

Technology Plan Cover Page

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Introductory Material

Plan History:

Hartland Schools began implementing technology plans to guide the procurement and use of educational technology in 1996 which coincided with the passage of a Bond involving the procurement of a significant amount of technology. Since that time, Hartland has passed three additional Bonds, the most recent of which was approved by voters in February of 2010. The passage of these various Bonds has been instrumental in the implementation of Hartland's Technology Plans and the plans themselves have always been used as the guide for the development of the scope of work for the technology portion of Hartland Bonds.

Mission Statement:

The Hartland Consolidated Schools, in cooperation with the community, will provide a positive environment for the development of productive and caring individuals of all ages. We are teaching for learning for life.

Vision Statement:

Hartland Consolidated Schools: A community of learners shaping successful tomorrows.

District Profile:

The Hartland Consolidated School District is located in Hartland, Michigan, which is both a suburban and rural community. With less than a one-hour drive to any one of four larger cities (Flint, Detroit, Lansing, and Ann Arbor), Hartland has the tranquility of a rural town, but the convenience of a major city suburb. The Hartland Schools is a Class A district with a population of approximately 5,515 students, 286 teachers, 22 Administrators, 6.9 FTE Technology Personnel and a total of 500 employees. The community is comprised of business people, farmers, professionals, service employees, children, parents, retirees, and clergy who are caring people dedicated to the School District in its desire to offer Hartland students a safe and quality education. All Hartland students are enrolled in the National School Lunch Program with 20.00% enrolled in the Free and Reduced Lunch Program (19.68% 2012-2013 school year, and 22.20% 2011-2012 school year).

Members of the District Technology Committee are listed on the next page. These members are selected based upon their role in the school system, leadership skills, and interest in enhancing student learning through the use of technology.

School Buildings

- **Creekside Elementary School (K-4)**
3480 East Street
Hartland, MI 48353
Population: 490
Free and Reduced Lunch: 76/22
- **Lakes Elementary School (K-4)**
687 Taylor road
Brighton, MI 48114
Population: 546
Free and Reduced Lunch: 41/18
- **Round Elementary School (K-4)**
11550 Hibner Road
Hartland, MI 48353
Population: 373
Free and Reduced Lunch: 61/13
- **Village Elementary School (K-4)**
10632 Hibner Road
Hartland, MI 48353
Population: 472
Free and Reduced Lunch: 73/13
- **Hartland Farms Intermediate School (5-6)**
581 Taylor Road
Brighton, MI 48114
Population: 899
Free and Reduced Lunch: 94/36
- **Hartland Middle School at Ore Creek (7-8)**
3250 North Hartland Road
Hartland, MI 48353
Population: 898
Free and Reduced Lunch: 127/39
- **Hartland High School (9-12)**
10635 Dunham Road
Hartland, MI 48353
Population: 1796
Free and Reduced Lunch: 176/59
- **Hartland Legacy (9-12)**
9525 Highland Road
Howell, MI 48843
Population: 127
Free and Reduced Lunch: 55/9

Total: 703 Free and 209 Reduced

District Technology Committee Members 2011-2014

Name	Position
Michelle Hutchinson	Board Member and Parent
Chuck Hughes	Assistant Superintendent of Curriculum and Instruction
Scott Usher	Technology Director and Parent
Ethan Hawker	Teacher – High School
Matt Assenmacher	Teacher – High School
Cathy Peck	Teacher – Middle School
Michele Cannaert	Media Specialist – Middle School/High School/Farms Int.
Rose Naughton	Teacher – Farms Intermediate School
Patti Roberts	Teacher – Hartland Middle School at Ore Creek
Matt Gutteridge	Teacher/ – Creekside Elementary
Pam Juliar	Teacher/ – Lakes Elementary School
Barb Benford	Teacher/Media Specialist – Round Elementary School
Erin Dennis	Teacher/Media Specialist – Village Elementary School
Lindsay Smither	Elementary Principal
Steve Livingway	Secondary Principal

Educational Technology Plan Summary

Vision and Goals

Background:

In February of 2010, Hartland Consolidated Schools passed a 28 Million Dollar (5-year) Bond designated for facilities renovation and technology. Within this bond there was a roughly 7 million-dollar allocation for technology improvements. These improvements included, but were not limited to replacement of all primary computers in the district, district-wide wireless, building entry card-access security enhancements, extension of district fiber to the ISD, printer replacement, replacement of phone switch, and acquisition and implementation of interactive classroom technology in each of the district's classrooms.

The technology portion of the 2010 bond was designed to enhance teacher and student access to interactive technology in all classrooms throughout the district. All classrooms were outfitted with SMART brand SMART Boards providing interactive technology in all classrooms. An essential component to this implementation was our pilot group who received their SMART Boards a year early, received professional training throughout that year, and became their building trainers for the subsequent year.

Educational Technology Mission Statement:

The Hartland Consolidated Schools, in cooperation with the community, will provide and promote the use of technology to enhance curriculum and prepare students for life-long learning.

Educational Technology Vision:

Hartland Consolidated Schools vision is to create a community of technologically skilled individuals who are capable and motivated to meeting the increasing and diverse challenges of the future.

Goals of the Educational Technology Plan

Our strategic plan is aligned with our district's School Improvement Plan and the goals for technology laid out within. The School Improvement Plan includes the provision of adequate hardware in all buildings, the development of this three year Educational Technology Plan, and the provision of on-going staff training in the use of technology to enhance student learning.

For our strategic plan to have valid educational meaning for the staff and students at Hartland, the Educational Technology Plan will:

1. Provide the ability for students and staff to use current interactive technology as a tool to enhance skills in all academic areas.
2. Prepare the Technology Curriculum to be refined and implemented into each grade level.
3. Adopt hardware, infrastructure, and software applications for the following purposes: education of students, management of student, staff, and facilities data and reports, facilitate communication, and provide networking and electronic communication capabilities.
4. Promote and encourage staff training opportunities in the use and integration of instructional technology.
5. Provide a means for the maintenance, support, upgrade and growth of district technology.
6. Provide a means for measurement and refinement during implementation.

I. Curriculum

Goals: Provide the ability for students and staff to use current technology as a tool to enhance learning in all academic areas.

Allow for the Technology Curriculum to continue to be refined and implemented into each grade level.

Technology Integration

In the 2010-2011 school year, our media and technology teachers began to develop a Hartland Technology Curriculum based off the NETS and METS. The core curricula still need to be revamped over the next few years, the intent is to fully integrate the technology curriculum into content appropriate areas of the core curricula. The Technology Committee and Curriculum Department are making a commitment to revise the Technology Curriculum over the next few years. In addition, the technology curriculum will continue to be revised as new technologies emerge and different ways to use technologies continue to develop.

The district will maintain subscriptions to online curriculum resources, which provide teachers at all grade and subject levels resources and opportunities for curriculum integration. These online subscriptions will include research databases, and video subscription to online video streaming resources. These types of services provide staff and students access to over 50,000 content-specific segments and over 5,000 full-length educational videos. This video content is correlated with state standards and provides a means by which users can search for videos by curriculum standard, keyword, subject area, or grade.

Staff have or will have the ability to participate in training either in-person or by using a number of on-line tutorials prepared by various Hartland staff. These training resources will continue to evolve and grow. Training opportunities will be planned annually based upon need and the video collection will continue to be expanded.

Student Achievement

Through the course of previous Hartland Technology Plans, the technology committee developed Student Technology Benchmarks aligned with METS and NETS standards (see below). Over the course of this plan, the technology committee and the district's curriculum leaders will continue to refine the benchmarks and turn focus toward integration into the core curricula and implementation. As a part of the refinement process, the Technology Committee will include grade appropriate Internet Safety components built into the curriculum at each grade level. Basic strategies and examples will be developed for implementation into the district's classrooms as part of the integrated curriculum.

