

Hopkinton Public Schools



Technology Plan 2015 - 2018

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Executive Summary

Vision

Hopkinton Public Schools is committed to providing a safe educational environment in which everyone learns and collaborates in new and creative ways previously unimaginable and where technology seamlessly enriches our daily learning experiences.

The Role of Technology

Hopkinton Public Schools believes technology will help all students and educators learn and continuously grow as independent, confident, resilient and thoughtful individuals willing to explore new ideas, reflect on progress, and challenge themselves. Technology supports collaboration and differentiated instructional programs to accommodate various learning styles and abilities. Furthermore, technology enables self-directed learning opportunities and helps bring about a closer global society by extending learning beyond the traditional classroom.

Technology improves communication between teachers and students, which encourages student growth and the exchange of ideas and feedback. Students and teachers will utilize web 2.0 tools and digital resources to better prepare students to work in a 21st Century environment in which a diverse set of skills and expertise are required. Students will leverage these tools in the classroom to learn how to collaborate, analyze data, and be effective members of a team.

Hopkinton's Philosophy of Technology in Education:

Technology aims to enhance student learning by creating personalized, student-centered learning environments where every student has equal access to the curriculum. However, it the district's understanding that not all curriculum is improved with the use of technology. Technology needs to be used to enhance the learning when appropriate and when it helps students reach specific learning outcomes. Therefore, the district fully supports a balanced approach of technology integration and more classical educational strategies.

It's the district's belief that technology can truly improve teaching and learning when implemented correctly and will work to provide a supportive culture for educators and students with the notion that it is okay to fail and try again.

History:

Hopkinton Public Schools has made great progress in the past 5 years and has met 86% of the Strategic Plan Action steps defined in the previous technology plan. Administrators, educators, and various members of the community have made great efforts to complete the Strategic Plan Action Steps identified in the table below. Hopkinton Public Schools and the Town of Hopkinton have invested in the technical infrastructure of all the schools and town buildings to better support and serve the members of the community.

2010 – 2015 Strategic Plan Action Steps:

Goal #1 – Curriculum – Teaching and Learning		
Action Step	Met	Not Met
Implement Teacher laptops and MACs at High School	✓	
Pilot Blended, hybrid, and online courses for high school students	✓	
Provide project carts as a project-based learning resource at HS	✓	
Develop a Freshman Technology Course for all 9 th graders	✓	
Assess student technology skills in Grade 8		✓
Implement web content management system for all schools (Schoolwires)	✓	
Pilot 1:1 Program in 9 th grade	✓	
Evaluate 1:1 Program and implement next Grade 9 class	✓	
Implement student email accounts at the high school level	✓	
Implement online assessment system (Galileo)	✓	
Goal #2 - Infrastructure, Hardware, Software, and Technical Support		
Action Step	Met	Not Met
Implement Fiber Network throughout town and schools	✓	
Create Network of VLANs, Wireless N, and GB switching	✓	
Implement a five-year replacement cycle for computers		✓
Replace elementary computers	✓	
Replace elementary teacher computers	✓	
Upgrade all elementary network infrastructure to GB with POE	✓	
Move to managed print services in our schools and offices	✓	
Implement ten-year replacement for network infrastructure	✓	
Evaluate technology services program based on data from annual surveys, and helpdesk statistics, and server uptime statistics	✓	
Hire full time tech integration specialist for high school	✓	
Hire full time network administrator	✓	
Hire school year technology assistant	✓	
Goal #3 - Educational Management – Data, Security, and Operations		
Action Step	Met	Not Met
Move from Exchange Email to Gmail with Postini Archiving	✓	
Implement Google Apps for Education	✓	
Implement VOIP systems for 7 buildings		✓

Remote Host student information management system (iPass)	✓	
Remote Host Financial system	✓	
Virtualize all building based servers with backup functionality	✓	
Co-locate our virtual servers on town hall virtual servers	✓	
Provide co-location for town hall servers on our servers	✓	
Review current database systems and look for opportunities for centralized management		✓
Evaluate systems of record and recommend systems to better meet our instructional and administrative needs		✓
Goal #4 Professional Development		
Action Step	Met	Not Met
Evaluate technology professional development program based on annual surveys of staff	✓	
Conduct summer institutes, ongoing workshops, and online training to expand the use of Moodle, explore and implement project-based learning, explore web 2.0 tools, and resources. Provide opportunities for teachers to share best practices	✓	
Develop teacher leaders through model classroom program	✓	
Conduct specific professional development concurrent to the implementation of specialized technologies	✓	

Primary Goals for FY15-FY18

Strategic Initiative	Primary Goals
I. Effective School Leadership	Develop, define, and communicate Hopkinton’s new technology plan to all educators and community and to establish a budget and professional development plan that supports its vision
II. Aligned Curriculum	Establish a technology task force in the fall of 2014 to define the criteria necessary to acquire a system that supports and aligned PreK-12 curriculum
III. Effective Instruction	Acquire and support technology tools for the classroom that promotes 21 st century skills and helps students meet learning goals.
IV. Student Assessment	Establish a technology task force in the Fall of 2014 to define the criteria necessary to acquire or maintains a database that contains assessment data that will support and inform instruction
V. Leadership, Governance, & Communication	Establish a communication plan that aligns with school committee policies to enhance communication between the school and the community
DESE Benchmarks	Establish a professional development plan that addresses the DESE benchmark short falls by analyzing and modifying current programs and by analyzing TSAT data to provide targeted PD to all standards we are not proficient in
HHS 1:1 Laptop Program	Enhance instruction with the 1:1 learning initiative at the HS by adopting device agnostic tools that will support a mixed device environment while promoting embedded professional development and reducing cost

