Firewalls
- 6 Routers
- Web Servers
- VoIP Service
- Email Service
- Remote Access
- Single Mode Fiber Ring Connecting all Schools
- Multi-Mode Fiber Infrastructure in all Schools



Strengthening our Infrastructure

- Switch Refresh at all Buildings
- Web Servers Refreshed
- VoIP Servers Refreshed
- Upgraded Backup Solution
- Upgraded Firewalls
 - Email Firewall
 - Web Firewall
- UPS Refresh and Generator Implementation



3 – 5 Year Refresh Cycle

Rollout Schedule										
Equipment	09-10	10-11	11-12	12-13	13-14	14-15	16-17	18-19	19-20	21-22
Hadley Desktops			X				X			
Hadley Laptops			X				X			
Grade School Desktops				X				X		
Grade School Laptops				X				X		
Lab PC Refresh				X						
Classroom Printers					X				X	
Color Printers				X						
Copiers										
Core Switch Equip.					X					
Classroom Switch										X
Phone Servers/Routers	X							X		
Phones						X				
Email Server				X				X		
SIS Servers				X					X	
SQL Server				X				X		
Security Camera Servers	X							X		
Security Cameras				X						
Skyward Server					X					X
Destiny Server					X					X
Web Server	X					X				X
Domain Controllers				X					X	
Application/Storage Servers					X					X
Read180 Server	X					X				
Email Archive Server	X					X				
Projectors	X				X					
Smart Boards 1st /Rollout			X							
Smart Boards 2nd /Rollout				X						
Email & Web Firewall				X				X		



Phase 1 (2011/2012)

- Technology Focus Group
 - Need Better Access to Technology
 - Not Enough Available Technology
- Existing Computers are 5 to 10 Years Old
- Implement a Fleet of Netbooks at Hadley
- Retain Half of the Existing Laptop Fleet
- Classroom Desktop Refresh
- Smart Board Rollout for Math, Science and Grade Schools
- Pilot Tablet Technology (iPad, Verizon Galaxy, Motorola Xoom)
- Reinforce Wireless Coverage
- Lab Computers will Remain for 1 More Year
- Pilot Google Docs and/or MS Live Accounts for Students
- Replace Current Student Information System



Phase 1 Outcomes

- Greater Equity and Access to Technology
 - Potential for 1:1 in the Classroom
- Reliable and Flexible Equipment
- Increased Variety of Technology
- Greater Capacity for Wireless Access
- Immediate Access to Information
- Promote 21st Century Learning
 - Creativity
 - Critical Thinking
 - Collaboration
 - Communication
- Greater Operational Efficiency



Phase 2 (2012/2013)

- Refresh Desktops in all Grade School Classrooms
- Repurpose Existing Desktops to Labs w/Memory Upgrades
- Rollout Grade Level Laptop Carts
- Reinforce Wireless Coverage
- Complete Smart Board Rollout District Wide
- Pilot Tablet Technology (iPad, Verizon Galaxy, Motorola Xoom)
- Begin Data Warehouse Integration w/ SIS
- Expand Student Online Storage for Hadley Students
- Continue to Consolidate Operational Systems



Phase 2 Outcomes

- Greater Equity and Access to Technology
 - Potential for 1:1 in the Classroom
- Reliable and Flexible Equipment
- Increased Variety of Technology
- Greater Capacity for Wireless Access
- Immediate Access to Information
- Promote 21st Century Learning
 - Creativity
 - Critical Thinking
 - Collaboration
 - Communication
- Evaluation of Computer Labs
- Begin to Merge District Data to a Single Platform



Technology Investment

Hadley Refresh

	Qty	Cost	Ext. Cost
Smart Boards	80	\$1,199.00	\$95,920.00
Mounts & Materials	80	\$1,710.00	\$136,800.00
Installation	80	\$440.00	\$35,200.00
		\$3,349.00	\$267,920.00

	Qty	Cost	Ext. Cost
Netbooks	500	\$549.00	\$274,500.00
Carts	30	\$1,200.00	\$36,000.00
Desktop/Monitors	150	\$989.00	\$148,350.00
Tablets	40	\$549.00	\$21,960.00
			\$480,810.00

Grade School Refresh

	Qty	Cost	Ext. Cost
SmartBoards	80	\$1,199.00	\$95,920.00
Mounts & Materials	80	\$1,710.00	\$136,800.00
Installation	80	\$440.00	\$35,200.00
		\$3,349.00	\$267,920.00

	Qty	Cost	Ext. Cost
Laptops	300	\$799.00	\$239,700.00
Carts	30	\$1,200.00	\$36,000.00
Desktop/Monitors	180	\$989.00	\$178,020.00
Tablets	40	\$549.00	\$21,960.00
			\$475,680.00



Professional Development

- Targeted After School Training
- Institute Day Centered on Technology
- National Education Technology Standards (NETS)
- Support Districts Learner Characteristics
- Partners in Tech Program
- Smart Board User Group
- Weekly Tech Training at CSO
- Focus on 21st Century Skills
 - Critical Thinking and Problem Solving Skills
 - Communication Skills
 - Creativity and Innovation Skills
 - Collaboration Skills
 - Information and Media Literacy Skills
 - Contextual Learning Skills



Phase 3 (2013/2014)

- Lab Evaluation Complete
- Refresh of Computer Lab Technology
 - Impact on LLC
 - Hub for Technology & Learning
 - Online Books, Multimedia Creation, Collaboration
- Expansion of Online Storage & Email for Hadley Students
- Leveraging Cloud Computing
- Full Software Review
- Printer Refresh
- Complete Server and Backup Evaluation



Phase 3 Outcomes

- Revitalized Lab
- Move to More Web or Browser Based Applications
- Reduced Printing Fleet
- Reduced Printing Costs
- Begin to Scale Back Quantity of District Servers
- Begin to Re- imagine our LLC



And Beyond....

- Hadley Student Laptops Due for Refresh
- Analysis of Student Devices Complete
- Full 1:1 for Hadley Students
- Refresh of District LLC's Begins
- Continue to Research Emerging Technologies
- Eliminate the Need to House Student Files on Local Servers
- Access to all Critical Data from Anywhere



Questions