In an effort to continue to improve student achievement across the curriculum, we will be evaluating using a number of methods including, but not limited to state assessments and the 8th Grade Technology Portfolios.

Technology Delivery

It is the intent of Hartland Consolidated Schools to provide the technology necessary to meet curricular needs and improve academic achievement. Teachers and students have access to distant resources by way of the Internet using district computers located in computer labs, classrooms, and on mobile carts.

Hartland schools has invested in interactive classrooms technology (SMART Boards, Elmo Document Cameras, Epson Data Projectors, SMART Slates, and SMART Learning Response Systems) to aide with instruction throughout the district. Each classroom has been configured with an interactive white board, document camera, and data projector. Most of our computer labs do not have interactive white boards installed because by nature, the students are sitting at computers and that by nature provides interactivity for those in the classroom. There is, however, a data projector and screen connected to the teacher computer in those rooms. There will be a handful of wireless slates available for checkout in each building and a handful

of learning response systems available as well. Our goal is to provide opportunities to manipulate or interact from anywhere in the classroom. Teachers were provided iPads as well and given the opportunity to purchase (on the district) an application that provides the ability for the teacher to see and manipulate their computer's desktop from their iPad.

It is the intent of Hartland Consolidated Schools to continue to expand the capability of offering distant resources to teachers and students. Hartland Schools is poised to be able to participate in interactive video distance learning and will respond to the needs of the curricular leadership at the high school for participation in on-line course work. Hartland Schools offers several opportunities for our students to be involved in virtual academies. Students at the high school can elect to take courses offered by Michigan Virtual University. Students who choose to do so can participate in our Hartland Virtual Academy in conjunction with the Michigan Seat Time Waiver Program. These opportunities reach students at our 9-12 grade high school and our alternative education program who desire to take courses not offered in our buildings or who prefer a non-traditional approach to learning.

Hartland Schools will continue to work closely with the special education department to provide assistive technology to students in need. Special Education teachers and aides will utilize resources to ensure all students have access to technology. Examples include special keyboards and mice, text to speech software, sound-field amplification, wheel chair accessible workstations, touch devices such as iPads and iPods, and mobile computing solutions such as laptops and Chromebooks. Each school in the district will continue to make available any open time slots in the technology lab for classroom teachers to use for integrating technology in daily lessons and using technology as a tool.

Parental Communications and Community Relations

The district has made a commitment to involve the parents and community in all facets of Hartland Consolidated Schools, including technology. The Technology Plan and incorporated curriculum will be posted on the district's web site (<http://www.hartlandschools.us/Departments/Support-Services/Technology/index.html>) and printed copies will be available to anyone who asks. The public at large has the opportunity to voice opinions and offer suggestions at a minimum of two public Board of Education meetings where the Technology Plan is discussed prior to Board approval. In addition to the public at large, there also exists parental representation on the Technology Committee.

Student accomplishments will continue to be traditionally delivered to parents; however, electronic delivery of materials and information including school newsletters is also available and all parents and students in the district are able to access grades, attendance, and lunch purchases online. Newsletters from all buildings are available electronically and those parents who do not have electronic access to these documents may still request a paper copy available at any building office. The district uses our student information system, website, and email system to communicate electronically with parents. There is an effort on the part of individual teachers, individual buildings, and the district as a whole to use various social media outlets (Facebook and Twitter) to communicate with the community. In addition, we have implemented parent phone and text system to convey anything of importance to district stakeholders.

Hartland Consolidated Schools has also worked very hard to build an extensive community education program. Hartland Community Education offers courses in basic computer literacy, Microsoft Office Suite, digital imagery, web page design, and the utilization of eBay. We currently offer two levels of senior citizen basic computer classes designed just for senior citizens.

Collaboration

In the Fall of 2004 Hartland Community Education entered into an agreement with Washtenaw Community College. The college offers an array of opportunities in Hartland including a variety of computer classes.

Hartland Community Education and the Hartland Senior Center also offer an array of computer classes available in district computer labs throughout the year.

Beginning in the Fall of 2012, Hartland Schools partnered with the University of Michigan Flint and their DEEP program to offer college-level classes to students from Hartland and surrounding school districts. The DEEP program offerings increased significantly during the 2013-2014 school year.

At the present time, Hartland Consolidated Schools does not offer GED certification. While we do have an ESL Tutor available to Hartland students, we do not currently offer this program at the post-graduate level.

Student Technology Benchmarks (Based upon ISTE NETS for Students and the Michigan Curriculum Framework) **Hartland Consolidated Schools**

Kindergarten

The student will be able to:

1. Identify Computer Parts and Hardware peripherals.
2. Turn the computer on and shut down properly.
3. Use the mouse to point, click, open, and close programs.
4. Identify and use the keyboard's basic functions including enter and spacebar.
5. Login to the network using a simple generic username and password.

First Grade

The student will be able to:

1. Apply all Kindergarten Benchmarks.
2. Identify and open appropriate applications and software.
3. Describe technology that is used at home.
4. Demonstrate the ability to print to the appropriate printer for a specific project.
5. Understand and demonstrate basic computer care.
6. Use technology, when appropriate, in curricular areas: Language Arts, Math, Science, Social Studies, Art, Physical Education, and any others.

Second Grade

The student will be able to:

1. Apply all First Grade Benchmarks.
2. Identify the home row and be able to properly place hands in the home row position.
3. Select different font types and sizes.
4. Login to the network using a unique username and password.
5. Open, save/save as, print, and close a document.
6. Demonstrate the functionality and uses of a toolbar.
7. Demonstrate the ability to use a word processor by creating a finished document.
8. Demonstrate the skills necessary to use a web browser and browse Internet resources.
9. Demonstrate the ability to research information using web and/or CD-ROM reference software.

Third Grade

The student will be able to:

1. Apply all Second Grade Benchmarks.
2. Demonstrate the use of the keyboard with correct fingering for letter, shift, punctuation keys, and spacebar.
3. Save files to and retrieve files from the district's network.
4. Use print preview, undo, redo.

5. Insert graphics into programs.
6. Use the right click mouse function.
7. Perform basic text formatting tasks: font color, bold, italic, and underline.
8. Obey copyright and licensing laws.
9. Demonstrate understanding of the appropriate use of Internet resources, technology safety rules, privacy, and the district's Acceptable Use Policy.
10. Begin working with multimedia and create a finished document.

Fourth Grade

The student will be able to:

1. Apply all Third Grade Benchmarks.
2. Cut, copy, and paste.
3. Describe the impact that technology has had on people's lives.
4. Maintain familiarity and comply with copyright and licensing laws.
5. Maintain familiarity and comply with the district's Acceptable Use Policy.
6. Use desktop publishing software to create a product.
7. Use web browsers and search engines as research tools:
 - a. Type URL in location field.
 - b. Understand that not all sites are appropriate as sources of valid data.
 - c. Follow proper online etiquette.
8. Begin to independently use Media Center Technologies:
 - a. On-line databases
 - b. Library Catalogue System
 - c. Etc.

Fifth Grade

The student will be able to:

1. Apply all Fourth Grade Benchmarks.
2. Set margins and change page orientation.
3. Demonstrate file organization skills.
 - a. Create Folders
 - b. Rename Folders
 - c. Save files in folders
4. Utilize multimedia in a project.
5. Continue to develop keyboarding skills.
6. Choose appropriate software for a project.
7. Understand and use relevance and accuracy in online research.
8. Use information gathered online to produce a product (report, desktop publishing, etc).