Part 1 - DESE Benchmarks:

The Massachusetts Department of Elementary and Secondary Education (DESE) provides technology planning guidelines and a set of six benchmarks to help organize a district's technology plan and to help measure its success. There are many reasons for a school district to produce a strategic plan. Long range planning helps the district secure funding, identifies strengths and areas for growth, and helps define a professional development plan. Ultimately, the strategic plan should help a district fulfill its vision and support student learning. There are six benchmarks described below each with its own set of data. The data below in combination with the data collected from the technology planning committee and the technology planning survey serve, as the district's needs assessment. This data in combination with the data collected for the district's strategic plan form the basis for the goals set in Part II of this plan.

Benchmark 1 - Commitment to Clear Vision and Implementation Strategies

Vision

Hopkinton Public Schools is committed to providing a safe educational environment in which everyone learns and collaborates in new and creative ways previously unimaginable and where technology seamlessly enriches our daily learning experiences.

Technology Planning Committee

Name	Position	School
Ashoke Ghosh	Technology Director	District
Bob Berlo	Assistant Superintendent	District
Merideth Ekwall	Director of Elementary Education	District
Evan Bishop	Principal	High School
Alan Keller	Principal	Middle School
Lauren Dubeau	Principal	Center School

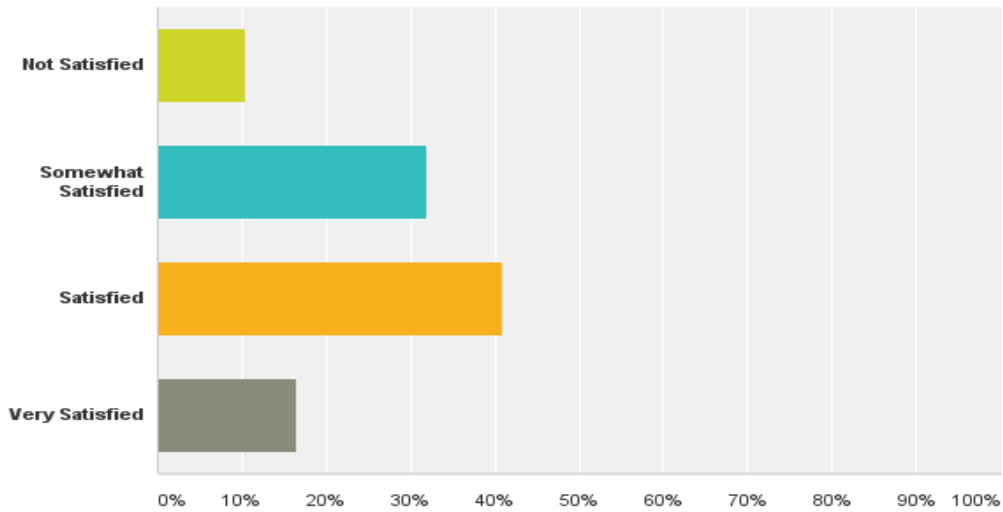
Dave Ljungberg	Principal	Elmwood
Tim Kearnan	Assistant Principal	Hopkins
Anne Carver	Assistant Principal	Elmwood
Ann Benbenek	Assistant Principal	Middle School
Josh Hanna	Assistant Principal	High School
Linda Henderson	Data Manager	District
Jon Parent	Network Administrator	District
Stephanie Doty	Technology Integration	Hopkins
Christine Gniadek	Technology Integration	Center & Elmwood
Linda Colby	Technology Integration	Middle School
Colleen Worrell	Technology Integration	High School
Chapin Porcella	Technology Support	High School
Matthew Ciprano	Technology Support	Elementary Schools
Ryan Choquet	Technology Support	Middle School
Betci Weldon	Librarian	Hopkins/Elmwood
Caitlin Rizzardi	Teacher	Hopkins
Diane Norby	Librarian	Middle School
Deborah Davis	Teacher	Center
Fred Haas	Teacher	High School
Shannon Allberry	Teacher	High School
Michael Siedlecki	Teacher	Middle School
Lauren Koelbl	Teacher	Middle School
Stacey Homan	Teacher	Center
David Bernstein	Teacher	Hopkins

Needs Assessment

Hopkinton Public Schools assesses all technology products and services that are needed to improve teaching and learning. Assessment is completed utilizing a variety of methods with the most common method being surveys. Surveys are sent to faculty and students on a bi-annual schedule. In addition, the district has collected data via focus groups and faculty meetings. The district also collects data on helpdesk tickets which is an internal ticketing system the district utilizes to schedule hardware and software repairs. The data table from the technology survey below shows the satisfaction levels of users that utilize our Help desk services.

Q12 How satisfied are you with "Help Desk" services and technician support?

Answered: 334 Skipped: 55



Budget

According to the DESE guidelines for technology per pupil expenditures, Hopkinton routinely meets the developing level and for the past two years has reached the proficient level. Fiscal year 2015 will be the first year Hopkinton Public Schools has reached the advanced level.