Sixth Grade

The student will be able to:

1. Apply all Fifth Grade Benchmarks.
2. Discuss advancements in technology and describe the impact they have had on our society.
3. Appropriately use graphics in a project.
4. Use on-line resources for research and communication to demonstrate basic Internet search skills.

Seventh Grade

The student will be able to:

1. Apply all Sixth Grade Benchmarks.
2. Demonstrate the appropriate use of Internet resources.

3. Model ethical, legal, safe, and responsible behavior when using technology.
4. Develop spreadsheets.
5. Develop graphs from spreadsheets.
6. Use a scanner and digital camera to capture an image and use in a project.
7. Develop a basic understanding of what a network is and what it does.
8. Produce a multimedia presentation.

Eighth Grade

The student will be able to:

1. Apply all Seventh Grade Benchmarks.
2. Demonstrate advanced features of word processing and basic features of spreadsheets and multimedia computer applications to produce an integrated product.
3. Continually model ethical, legal, safe, and responsible behavior using technology.

Ninth – Twelfth Grade

The student will be able to:

1. Apply all Eighth Grade Benchmarks.
2. Produce documents using word processing skills.
3. Manipulate databases by gathering and reporting data, interpreting, and communicating results.
4. Process numeric information using a spreadsheet.
5. Use content-specific software (ex: Drafting, Business, Science, Journalism, Math, etc).
6. Use content-specific technologies (ex: Drafting, business, Auto, Art, etc).
7. Investigate careers that use various technologies.
8. Continue to model responsible, safe, and ethical use of technology.
9. Demonstrate email etiquette.
10. Produce an advanced multimedia presentation.

Over the course of the next three years, the Technology Committee will be working with the Curriculum Department to integrate the Technology Curriculum into the core curriculum. The following are the strategies for its integration:

Goals and Timetable	
Date	Description of Task
2014-2017	Refine K-8 Technology Curriculum
2014-2017	Integrate K-8 Technology Curriculum Into Classrooms
Ongoing	Email Monthly Newsletters from buildings and post on district website
Ongoing	Use Email, Website, Student Information System, Website to community with parents and district stakeholders
Ongoing	Continue to work with Curriculum Department and offer valuable technology training opportunities to district teachers and staff.

II. Professional Development

Goal: Promote and encourage staff training opportunities in the use and integration of technology, at the Hartland Consolidated Schools.

Professional Development Programs

Each year, all new teachers to the district are required to attend a half-day training session on the use of educational technology in the classroom. Teachers (within the first 3 years of practice) have the ability to participate, voluntarily, in annual training opportunities offered by district trainers. This effort has helped Hartland's newer teachers reach their required 15 days of professional development per year. The district plans to continue and expand this practice in subsequent years.

Training for veteran teachers has been offered on both a mandatory and voluntary basis. Mandatory training occurs when applications are adopted or procedures are changed to such a degree that day-to-day teaching would be affected. In addition, we have begun to offer options from which teachers can select on days when it is mandatory for them to participate in technology training. The intent is to make the training more valuable to the individual teacher. Voluntary training occurs throughout the year at the building and district level for teachers when opportunities exist to share new ideas and ways of conveying information using technology. Our Data Techs make themselves available to district staff and can be scheduled for as little or as much time is needed.

District trainers include members of the technology staff, teachers, administrators, and other staff members. Through the course of this plan, we will survey our staff and use that data in conjunction with the national standards (NETS for teachers and administrators) to help us develop the best training opportunities.

When district staff have questions or issues regarding the use or integration of technology, they have access to the curriculum, and technology staff who are all capable of assisting with their needs. In addition, access to a growing library of how-to videos provides staff with the ability to discover a solution to a problem or an answer to a question on their own.

The district will continuously seek additional resources for professional development, including REMC, LESA, and RESA in an effort to assist teachers with the utilization of technology. The Technology Director will continue to work with other local districts Technology Directors to offer training and online resources to all local teachers.

The current budget for the support of professional development for the use of technology is \$1,000 annually out of the technology General Fund. Title II monies have also been used in recent years at the amount of approximately \$2,000 per year. Hartland Consolidated Schools is aware that in order to support professional development initiatives, additional resources will need to be allocated. A continual effort will be made by the Technology and Curriculum Departments to continue to send teams of teachers and administrators to the MACUL conference.

Because access to technology requires a high level of responsibility, all district employees are required to sign the Staff Acceptable Use Policy prior to using district technology. Since the district continues to acquire technology for use in the learning environment on a regular basis, staff has access to a number of basic training materials via a technology website.

Professional Development Training Goals and Timetable:

- New teachers are required to attend a mandatory technology orientation session on their first official day in the district. – Ongoing during August each year
- Make available Technology Standards and Benchmarks for Teachers (Appendix I). – Ongoing
- Develop and make available Technology standards and benchmarks for Administrators (Appendix II), Office Secretaries and Paraprofessionals, Classroom Paraprofessionals, and Media Center Staff (Administrators Standards are based upon the NETS for Teachers) - Ongoing
- Survey district stakeholders annually and continue to develop training opportunities based upon NETS and data collected – Ongoing Survey in Spring of each year.
- Continue to identify trainers for various groups. The district will utilize students, teachers, community members, ISD Staff, and district staff members with specialized technology skills as trainers. - Ongoing
- Continue to solicit training assistance from LESA and RESA. – Ongoing
- Train teachers not only to develop a set of skills in using technology, but to incorporate their knowledge in day-to-day lesson plan development and use correct terminology. – Ongoing
- Train Technology Staff as new technologies are adopted. – Ongoing

III. Infrastructure, Hardware, Technical Support, and Software

Goal: Allow for the adoption of hardware, infrastructure, and software titles for the following purposes: education of students, management of data and reports (for students, staff, and facilities), facilitate communication, and provide networking and electronic communication capabilities.

Infrastructure

LAN/WAN (See Network Diagram in Appendix IV)

All district buildings are connected via our private fiber WAN terminating into Cisco 3550 or Cisco 3750 switches at the far ends and all running back to our high school facility on the main campus which houses a Cisco 6509 core. All buildings have IDF's (remote data closets) that are connected to each MDF (main data closet) via Multi-Mode fiber gigabit connections.

The district currently connects to our Internet Service Provider (Wayne RESA) with an AT&T product called Optiman which currently provides a 100 Mb connection which is upgradeable. In addition, we have split our data between that connection and a fiber connection to the ISD where we share a 600 Mb connection with other Livingston County Schools. We have employed a Cisco PIX Firewall and a Cisco ASA which provides protection from intrusion on both our 100 Mb and the shared 600 Mb connections.

Through the course of this plan, we will need to maintain our membership in the County Fiber Consortium and be prepared to repair any failed equipment.

File Servers

Currently, Hartland Schools runs a server farm in order to meet the academic and business needs of our organization. All of the main servers for the district are located in a server farm in the MDF at the High School. We have a current install of about 500 virtual desktops and will be expanding to approximately 1,500 desktops over the course of this technology plan. That server infrastructure is comprised of a NetApp storage appliance, and we use a VMware View solution for our end virtual machines. Email and voice mail is retrieved from our educational Gmail accounts and computer imaging is handled using a combination of our Altiris Server and our Microsoft Management Console. The district's Internet content filtering and email virus scanning is governed by our LightSpeed server which receives nightly blacklist downloads.

As we continue to replace server infrastructure, we will continue to virtualize where possible.

Back-Up

Hartland Schools has an extensive back-up plan to protect from catastrophe. All student and staff files are replicated to a 13 TB back-up device located off-site at the Support Services Center. In addition, files are backed-up daily to tape. Each month the tape backups are removed from the tape server and taken to an off-site storage location, locked in a fire-proof cabinet.