Deseg Guidelines:	Early Tech	Less than \$175/PP
	Developing	\$175-\$300/PP
	Proficient	\$300-\$425/PP
	Advanced	more than \$425/PP

FY	Enrollment	Tech Budget	Per Pupil Expense	Level
2009	3452	\$922,310	\$267	Developing
2010	3453	\$926,539	\$268	Developing
2011	3454	\$901,004	\$261	Developing
2012	3414	\$971,436	\$284	Developing
2013	3414	\$1,091,894	\$319	Proficient
2014	3461	\$1,300,331	\$375	Proficient
2015	≈3461	\$1,730,219	\$500	Advanced

Evaluation

The district has created an online form via Google Apps to collect technology requests from educators. Teachers were asked in the online form to describe the intended use of the technology, the number of students it will impact and the standards it is aligned with or supports. Requests are reviewed by the technology department and administration prior to budgeting season and then are confirmed to be aligned with strategic initiatives and school improvement plans. Requests are then prioritized before they are considered for purchase.

Benchmark 2 -Technology Integration and Literacy

A. Technology Integration

Goal #1	Met	Not Met
At least 90% of Teachers use technology effectively every day outside of teaching time	✓	
Goal #2		
At least 90% of teachers use technology appropriately with students everyday to improve student learning		✓

B. Technology Literacy

Goal #1	Met	Not Met
At least 90% of eighth grade students show proficiency in all MA Technology and Literacy standards and Expectations for grade 8		✓
Goal #2		
At least 100% of teachers are working on meeting the proficiency level in technology, and by the school year 2014-2015, 90% of the teachers will have mastered 90% of the skills in the TSAT		✓

C. Staffing

Position	School	Ratio	DESE Recommended Guidelines
Technology Director	District	1	1
Data Manager	District	1	1

Network Administrator	District	1	1
Technology Integration	Elementary	1:125	1:60-120 Staff
	Middle School	1:100	
	High School	1:125	
Technology Support	District - FY14	1:502	1:400 Computers
Technology Support	District - FY15	1:580	1:400 Computers

Benchmark 3 -Technology Professional Development

Goal #1	Met	Not Met
At least 90% of district staff will have participated in high-quality professional development	✓	

Professional Development Models:

Hopkinton Public Schools utilizes a variety of professional development models to help meet the needs of individual teachers.

Model 1 – Professional Development Days

Serve has full or partial days dedicated to serving educators. The full days are usually focused around district priorities and usually offer a few mandated trainings that are district led and focused around 1 or 2 topics. In most cases, the time is divided among district and school priorities. A typical training usually starts with a large presentation offered to the entire building or district that lasts for an hour or two. The remainder of the day consists of breakout sessions and teachers are given a choice of workshops to attend.

Model 2 – Embedded Professional Development

The embedded model usually focuses on a smaller group of teachers and takes place during Department Meetings, Professional Learning Community meetings, or during Team Time. One of the biggest benefits of an embedded model is that it occurs on a regular basis and work carries on over a period of time with consistent feedback from coaches, teacher leaders, or peers. The feedback teachers receive from their peers help to reinforce best teaching practices and encourages teachers to test new skills.

Model 3 – The Blended Model

The blended model combines face-to-face time and training with an online component housed in a learning management system like Moodle. One of the key benefits of a blended model is that it offers more flexibility to teachers. They often learn a new topic or skill during the face-to-face time and then have opportunities over time to practice the new skill. In addition, the blended model also offers teachers an opportunity to interact with their peers or teacher in an online discussion or forum, which further solidifies the learning.

Model 4 – Share Fairs

Share fairs are usually short sessions, not more than an hour, where teachers can share out on best practices over a short 5-10 minute period. This is a great way to introduce teachers to a variety of new teaching practices in a short period of time.

TSAT Data:

All staff members from Hopkinton Public Schools were invited to participate in the Massachusetts Technology Self-assessment Tool. The tool measures teachers against three key standards, Standard 1 – Technology Operations and Concepts, Standard 2 – Safety and Ethics, and Standard 3 – Teaching and Learning. The levels are cumulative and described as follows:

Level 1 – Beginning level

Level 2 – Developing – Must have 100% of Level 1

Level 3 – Proficient – Must have mastered 100% of level 1 and at least 80% of Level 2

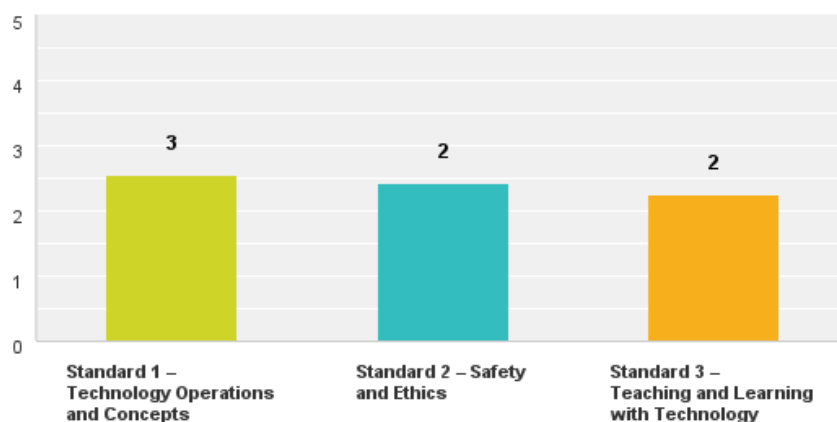
Level 4 – Advanced – Must have mastered Level 1 with 100% and Levels 2 & 3 with 80%

131 staff members participated in the survey, and 118 answered the question.

	Level 1	Level 2	Level 3	Level 4	Total
Standard 1 <i>Technology Operations & Concepts</i>	17.8%	30.51%	30.51%	21.19%	118
Standard 2 <i>Safety & Ethics</i>	22.8%	24.5%	40.68%	11.86%	118
Standard 3 <i>Teaching & Learning</i>	26.27%	37.29%	20.34%	16.10%	118

Q16 Summative Rating for TSAT

Answered: 118 Skipped: 13



Benchmark 4 - Accessibility of Technology

Hardware Access

Goal #1 By 2014–2015, the district has an average ratio of one high–capacity, Internet connected computer for each student:

Benchmark	Current	2015	2016	2017
100% 1:1 Center	No	Not Yet	Not Yet	Not Yet
100% 1:1 Elmwood	No	Not Yet	Not Yet	Not Yet
100% 1:1 Hopkins	No	No	Yes	Yes
100% 1:1 Middle School	No	No	Yes	Yes
100% 1:1 High School	Yes	Yes	Yes	Yes
100% 1:1 Teachers All Schools	Yes	Yes	Yes	Yes

Technology Tools & Software Available to Students and Staff

Instructional Tools	High School	Middle School	Elementary Schools
Laptops for Teachers	✓	✓	✓
Printers & Copiers	✓	✓	✓
SMART Boards			✓
LCD Projectors	✓	✓	✓
Document Cameras	✓	✓	✓
DVDs & VHS Tapes	✓	✓	✓
iPods			✓
Digital recorders	✓		

Video Recorders	✓		
Digital Cameras	✓	✓	
iPads	✓		✓
Wacom Tablets	✓		
Flip Cameras	✓		
Assistive Technology Devices	✓	✓	✓
Applications and Software	High School	Middle School	Elementary Schools
Google Apps for Education	✓	✓	✓
Gmail - Age restrictive Permissions	✓	✓	✓
iPass	✓	✓	✓
Galileo	✓	✓	✓
Schoolwires	✓	✓	✓
Atlas Rubicon	✓	✓	✓
Moodle/Canvas	✓	✓	✓
Brain Pop & Brain Pop Jr.	✓	✓	✓
SAM (FASTT Math, SMI, SRI)		✓	✓
Discovery Education Streaming	✓	✓	✓
Naviance	✓	✓	
MS Office	✓	✓	✓
Windows 7	✓	✓	✓
BaselineEdge Teacher Evaluation Software	✓	✓	✓
Turnitin.com	✓		
Reading A-Z			✓
Assistive (Dragon, TouchChat, etc.)	✓	✓	✓
Kurzweil		✓	✓
VHS/TECCA	✓		
Gizmos		✓	
Glogster		✓	
Make Music	✓	✓	✓
Plato	✓	✓	
Fitnessgram Cloud	✓	✓	✓
SmartMusic Practice Room	✓	✓	✓
Finale	✓	✓	
LanSchool	✓		
Geometer Sketchpad	✓		
WordPress	✓		
Voicethread	✓	✓	✓
Casper - Management Software	✓	✓	✓
ios 7/8	✓	✓	✓
Autodesk Inventor		✓	
iWork/iLife	✓	✓	✓
OS X	✓	✓	✓
Opals Library Management	✓	✓	✓
EasyBib	✓	✓	✓
iPad Apps	✓	✓	✓
Lexia		✓	✓

SIRS	✓		
Gale Virtual Hosting	✓		
Culture Grams	✓		
Facts on File	✓		
Britannica	✓	✓	✓
Virtual Business	✓		
Inspiration V.3			✓
Adobe CS6/CC	✓	✓	✓
WeVideo - Trial	✓	✓	

Internet Access, Networking (LAN/Wan)

In the spring of 2014, Hopkinton Public Schools upgraded its Internet connection from a residential, non-dedicated Verizon line to an enterprise-dedicated connection with Comcast. The district currently has 800mbps download speed and 565mbps upload speed that is loaded-balanced across all 5 schools and 2 support buildings. All 7 buildings are connected to each other and the town with a closed loop fiber connection that is state of the art. All district data is centralized at the High School’s datacenter that is shared with the town. The datacenter is housed in a climate-controlled room with redundant power supplies and offsite storage. The consolidation and virtualization of all individual school based servers will reduce labor, improve system operations, and centralize management. This has been one of the first successful joint projects between the town and the school district.

All schools will have updated wireless connectivity by the August 25th, 2014 and will be supported by POE switches in all the network closets through out the district. All new access points will support the latest Wi-Fi Protocol 802.11AC in a high-density setup which will support 1:1 classrooms.