Objective	Description/Rationale	Timetable	Progress
F.1 Continue to keep servers up to date and properly patched	This will avoid security breaches and help to curtail incompatibilities with newer applications running on the servers	On-Going	

Server Replacement Schedule		
Servers	DOP	Replace
NetApp1	2012	2018
NetApp2	2012	2018
VMHost02	2009	2016
Cstr1-esxi01	2012	2018
Cstr1-esxi02	2012	2018
Cstr2-esxi04	2012	2018
Cstr2-esxi05	2012	2018
Cstr2-esxi06	2012	2018
Cstr2-esxi07	2012	2018
Cstr2-esxi08	2012	2018
Cstr2-esxi09	2012	2018
Cstr2-esxi10	2012	2018
Cstr2-esxi11	2012	2018
Cstr2-esxi12	2012	2018
Cstr2-esxi13	2012	2018
Cstr2-esxi14	2012	2018
Cstr2-esxi15	2012	2018
Cstr2-esxi16	2012	2018
Cstr2-esxi17	2012	2018
Video1	2012	2018
NDVR1	2012	2018
NDVR2	2012	2018
DC1	2012	2018
FS1	2012	2018
DC2	2012	2018
FS2	2012	2018
HA_UTIL	2009	2016
localhost.nettechlab.local Ocularis Camera Host	2012	2018
Win-45unk73rgkv Ocularis	2012	2018
Win-du2p8untcsb Ocularis	2012	2018

Voice

Hartland Schools uses three T1 prime phone lines that carry a total of 72 connections which are shared across the entire district. The server infrastructure is Cisco's Call Manager and Cisco Unity for Voice Mail. The edge connections are Cisco 2960 PoE switches. In the classrooms and offices, we have Cisco IP handsets and in some conference rooms, we have placed some Cisco conference phone devices. In addition to the land-line phone, Hartland Schools also issues cellular phones to some district administration, technology, and maintenance personnel. Cellular phones and district phone lines are all E-rate eligible and are used to promote safety, parental communication, and expedite service enhancing the ability of the district to provide the most effective learning environment.

In all district buildings, a small number of Centrex lines are still used as 911 emergency, fire alarm, security system, energy management system, and elevator lines. These lines are POTS lines and do not interface with our district-wide phone and voice mail system save for the 911 emergency lines which allow outgoing calls in the event of power failure.

The district currently has its maintenance, and some of its administrative personnel equipped with cell phones. These devices are essential for repairs, maintenance, and emergency communication.

Video/Security

District buildings have access to our Safari Montage Video Distribution Server. Classroom video content is delivered across IP so each computer can display any subscribed video content or locally created content using an Internet Browser. This can then be displayed on the classroom SMART Board through the data projector and audio can be heard through the soundfield amplification in the classroom. The district and media centers will continue to maintain the subscription to the Safari Montage content and expand the district-created content.

District buildings have video surveillance with cameras strategically located throughout the interior and exterior of the facilities. A few of our buildings have older Pelco cameras and DVRs located within them while others have newer Ocularis DVR software and Sony cameras.

All of our buildings have key FOB building access systems enabling us to not have to use the traditional brass key solution to allow access. Swipe card readers and door mechanisms were added to specific exterior doors across the district in 2013.

Objective	Description/Rationale	Timetable	Progress
V.1 Continue our subscription to educational on-line videos	Video Streaming solutions are currently bringing content to classrooms.	Annual and On-going	
V.2 Expand FOB system to select doors as identified by district administration	Provide additional access where needed.	August 2014	
V.3 Plan for and execute key collection and re-coring of exterior doors throughout district.	Increase security	August 2014	

Computer Hardware and Peripherals

The major issue facing the Hartland Consolidated Schools, with regard to hardware, is the timely replacement of its 2000+ computers and the ability to get educational technology into as many student hands as possible. The use of computers in education is essential and the potential benefits to enhance student learning are significant. However, the equipment must be in good working condition and capable of supporting the current software titles and applications to have the most impact on a student's learning. Some locations do not require the technology to be as new so some older computers may be re-allocated. In locations where computers must be newer to support current software or teaching practices, this plan calls for a replacement after 5 years.

The entire printer fleet will be replaced during the summer of 2014.

Teacher computers are desktops because of the need for them to be connected to the SMART Boards in each classroom and the inefficiencies associated with having to disconnect and reconnect a laptop computer each day to take it with them. Teachers are also all assigned an iPad so they can still experience and benefit from mobile computing. Our district-wide wireless, which was installed in the summer of 2012 continues to promote anytime anywhere learning for students and staff alike. Interactive classroom solutions have been installed into all district classrooms: Interactive whiteboards, data projectors, and document cameras. In addition, wireless technology devices (slates and classroom response systems) are available in all buildings throughout the district.

During the summers of 2012 and 2013 we installed a virtual desktop integration (VDI) solution at Farms, Round, Village, and Lakes as pilot schools. During this install we learned that the solution was not viable for Hartland Teachers due to the extensive use of multi-media resources and our SMART Notebook software. Videos lagged and the SMART Notebook software did not function correctly in the VDI environment. After attempting many fixes we decided that we should cease transitioning the teacher workstations to the VDI environment and instead use traditional desktops in those locations. Student desktops proved to not have these types of issues so we plan to move forward with the VDI install on student workstations throughout the next two summers.

Due to the needs of online testing required by school districts in Michigan beginning in 2015, we will be purchasing Chromebooks and carts to provide sufficient devices upon which students will use to test.

Considerations for Hardware and Peripheral Replacement

- General funds cannot be the only method of funding technology replacement and procurement.
- Teacher computers need to be capable of running the common teacher applications in the district.
- Student computers need to be capable of running grade and content specific software in the location the computer resides.
- In general, all district technology/computers must be kept current based upon how the device is being used.
- Those areas of proven and productive technology use should receive priority over those areas that have not displayed as productive uses.
- All computers should be placed where they are most productive.
- Primary computer devices are 0-5 years old and will be included in the replacement plan.
- Supplemental computer devices are 5 years old or older and are not included in the replacement plan.
- More advanced/newer technologies will change the costs and hardware solutions for what is considered a primary computer workstation.
- This plan will focus on complete and functional solutions.

- The needs of equity issues and assistive technology are constantly addressed and updated.
- As the availability of finances allows, computers will be upgraded and/or reassigned to extend their useful life.

Current Primary Computer Inventory

Location	Teacher	Student	Admin	Total	Brand	Processor	Purchased Date
CES							
CES DT	32	97	12	141	Dell	P-IV 2.5 GHz Dual Core	July 2009
CES LT		16	2	18	Dell	P-IV 2.5 GHz Dual Core	July 2009
CES Thin Client				0			
Chromebooks				0			
TOTAL	32	113	14	159			
LES							
LES DT	32	40	7	79	Dell	P-VI 1.8 GHz Dual Core	July 2007
LES LT	1		1	2	Dell	P-VI 1.8 GHz Dual Core	July 2007
LES Thin Client				0			
Chromebooks				0			
TOTAL	33	40	8	81			
RES							
RES DT	30	41	9	80	Dell	P-VI 1.8 GHz Dual Core	July 2007
RES LT	1		1	2	Dell	P-VI 1.8 GHz Dual Core	July 2007
RES Thin Client				0			
Chromebooks				0			
TOTAL	31	41	10	82			
VES							
VES DT	31	44	7	82	Dell	P-VI 1.8 GHz Dual Core	July 2007
VES LT	1		1	2	Dell	P-VI 1.8 GHz Dual Core	July 2007
VES Thin Client				0			
Chromebooks				0			
TOTAL	32	44	8	84			
FIS							
FIS DT	50	81	11	142	Dell	P-VI 1.8 GHz Dual Core	July 2007
FIS LT		9	2	11	Dell	P-VI 1.8 GHz Dual Core	July 2007
FIS Thin Client		31		31	Dell		July 2012
Chromebooks				0			
TOTAL	50	121	13	184			
HMS							
HMS DT	51	255	15	321	Dell	2.53 GHz Core 2 Duo	July 2008
HMS LT		47	3	50	Dell	2.53 GHz Core 2 Duo	July 2008
HMS Thin Client				0			
Chromebooks				0			
TOTAL	51	302	18	371			
HHS							
HHS DT	100	399	24	523	Dell	2.7 GHz Core 2 Duo	July 2010
HHS LT		88	2	90	Dell	2.7 GHz Core 2 Duo	July 2010
HHS Thin Client				0			
HHS CAD		62		62	Dell	3.2 GHz Quad Core	July 2012
HHS Mac		72	4	76	Mac	3.2 GHz Quad Core	July 2012