Benchmark 5 - Virtual Learning and Communication

- A. The district encourages innovative development and the use of innovative strategies for developing high-quality courses through the use of technology in the following ways:
 1. Utilizes digital hubs to share resources and support blended learning environments
 2. Utilizes digital tools and software to assess student learning and provide immediate student feedback.
 3. Utilizes Web 2.0 tools to encourage student centered learning, and collaborative projects.
 4. Provides Internet access and library databases to promote authentic research
 5. Communicates information and ideas respectfully to multiple audience using a variety of digital tools and environments

- B. The district supports a learning management system called Moodle to organize class resources and to promote online and blended learning environments. The district has supported this LMS for over 8 years. The high school currently has over 200 courses registered in Moodle that supports virtual and face-to-face classrooms. In addition, the school district currently provides high school students' access to Virtual High School and will begin supporting students that are interested in taking courses at Tec Connections Academy (TECCA) in the fall of 2014.
- C. The district maintains up-to-date websites that include information for parents and community members via Schoolwires, Blogger, and WordPress. Schoolwires is the company that supports our main district website and our current listserv distribution system. There are many advantages to using a web-based system like Schoolwires. The first reason is the ability to give multiple users access to specific sections of the website to help update and customize to meet individual department and school needs. The second advantage of this system is that we can maintain a consistent design across multiple schools by using pre-designed templates and pages. This consistency across multiple sites and pages makes it easier for user to find resources with in the sites.

Benchmark 6 - Safety Security and Data Retention

- A. The district has a CIPA-compliant Acceptable Use Policy (AUP) regarding Internet and network use. Please read School Committee policy **IJNDB**. The policy is updated as needed to help ensure safe and ethical use of resources by teachers and students. In addition, the school is required to provide a firewall and web content filtering system to keep students away from inappropriate content. The district has added increased monitoring solutions this past spring that provides more granular information about student and teacher use of the Internet. There is a full-time network administrator that monitors the network activity on a daily basis and all irregular findings are reviewed with the district Technology Director. The assistant principals at the building level handle any inappropriate student behavior.
- B. The district educates teachers and students about appropriate online behavior in a variety of ways. Students receive safety training about online environments starting in elementary schools and layers of complexity are added year to year in an age appropriate manor. Topics include cyber-bullying, potential risks related to social networking sites and chat rooms, and strategies for dealing with these issues.
- C. The district has a plan to protect the security and confidentiality of personal information of its students and staff. All access to student data is password protected on secure servers. In addition, our network is password protected and all users are required to authentic before they are granted access to the district's network. When users authentic they are presented with the district's Acceptable Use Policy and are required to consent before gaining access to

the network.

- D. The district complies with federal and state law, and local policies for archiving electronic communications produced by its staff and students. The district utilizes a service called Postini to archive all electronic information created from Gmail. The district informs staff and students that any information distributed over the district or school network may be a public record.

Part 2 – Strategic Plan Objectives and Action Steps

Hopkinton Public Schools Strategic Initiative I.					
<u>I. Effective School Leadership:</u>					
<p>The district and school take action to attract, develop, and sustain an effective school leadership team that obtains staff commitment to improving student learning and implements a clearly defined mission and set of goals.</p> <p>Objective #1 Attract, develop, and sustain an effective school leadership team</p> <p>Objective #2 Establish a clearly defined set of goals aligning the Schools’ Improvement Plans to the District Strategic Plan</p> <p>Objective #3 Foster a collaborative culture open to dialogue and trust</p>					
Initiative’s Technology Impact					
<p>The district’s technology budget supports mission critical software, hardware, and infrastructure which in turn supports the work of the administration, its educators, and its students so they can create, achieve, and learn together.</p>					
Priority/Impact Level		Hard/High	Easy/High	Hard/Low	Easy/Low
		I.3.A	I.1.A & I.2.B		I.2.A.V
	FY2014	FY2015	FY2016	FY2017	FY2018
	-	-	\$2500	\$2500	\$2500
Action Items					
Year 1:	I.1.A.ii	Develop social media presence to promote district job posting and recruit highly qualify personnel			

	I.2.A.i	Host a Public forum to present key components of the technology plan & explain communication protocols
	I.2.B.i	Create professional development plan to support priority technology initiatives
	I.2.B.iii	Align district level funding to support identified technology priorities
	I.2.A.V	Finalize technology plan and ensure alignment with School Improvement plans
	I.3.A.iii	Clearly define district communication tools to all stakeholders by establishing communication flow chart and sharing it with the community
Year 2:	I.1.A.ii	Review and revise online hiring forms to align with new hiring practices
Year 3:	I.1.A.ii	Develop an online registration and hiring process to streamline and digitize all personnel records
Professional Development		
Year 1	I.2.A.ii	Train Human Resource personnel and administrative team on the purpose and use of social media in the district for recruiting and sharing district news and events
Year 2	I.1.A.ii	Train administration and support personnel on the use of online forms for school registration and handbook sign offs.
Year 3	I.1.A.ii	Train new administration and support personnel on the use of online forms for school registration and handbook sign-offs Create digital "How to Video" and deploy via online learning management system
Anticipated Benefits		

The 3-year technology plan will define the district’s direction and will help address key issues identified by the community, educators, and students. The technology plan will help the district align resources to priority initiatives and will map out a logical sequence for implementation and training. In addition, the plan, when communicated, will help educators focus only on key initiatives that support teaching and learning.

Hopkinton Public Schools Strategic Initiative II.

II. Aligned Curriculum

Theory of Action: *If* educators **implement an aligned curriculum** that **articulates common, well-defined learning outcomes** with a focus on depth of understanding and critical thinking *then* all students will be prepared for the next level of learning.

Objective #1 Develop a consistently implemented and vertically aligned PreK-12 curriculum

Objective #2 Articulate common, well-defined learning outcomes with a focus on depth of understanding and critical thinking

Initiative’s Technology Impact

District technology will support this initiative by providing communication pathways for teachers to collaborate. In addition, the technology task force will assess our current curriculum database and determine what the next steps will be for housing aligned curriculum in FY 16.

Priority/Impact Level		Hard/High	Easy/High	Hard/Low	Easy/Low
		II.1A			
Yearly Expense	FY2015	FY2016	FY2017	FY2018	
Estimated Cost	\$35,000	\$45,000	\$45,000	\$45,000	

Action Items

Year 1:	II.1A.i	Finalize and align PreK-12 District Technology and Literacy standards with the Common Core
	II.1A.iii	Develop sample technology lessons and rubrics to use in teacher coaching sessions.

	II.1A.iii	Create a technology task force to evaluate current curriculum database (Atlas Rubicon) and to define criteria for new acquisition of a software tool
	II.1A.i	Move 9 th Grade Freshman Tech curriculum to 8 th grade and align with MA Technology Literacy Standards and Expectations
Year 2:	II.1A.i	Implement 8 th Grade MA Technology Literacy Standards and Expectations Assessment. Benchmark: At least 90% of eighth grade students show proficiency in all the <i>Massachusetts Technology Literacy Standards and Expectations</i> for grade eight.
	II.1A.ii	Provide 1 Hour of building-based time per month for teachers to align and modify units of study to new technology standards
	II.1A.iii	Implement new curriculum database for grades PreK-12 <i>*Hire or provide time for teachers to move Atlas database if necessary.</i>
Year 3:	II.1A.i	Analyze 8 th Grade MA Technology Literacy Standards and Expectations data and adjust curriculum Benchmark: At least 100% of eighth grade students show proficiency in all the <i>Massachusetts Technology Literacy Standards and Expectations</i> for grade eight.
Professional Development		
Year 1	II.1A.i	Implement SMAR Model training for all teachers Grades PreK-12 during full day professional development Develop SMAR Ladders with MA Technology standards Benchmark: Substitution & Augmentation Levels
Year 2	II.1A.i	Develop SMAR Ladders with MA Technology Standards Benchmark: Augmentation & Modification Levels

	II.1A.iii	Develop a train the trainer model for new curriculum database and train all teachers by fall of FY15
Year 3	II.1A.i	Develop SMAR Ladders with MA Technology Standards Benchmark: Modification & Redefinition Levels
Anticipated Benefits		
<p>New curriculum database will be dynamic and consistently updated. The database will allow asynchronous communication among grade bands. In addition, the new system will support better collaboration between teacher teams. The system will better integrate with SIS and assessment data to help inform instruction. The SAMR Model will provide a framework to integrate technology grades PreK-12 and will help educators focus on learning outcomes and not tools.</p>		

Hopkinton Public Schools Strategic Initiative III.				
III. Effective Instruction				
<p>Theory of Action: <i>If</i> educators communicate high expectations for all students <i>and</i> implement evidence-based, high-quality instructional practices focused on critical thinking, creativity, collaboration, and communication, <i>then</i> students will be challenged to grow as individuals and global citizens.</p>				
<p>Objective #1 Communicate high expectations for all students</p>				
<p>Objective #2 Implement evidence-based high quality instructional practices</p>				
Initiative's Technology Impact				
<p>All students will have daily access to a tool that is engaging, current, can provide immediate feedback, and allows students to access relevant content and learning experiences, allows them to produce content, and access to tools and apps that meet their individual interests and learning styles; students are responsible users of technology.</p>				
Priority/Impact Level	Hard/High	Easy/High	Hard/Low	Easy/Low
		III.1.A, B		
	FY2015	FY2016	FY2017	FY2018
		\$232,000	\$250,000	\$250,000
Action Items				

Year 1:	III.1.A, B	Purchase 150 Chromebooks for 8 th Grade students to ensure seamless communication between students and teachers and to support evidence-based instructional practices.
	III.1.A, B	Purchase 240 iPads for Elementary Schools students to ensure seamless communication between students and teachers and to support evidence-based instructional practices.
	III.2.A, B III.2.A, B	Provide teachers and students access to tools that support differentiated learning, student-centered learning, and personalized learning.
Year 2:	III.1.A, B	Purchase 683 devices for Middle Schools students to ensure seamless communication between students and teachers.
	III.1.A, B	Purchase 774 devices for Elementary Schools students to ensure seamless communication between students and teachers.
	III.1.A, B	Provide 90 laptops for Middle Schools Teachers to ensure seamless communication between students and teachers while maintaining 4-year lease cycle.
Year 3:	III.1.A, B	Provide 150 laptops for Elementary Schools Teachers to ensure seamless communication between students and teachers while maintaining 4-year lease cycle.
Professional Development		
Year 1	III.2.A, B	Provide 1:1 Boot camp for 8 th grade teachers on July 30 th . 2014 Training will include device overview, advanced Google Apps training, and Web 2.0 tools.