HHS Mac LT	5			5	Mac	2.6 GHz Core i7	July 2012
Chromebooks				0			
TOTAL	105	621	30	756			
SSC							
SSC DT	25	52	43	120	Dell	P-II 266 - PIV 2.8 GHz	Jul-98 thru Jul-04
SSC LT		18	8	26	Dell	P-II 266 - PIV 2.8 GHz	Jul-98 thru Jul-04
SSC Thin Client				0			
SSC Mac	31		2	33	Mac	2.93 GHz Core 2 Duo	July 2009
SSC Mac LT			3	3	Mac	2.4 GHz Core i5	July 2009
Chromebooks			2	2	Samsung	Samsung Exynos 5250 Dual	March 2013
TOTAL	56	70	58	184			
Bldg 51							
Bldg 51 DT	11		3	14	Dell	P-VI 1.8 GHz Dual Core	July 2007
TOTAL	11	0	3	14			
Grand Total	401	1352	162	1915			

Primary Computers Guidelines

- 1 teacher desktop assigned to each classroom.
- Administrative computers are for office, clerical and technology use
- Minimum of 2 student computers for each special education room
- 30 student computers per computer lab (Exceptions Below)
 - 35 in HHS Media Lab to accommodate larger classes
 - 33 in lab 300 and 204 at the HHS
 - We would like to increase to 35 in the HMS Media Center in the future
 - 8 in HHS Music Lab
 - 31 in HMS in rooms 31 and 33 and FIS Apps Lab

Supplemental Computer Guidelines

- Allocated to the locations proven to be productive with technology (never new computers)

Objective	Description/Rationale	Timetable	Progress
H.1 Replace computers as they become too costly to maintain or incapable of performing the processes needed	As large numbers of computers become older, the cost of maintaining them grows rapidly. In addition, newer and more advanced software and other applications often do not run as quickly making the use of the computer less desirable.	See replacement schedule below this table	
H.2 Provide any building with computer that is wheelchair accessible as needed.	When the need arises, any building with the need will be provided a computer that can be accessed by a user who uses a wheelchair. That may be a desktop with a wheelchair desk or it may be a laptop that can easily be placed on the lap of the end-user.	Ongoing	
H.3 Provide the high school with at least two portable voice amplification systems.	Devices that can be carried around or be placed in specific classrooms to accommodate students who have difficulty with hearing.	July 2015	
H.4 Continue discussions with the technology committee and the department of special education the district's needs for assistive technologies.	Various assistive technologies are available and continue to become available which are helpful to students of varying disabilities.	On-Going	
H.5 Purchase thin client computing devices for labs at LES, VES, RES, FIS, SSC...Qty 196.	Replace aging devices purchased in 2007.	See replacement schedule below this table	
H.6 Expand VDI Server Environment to accommodate up to 1,500 end users.	Expand VDI to CES, HMS, HHS on student machines to prepare to replace aging desktop technology	July 2014	
H.7 Purchase thin client computing devices for labs at CES, HMS, HHS	Replace aging desktop devices throughout district purchased between 5 and 9 years prior.	See replacement schedule below this table	
H.8 Purchase Chromebooks 256 Devices	With TRIG Grant money to prepare for state-mandated on-line testing	July 2014	

Computer Device Replacement Schedule (Computers, iPads, Chromebooks, Thin Clients)

Summer 2014										
	CES	LES	RES	VES	FIS	HMS	HHS	SSC	Bldg 51	Total
Admin DT										0
Admin LT										0
Teacher DT										0
Teacher LT										0
Student DT										0
Student LT										0
Mac DT										0
Mac LT										0
iPad										0
Chromebook	32	32	48	32	112	16		32		304
Thin Client										
Total	32	32	48	32	112	16	0	32	0	304

Summer 2015										
	CES	LES	RES	VES	FIS	HMS	HHS	SSC	Bldg 51	Total
Admin DT		7	9	7	11				3	37
Admin LT		1	1	1	2					5
Teacher DT		32	30	31	50				11	154
Teacher LT		1	1	1						3
Student DT										0
Student LT										0
Mac DT										0
Mac LT										0
iPad										0
Chromebook										0
Thin Client		40	41	44	112					237
Total		81	82	84	175	0	0	0	14	436

Summer 2016										
	CES	LES	RES	VES	FIS	HMS	HHS	SSC	Bldg 51	Total
Admin DT						15				15
Admin LT						3				3
Teacher DT						51				51
Teacher LT										0
Student DT										0
Student LT						32				32
Mac DT										0
Mac LT										0
iPad										0
Chromebook										0
Thin Client						255				255
Total		0	0	0	0	356	0	0	0	356

Summer 2017										
	CES	LES	RES	VES	FIS	HMS	HHS	SSC	Bldg 51	Total
Admin DT	12						24			36
Admin LT	2						2			4
Teacher DT	32						100			132
Teacher LT										0
Student DT										0
Student LT										0
Mac DT							4			4
Mac LT							5			5
iPad										0
Chromebook	16									16
Thin Client	97									97
Total	159	0	0	0	0	0	135	0	0	294

Summer 2018										
	CES	LES	RES	VES	FIS	HMS	HHS	SSC	Bldg 51	Total
Admin DT										0
Admin LT										0
Teacher DT										0
Teacher LT										0
Student DT							14			14
Student LT							88			88
CAD DT							62			62
Mac DT							72			72
Mac LT							0			0
iPad										0
Chromebook										0
Thin Client							385			385
Total		0	0	0	0	135	621	0	0	621

Summer 2019										
	CES	LES	RES	VES	FIS	HMS	HHS	SSC	Bldg 51	Total
Admin DT								43		43
Admin LT								8		8
Teacher DT								25		25
Teacher LT										0
Student DT										0
Student LT								18		18
Mac DT								33		33
Mac LT								3		3
iPad										0
Chromebook								2		2
Thin Client								52		52
Total		0	0	0	0	0	0	184	0	184

Software

PC computers in the district are running Windows XP, 7, or 8 operating systems and Mac Computers are running version 10.5 or higher. Each computer also has Office 2003 or 2010, installed on it. The district has invested in the Microsoft EES Licensing Program enabling us to install any version of Microsoft Windows and Office so desired on any number of computers throughout the district. EES Licensing is an annual renewal but ensures the district an operating system and productivity software that are current and up to date for our end users. Email users access their school email and calendar Gmail using a web browser. The district's Student Information System is MiStar supported by programmers at Wayne RESA. Specialized grade level or subject matter software is available to students and teachers. Web hosting is provided by Catapult K-12 and has been in place since summer 2013. For a complete list of software applications used in the district, see Appendix III.

General Guidelines for Software Acquisition Proposals

- All proposals must clearly indicate all details and rationale
- All proposals must include a detailed description of the software
- All proposals must include a projected cost and a description of how those costs were developed
- All proposals must include a description of how they will improve the productivity or enhance student learning throughout the district
- All proposals must be submitted first to the building Principal for pre-approval
- All proposals must be approved by the District Technology Committee
- All proposals must attempt to use the REMC Statewide Bid to save on the purchase of software packages.

Procedure for Software Proposals

- After receipt of a proposal that has followed the general guidelines, the District Technology Committee will review
- Proposals will be presented based upon the timeline below
- Proposals will be discussed at that time
- The District Technology Committee may then approve, recommend revisions, or reject a proposal
- Once approved, a proposal will be prioritized by the District Technology Committee.

Timeline for Proposal

- September District Technology Committee Member Selection
- September Organizational Meeting
- November Proposals are presented to Technology Committee
- February Proposals are presented to Technology Committee
- April Proposals are prioritized and publicized

Objective	Description/Rationale	Timetable	Progress
S.1 Maintain Microsoft EES Licensing	EES Licensing allows the district to install current versions of Windows and Office on any number of devices district-wide based upon employee FTE. This is essential to maintain current updated and patched operating system and productivity suite software.	Annually in October	
S.2 Maintain Web Hosting Solution inclusive of Teacher Websites	District and individual classroom websites are hosted offsite and have been since Summer 2013. This hosting solution should be maintained ensuring teachers classroom websites.	Annually in June	
S.3 VMWare Licenses	Connect thin clients to VM Servers	Annually in July	
S.4 Cisco UCS SMARTnet	Server maintenance for VM Servers	Annually in July	
S.5 NETAPP Storage Maintenance	Server maintenance for NetAppl connection for VM Servers	Annually in July	
S.6 Thin Client EES VDA Windows Client Access	Allows thin client devices to connect to Windows OS in the VDI	Annually in July	

Technical Support

Hartland Consolidated Schools supports technology with a full-time District Technology Director, a shared Network Administrator with another district, two full-time Computer Technicians, a full-time Student Services Coordinator, two full-time Data Technicians, and a part-time Help Desk Coordinator. The shared services agreement has been in place since Fall 2008 and is coordinated by our local ISD. At the elementary, a full-time Media Specialist often act as the first point of contact many technology needs and is often the building-level coordinator for technology. At the Farms Intermediate School, a teacher and the part-time Media Specialist often act as the point of contact and are responsible for building-level coordination. In the middle school, the technology department Data Technician is the first point of contact, but the part-time Media Specialist and Data Technician together act as the building level coordinator for technology. At the high school the technology department Data Technician acts as the first point of contact and coordinate with the Media Specialist for building level technology coordination. In the event the building level contacts and Data Technicians are not readily available, end users contact our Help Desk Coordinator. Our Data Technicians, Help Desk Coordinator and building level contacts are essential for timely responses to problems, training, and maintenance of our data systems.

If a technology issue is too complex or time-consuming for the building contact to handle, a trouble ticket is generated. Once a ticket is opened, the issue remains in the database until the problem is resolved. Systems and procedures are in place to speed the repair process, including, computer imaging software, proper back-ups, and computer management policies on the individual workstations.

In the summer of 2013, we expanded the technology department from 5.2 FTE to 6.9 FTE by adding .3 FTE Help Desk, expanding a .6 FTE Computer Technician to 1 FTE and adding a 1 FTE Data Technician. We also split the district into two sections where a Data Tech and Computer Tech would be responsible for covering issues in a select buildings believing the buildings would get very comfortable knowing whom to expect when a ticket was submitted (See Appendix VI). We are trying to building culture where the end user feels and truly is more supported, but also in conjunction with professional development can address some of their own needs or find assistance in a nearby classroom form another end user. We continue to monitor and evaluate the success of this expansion and will continue to make adjustments when issues arise.

Our current level of support, while not in an overabundance, is much better than in recent years. That in addition to the systems and procedures that have been put into place enable the technology staff to be able to manage the technological needs of district staff and students. With the installation and implementation of the extensive interactive classroom technology and other systems we have implemented throughout the district, we will need to closely monitor the abilities of our current staffing to continue to attend to the technological needs of the district. The Technology Director will continue to keep upper management aware of the department's ability to keep everything running efficiently.

Funding and Budget

Goal: Provide a means for the maintenance, support, upgrade and growth of district technology.

Hartland Consolidated Schools is in the process of implementing a 28 million dollar school renovation bond. With these funds, Hartland Schools has conducted both minor and major remodeling to a number of its facilities. As part of the 28 million Bond, Hartland Schools committed 7 million dollars to technology improvement and replacement throughout the district.

Some of the major technology improvements include: The installation of district-owned fiber connecting our district to the remainder of the districts and ISD in Livingston County, primary computer replacement over a 5 year implementation plan, installation of classroom interactive technology in every classroom throughout the district, installation or replacement of sound-field technology in every classroom K-8 and installation of sound amplification in every other classroom 9-12, adding wireless throughout the district for both direct internet access to public devices and district network connectivity to all Hartland Schools devices, replace and expand some network infrastructure, and increase security with card access and video surveillance equipment.

Coordination of Resources

Universal Service Fund (USF):

Hartland Schools has applied for and will continue applying for universal service discounts under the universal service support mechanism, E-rate, which is a federal program created to provide discount reimbursements and assist most schools and libraries with obtaining affordable technologies, including telecommunications and internet access. Discounts are based on an individual schools' enrollment in the National School Lunch program. Hartland Consolidated Schools anticipates obtaining approximately \$30,000 annual average reimbursement from E-rate.

Grants:

Hartland Schools will continue to seek out federal and state grants that will help in implementing our long-range technology plan. Any grant funds received will be disbursed according to the goals and objectives outlined in our technology plan. Accordingly, our plan will evolve as new technologies arise. To avoid duplication of funds, we will consistently update our technology plan to reflect technologies that have been acquired.

Bonds:

Hartland Schools has been in the process of implementing four different Bonds at different times for various reasons for the past 15 years. Each of those Bonds have included technology components which have added to the technological arsenal of educational resources at Hartland Schools.

General:

- Technology purchases will continue to take advantage of State-Wide REMC bid pricing and other competitive bids on as much technical equipment as possible.
- Technology department, curriculum department, and building level funds will be coordinated to provide equitable funding for technology.

- Hartland schools will continue to participate in the shared services agreement with our Livingston Educational Services Agency. Currently, we employ .6 FTE of our 6.9 FTE technology staff through this agreement and as needs or opportunities arise, we will continue to do so, making the best use of district funds to support technology.
- Additional sources of funding for replacement of equipment and new acquisitions will be explored.