	III.2.A, B	Provide 1:1 Boot camp for incoming 9 th and 12 th graders August 27 th , 2014 during freshman orientation. Training to cover HPS digital tools, resources, and a “Meet your Mac” session.
	III.1.A.ii	Train elementary teachers on iOS7 in preparation for iPad implementation in FY16.
	III.1.A	Train teachers on Web 2.0 Tools that support formative assessment, differentiated instruction, and help inform instruction
	III.2.A, B	Provide professional development for teachers utilizing our Learning Management system to establish a digital learning environment to support a “flipped” classroom via designated early release day.
	III.2.A, B	Provide professional development for teachers in the utilization of our Learning Management system to establish a digital learning environment to support a “flipped” classroom via blended course offered by district Fall 2014
Year 2	III.2.A, B	Provide 1:1 Boot camp for teacher’s grades 4-8 Spring of FY 15. Training will include device overview, advanced Google Apps training, Web 2.0 tools, and our LMS.
	III.2.A, B	Provide 1:1 Boot camp for incoming 9 th graders August FY 15 during freshman orientation. Training to cover HPS digital tools, resources, and a “Meet your Mac” session.
Year 3		
Anticipated Benefits		
<p>Teachers have relevant technology (hardware/software/data) that is up to date, always works, and that they have had training on it; teachers use the resources to engage students in their learning, and provide immediate feedback to students with up to the minute student learning data; technology (hardware/software/data) is used to enhance</p>		

instruction.

Hopkinton Public Schools Strategic Initiative IV.

IV. Student Assessment

Theory of Action: *If* educators **implement a balanced system of assessments** that **informs curriculum and instruction** *and* **engage students in shared accountability** for learning, *then* educators will make effective adjustments to improve the learning and growth of all students.

Objective #1 Implement a variety of assessments that examine both short and long-term growth of students

Objective #2 Use assessment results to evaluate and adjust instructional practices

Objective #3 Provide opportunities for students to share in goal-setting and self-evaluation

Initiative's Technology Impact

Hopkinton public schools will establish a set of criteria for future software purchases to ensure they are SIF (Schools Interoperability Framework) compatible and are able to sync with our student management system. SIF compatibility will enable mission critical software to exchange data behind the scenes therefore reducing labor, and decreasing the amount of time it takes to deliver its data to stakeholders.

Priority/Impact Level		Hard/High	Easy/High	Hard/Low	Easy/Low
		IV.1.B	IV.1.A & IV.2.A		
	FY2015	FY2016	FY2017	FY2018	
	\$20,000	\$24,000	\$30,480	\$30,480	
Action Items					
Year 1:	IV.1.A.i	Utilize individual students devices and applicable software tools to capture student assessment data			

	IV.1.B.i	Create a technology task force to evaluate current assessment database (Galileo) and to define criteria for system that will warehouse and analyze student assessment data.
	IV.1.A.ii	Utilize Longleaf's BaselineEdge teacher evaluation tool to sync DDM's with state
Year 2:	IV.1.A.i	Utilize data warehouse to analyze student assessment data and inform instruction
	IV.1.A.ii	Utilize Longleaf's BaselineEdge teacher evaluation tool to sync DDM's with state and new data warehouse
	IV.2.A.i	Utilize SIS and LMS to house and share common grading practices and common rubrics
	IV.3.A.i, ii	Leverage LMS's eportfolio feature to house student learning goals and evidence that shows mastery towards those goals Grades 8-12
	IV.3.A.ii	Leverage online assessments (Formative & Summative) to provide students timely feedback to improve learning.
Year 3:	IV.2.A.iii	Provide PLCs and teacher teams with tools to easily analyze data to better inform instruction
	IV.3.A.i, ii	Leverage LMS's eportfolio feature to house student learning goals and evidence that shows mastery towards those goals grades 4-12
Professional Development		
Year 1	IV.1.A.i	Train teachers on the effective use of web 2.0 tools and applications that assess student performance and provide timely feedback

	IV.1.A.ii	<p>Advanced training for educators in the use of BaselineEdge’s teacher evaluation system</p> <p>Benchmarks:</p> <ul style="list-style-type: none"> • Educators will be able to create and modify multiple file types including PDFs, PNGs, JPEG, and Docs. • Educators will be able to modify and edit photos. • Educators will be able to create file folder structures in Google Docs and create hyperlinks to resources and evaluation evidence.
Year 2	IV.1.A.i	<p>Train teachers on the new data warehouse tool.</p> <p>Benchmarks:</p> <ul style="list-style-type: none"> • Educators will be able to upload and download assessment data. • Educators will be able to generate customized reports to help monitor student growth and inform instruction. • Educator’s will be able to export data via CSV file and have a basic understanding of how to use a spreadsheet to organize, sort, and analyze data •
	IV.3.A.i, ii	<p>Train teachers on the LMS system to utilize rubrics and eportfolios.</p>
Year 3	IV.2.A.iii	<p>Train teachers on the use of PLCs protocols to support data analysis.</p>

Anticipated Benefits

Teachers are consistently using technology and data to provide dynamic, engaging, relevant instruction

Students have a better understanding of where they are with their own learning, are collaborating with people outside of the school walls, and interacting with adults other than their own teacher. Schools are better able to meet individual student interests.

Students and teachers have data available in real time (at their fingertips) and are able to modify goals/instruction/etc. Students are better informed about their progress and learning. Teachers see technology as seamless or invisible.

Hopkinton Public Schools Strategic Initiative V.

V. Leadership, Governance, and Communication

Theory of Action: *If the district develops a responsible budget, continuously evaluates policies, and cultivates effective partnerships with family and community, then students' academic, social, and emotional needs will be met.*

Objective #1 Develop a transparent budget that supports the district's priority initiatives

Objective #2 Evaluate and develop School Committee policy

Objective #3 Cultivate effective partnerships with families and within the community

Initiative's Technology Impact

Establishing a clear communication plan will improve communication between the school district and the community. Enhancements to the website and listserv systems will allow for a better flow of information between all parties. The final stage of the VOIP phone system will take place in FY 16 which will unite all school and town buildings under one communication system. Improving existing relationships with the HEF and HPTA will help our district in its efforts to innovate and try new pedagogical methods. Establishing new relationships with local businesses will provide opportunities for students to internship and experience real world experiences. These relationships will also help the district align its curriculum with the needs of 21st century businesses, which will help student obtain work upon completion of high school or college.

Priority/Impact Level		Hard/High	Easy/High	Hard/Low	Easy/Low
			V.1.A & V.3.B		V.2.A
	FY2015	FY2016	FY2017	FY2018	
Capital funds	\$100K	\$100K			
		Action Items			
Year 1:	V.1.A.i	Align FY16 budget to new 3 year technology plan and look for areas of consolidation			

	V.2.A.i	Review Acceptable Use Policy and update necessary changes to support the safe use of social media to promote recruitment of personnel and to better update community members about district events
	V.2.A.i	Review and create communication policy that improves district communication
	V.3.B.ii	<p>Create communication training materials for all educators and community members to improve digital communication</p> <p>Benchmark:</p> <ul style="list-style-type: none"> • Update web resources to reflect current communication tools • Share Communication chart with all stakeholders • Research and deploy push notification system • Record instructional video and post on district website • Record HCAM session that reviews district communication processes • Provide training sessions at open house
Year 1	V.3.B.ii	Install VOIP phone system at Center and Elmwood schools
	V.3.B.ii	Create emergency communication plan when primary system is not functioning
	V.3.B.i	Schedule a bi-annual meeting with HPTA and HEF to discuss priority initiatives and event planning
Year 2:	V.3.B.ii	Install VOIP phone system at High school and Hopkins
	V.3.B.i	Meet with local businesses to establish partnerships to ensure technology curriculum meets the needs of current employers

Year 3:	V.3.B.ii	Add additional PRI to extend number of phone lines if needed
	V.3.B.i	Establish summer internships for college students seeking careers in technology and tech integration
Professional Development		
Year 1	V.3.B.ii	Train Center and Elmwood staff on the use of the new phone system and its integration with the PA
	V.3.B.ii	Update main page of each school's website to re-organize and standardize announcements section
	V.3.B.ii	Provide advanced training for administrators and support staff on the use of the District's E-Alert and Email Broadcast systems to ensure standardized communication protocols.
Year 2	V.3.B.ii	Train High School and Hopkins staff on the use of the new phone system and its integration with the PA
Year 3	V.3.B.ii	Provide advanced training to teachers and administrators on Schoolwires functionality.
Anticipated Benefits		
<p>An updated acceptable use and communication policy will better align with current social media and digital communication tools. As a result, the district will be able to leverage the latest technologies to ensure quality two-way communication between the school system and the community. Additional training for all parties involved will also allow for improved communication and may enable the end user to experience improved functionality and ease of use.</p>		

Part 3 – Communication Tools & Appendices

District Communication Tools

Tool Name	Access	How to Sign Up	Current Use	Future Use
Schoolwires	All staff & Community	A. Parents – Create account by self-registration B. Teachers - Accounts created by district	District Website E-Alerts Broadcast Email	SMS Mobile App Event Planner
iPass	All Staff	District Creates Staff accounts and permissions	Snow Chain, Emergency calls & Emails Student progress monitoring	Assessment module
iParent & iStudent	Parents & Students	A. Parent Completes Online Registration B. District Creates iStudent accounts	Student Schedules Term grades Progress reports @ M.S Competencies	Progress reports @ HS
Gmail	All Staff Grades 8 -12	District creates accounts for all staff and students	Internal an external communication for all educators and students	-
Google Groups	All Staff Grades 8-12	District creates accounts for all staff and students	Administrative Communication, Teacher to Student, & Admin to Teacher	Extra-Curricular activities
LMS	All Staff Grades 9-12	District creates accounts for all staff and students	Content Management system – Flipped Classroom & class communication tools	Grades 4-8
Backpack Letters	Administration & Teachers	Administration, Teachers, & Support Staff,	School or Teacher to Parent communication	-
Snail Mail	All Staff	Administration, Teachers, & Support Staff,	Welcome letters, confidential matters,	-
Cell Phones	Administration	District Creates accounts	Emergencies & Day use	Schoolwires Updates & Notifications
Phones	All Staff	Voicemails set-up by staff	Absentee Lines Emergencies General information School to Parent Communication	VOIP @ all Buildings

Technology Department Organization Chart