Budget Item	2014-2015	2015-2016	2016-2017
Revenue Sources			
General Funding	\$896,334.67	\$993,950.35	\$1,006,600.69
Bond Funds	\$778,844.50	\$266,750.00	\$200,100.00
E-Rate Funding	\$28,612.51	\$28,612.51	\$28,612.51
TRIG Grant	\$7,102.28		
Total Revenue	\$1,710,893.96	\$1,289,312.86	\$1,235,313.20
Expenditures			
Salaries and Benefits	\$409,396.00	\$421,677.88	\$434,328.22
Supplies - Computer	\$75,000.00	\$75,000.00	\$75,000.00
Annual Software Licensing (New 2014-2015)	\$130,161.49	\$215,495.29	\$215,495.29
Data Processing Services LESA (MiStar, SMART, Cyborg, Data Dir.)	\$138,978.00	\$138,978.00	\$138,978.00
LESA Consulting (Tech Consortium Personnel)	\$67,629.00	\$67,629.00	\$67,629.00
Contracted Services Data Processing	\$8,500.00	\$8,500.00	\$8,500.00
Travel/Conference Computer	\$6,000.00	\$6,000.00	\$6,000.00
Data Processing Computer Supplies	\$7,200.00	\$7,200.00	\$7,200.00
Internet Connectivity	\$11,175.97	\$11,175.97	\$11,175.97
Verizon Telephone	\$22,529.80	\$22,529.80	\$22,529.80
AT&T	\$48,376.92	\$48,376.92	\$48,376.92
Technology Upgrade and Replacement	\$0.00	\$0.00	\$0.00
Replace File Servers F.1	\$62,018.00		
Expand FOB system to select doors V.2	\$25,000.00		
Plan for and execute key collection and re-coring of exterior doors V.3	\$10,000.00		
Computer and Thin Client Replacement Summer H.1, H.5, H.7		\$266,750.00	\$200,100.00
Expand VDI Server Environment H.6	\$411,826.50		
Replace printers throughout district H.9	\$200,000.00		
PAC Sound/Light Board	\$70,000.00		
Purchase Chromebooks H.8	\$7,102.28		
Total Expenditures	\$1,710,893.96	\$1,289,312.86	\$1,235,313.20

Monitoring and Evaluation

Goal: Provide a means for measurement and refinement during implementation.

Because technology continues to change, it is important to annually review the technology plan. The evaluation process will identify successes and weaknesses which will allow the Technology Committee to make adjustments and improvements as needed. The entire plan will be reviewed annually assisting the committee in determining hardware and software needs. In addition, annual evaluation is necessary to monitor the extent to which technology is being used in the classroom to enhance student learning.

The District Technology Committee will meet a minimum of four times during the school year to review and discuss the progress of the technology plan. The committee, with input from the technology staff, will review and evaluate the process of curriculum integration, staff professional development, hardware and software acquisition and implementation, and the ability of the district to financially meet the needs of the plan.

Curriculum

To evaluate curriculum integration, Hartland Schools will rely heavily on empirical evidence. Principals and teachers will be surveyed to determine the extent of technology use and integration taking place in buildings. An increase in the use of technology by staff and students will indicate that the technology plan has been at least in part successful. The committee will also use data collected from the 8th Grade Technology Portfolios, and state standardized tests to determine the plan's effectiveness at the various school buildings in the district.

Professional Development

The effectiveness of training opportunities will also be reviewed. Workshop evaluation forms and the number of participants signed up for voluntary training will be considered. An increase in participation for voluntary workshops will indicate these types of classes should be offered. Teachers and staff will be surveyed annually to determine their interest and perceived needs in technology training topics, and adjustments to the course offerings will be made accordingly.

Infrastructure

The functionality of existing hardware and network systems will be continually evaluated. The committee will consider the number of technology repairs logged and the response time necessary to address repair issues. Fewer numbers of repair tickets, quicker response times with existing numbers of technicians will be one indication of productive equipment, a functional network, and more knowledgeable technology and educational staff.

Funding and Budget

The technology committee will monitor the technological needs of the district with respect to the budget allocation for technology. The ability of the fund allocation to meet the technological needs of the district on an annual basis will be an indication of adequate funds being supplied to support the technology. Should funds not be adequate, the technology committee will make recommendations for budget adjustment so needs can be met.

Efforts and goals that have been deemed unsuccessful by the District Technology Committee based upon the above criteria will be addressed. District Staff will be consulted and different strategies will be implemented to achieve goals not met. Revisions to the plan and budget adjustments will be made as needed.

Hartland Consolidated Schools

Acceptable Use Policy

Hartland Consolidated Schools (HCS) offers staff and students access to a computer network for educational and instructional purposes. In addition, HCS offers staff and students access to the Internet. Internet access is intended to promote, enhance, and support educational goals and objectives. To gain access to the HCS network and the Internet, all students under the age of 18 must obtain parental permission. All staff and students must sign the Acceptable Use Policy. A copy of the AUP signed by the student will reside at the building in which the student attends. A copy the Acceptable Use Policy signed by a staff member will be kept at the personnel office. Students 18 and over may sign their own forms.

CIPA Compliance

The Hartland Consolidated Schools has and will continue to comply with the requirements of the Children's Internet Protection Act, as codified at 47 U.S.C. § 254(h) and (l). The district is committed to assuring the safe conduct of all students while online and has a comprehensive policy about the proper use of our technological resources. At the beginning of each school year, students and staff are made aware of the district's Acceptable Use Policy. In addition, each student must sign an Internet use agreement before they are allowed access to the Internet both when they enter the district and each time they are promoted to a new building. It is the district's intent to preserve network bandwidth and improve network response times by limiting Internet access to educational-related sites. The filtering software used to block and filter access to the Internet from pornographic and obscene sites is LightSpeed, ensuring compliance with district policies and maintaining a positive environment.

Internet Services

Access to the Internet expands classroom and library media resources. These enable staff students to explore thousands of libraries, databases, and other information resources. These resources can be used for individual and group projects, collaborations, curriculum materials and idea sharing.

Internet Responsibilities

With access to the Internet comes responsibility. HCS has installed an Internet filtering application and Firewalls to help protect students from inappropriate material while they are accessing Internet resources at school. Filtering is effective but not perfect. Staff must be vigilant in monitoring student use of technology systems and prepared to enforce the guidelines found within this policy (AUP). Parents and guardians of minors are responsible for setting and conveying the standards that their children should follow when using any media and information sources. Students are responsible for appropriate behavior when using electronic resources. When signing the Acceptable Use Policy the students and parent agree to abide by the policies set forth by HCS.

HCS is held harmless and released from liability for ideas and concepts that students gain by their use of the Internet.

District Network Services

Each staff member and student is provided with a network account, which allows access to district network services. This access to network services is provided for those who agree to act in a considerate and responsible manner. Access is a privilege, not a right. Network accounts provide for a limited

amount of personal storage space on the HCS network for files related to the pursuit of education, which should be maintained by periodically clearing out older files.

It is important for staff and students to keep passwords secure and private. However all users should be aware that teachers and administrators have the right to review files to maintain system integrity and to be sure that the system is being used according to the HCS district policy.

Hartland Schools employs an extensive back-up of data each night. Copies are stored both on-site and off-site for additional security. For details, see the Disaster Recovery Plan. (Appendix VI)

District Network Access Responsibilities

Individual users of the district computer networks are responsible for their behavior and communications over those networks. Users will only use their personal user ID to log in to the HCS network (some elementary students will use classroom IDs). When signing the AUP users agree to comply with district rules and policies.

HCS makes no warranties of any kind, either expressed or implied, for the provided access. The staff, school and HCS are not responsible for any damages incurred, including, but not limited to, the loss of data stored on HCS resources, to personal property used to access HCS resources, or for the accuracy, nature or quality of information stored on HCS resources.

Restrictions

The following activities are not permitted on the HCS electronic resources:

- Accessing, uploading, downloading, transmitting, displaying or distributing obscene or sexually explicit material.
- Accessing, uploading, downloading, transmitting, displaying, or distributing unauthorized files or applications of any kind (including but not limited to games, IM clients, and Internet Proxies).
- Transmitting obscene, abusive or sexually explicit language.
- Damaging or vandalizing computers, computer systems, computer networks or computer files.
- Debilitating, disabling or altering computers, systems or networks.
- Creating, downloading, or distributing computer viruses or parts of computer viruses.
- Violating copyright or otherwise using another person's intellectual property without his or her prior approval and/or proper citation.
- Using another person's account, password, folder, work or files.
- Intentionally wasting computer network or printer resources.
- Using the HCS network or equipment for commercial or political purposes.
- Violating local, state or federal statutes.

Consequences for Improper Use

Inappropriate use of the HCS network will result in the restriction or cancellation of the users account. Violations of the AUP may lead to disciplinary and/or legal action, including but not limited to suspension or expulsion, or criminal prosecution by government authorities.

Hartland Consolidated Schools Acceptable Use Policy Agreement

User Agreement

As a user of the Hartland Consolidated Schools computer network, I agree to comply with the Acceptable Use Policy (AUP). I will use the HCS network and the Internet in a constructive and appropriate manner. Should I commit any violation, my access privileges may be revoked, and disciplinary action will be taken.

STAFF MEMBER STUDENT

User (print): _____

User Signature: _____

Staff Position/Homeroom Teacher: _____

Date: _____

Parent Agreement

As parent or legal guardian of the student above, I have read and understand the HCS Acceptable Use Policy.

_____ I grant permission for my child to access networked computer services and Internet resources. I understand that he/she is expected to use good judgment and follow rules and guidelines when using the HCS network and Internet resources. I agree to comply with the HCS Acceptable Use Policy.

_____ I do not grant permission for my child to access Internet resources while at school. I understand that my child will still have access to the HCS network and is expected to follow the rules and guidelines for the appropriate use of the network as stated in the HCS Acceptable Use Policy.

Parent Name: (print) _____

Parent Signature: _____

Date: _____

Appendix I

Technology Standards and Benchmarks for Teachers

Hartland Schools bases our technology standards for teachers from the ISTE Standards for Teachers. Those can be found at the following website: <http://www.iste.org/standards/standards-for-teachers>

Appendix II

Technology Standards and Benchmarks for Administrators

Hartland Schools bases our technology standards for administrators from the ISTE Standards for administrators. Those can be found at the following website:

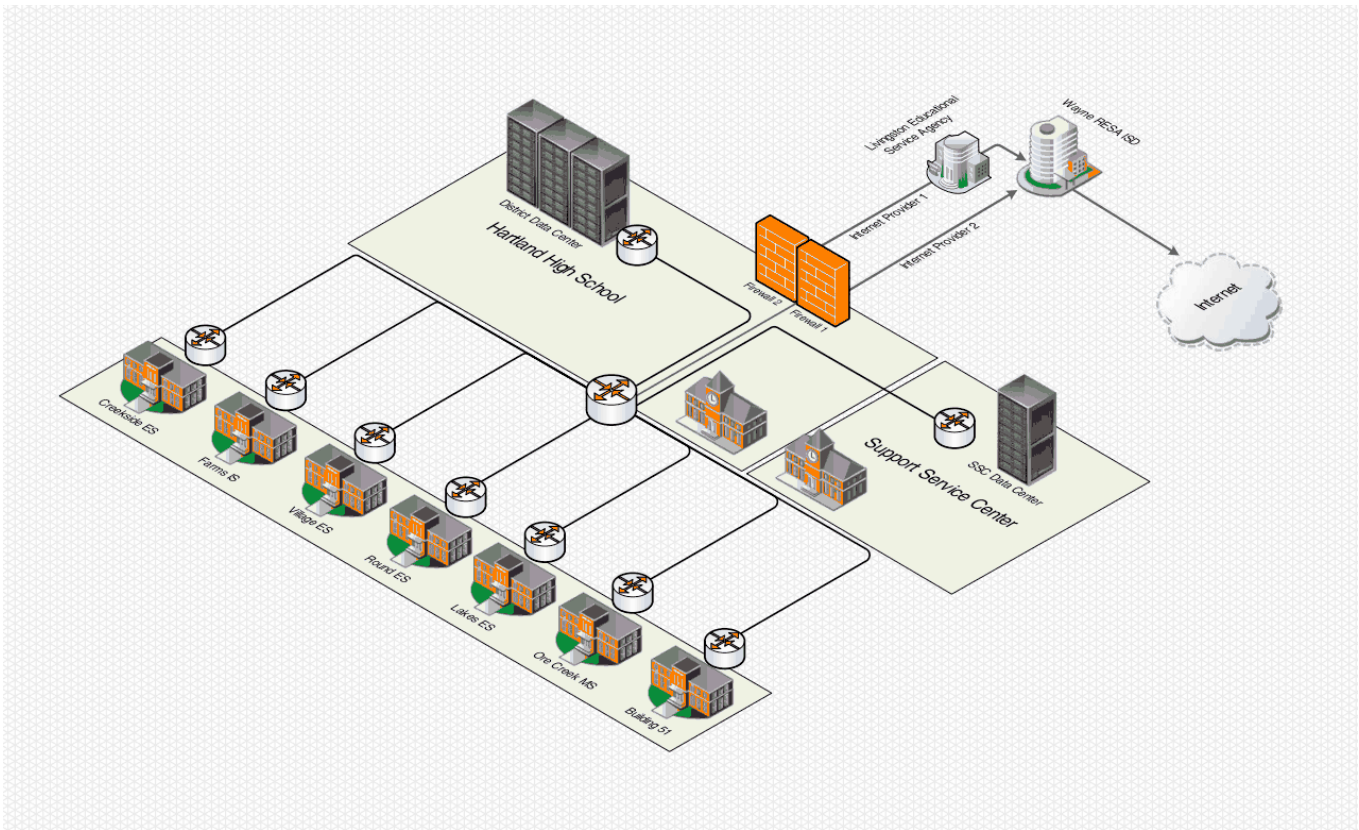
<http://www.iste.org/standards/standards-for-administrators>

Appendix III HCS Software

Program	# of License	Building
Acrobat Reader 11.0	Free	HCS
Adobe Acrobat Professional 8.0	3	SSC, HMS
Adobe Acrobat Professional 9.0	9	HCS
Adobe CS Standard 6	Site	HHS
Adobe Illustrator 10.0.3	15	HHS
Adobe InDesign 2.0	15	HHS
Adobe In-Design CS	1	HHS
Adobe PageMaker 7.0	70	HHS
Adobe Pagemaker 7.0.2	1	HHS
Adobe Photoshop 7.0	15	HHS
Adobe Photoshop CS	1	HHS
Adobe Photoshop CS2	10	HHS
Adobe Photoshop Elements 2.0	35	HHS
Adobe Photoshop Elements 4.0	3	HCS
Adobe Photoshop Elements 7.0	20	SSC
Altiris	2200	District
CAD	60	HS
Clock Shop	50	LES, RES, VES
Coin Critters	50	LES, RES, VES
Corel Graphics Suite 11	15	HHS
FrontPage 2000	11	HMS
FrontPage 2002	22	HMS
Ghost7.5 Corp Ed.	150	CES
Graph Club	Site	CES, LES, RES, VES
Intermapper	1	Tech
Kid Pix Delux	150	CES
Kid Pix Studio	Site	LES, RES, VES
Kidspiration	165	Elementary

Program	# of License	Building
Kidspiration	120	CES
Lan School	Site	FIS, HMS, HHS
Macromedia Contribute Pub Server	Site	HS
Macromedia DreamWeaver MX	18	HCS
Macromedia Studio 8 HS Site	Site	HS
Macromedia Studio MX	7	HCS
Mapmakers Toolkit	Site	FIS
Mavis Beacon Teaches Typing 16	5 Lab	HMS, SSC
Microsoft Office EES	Site	HCS
Neighborhood Map Machine	Site	CES, LES, RES, VES
NumberMaze	Site	LES, RES, VES
OmniPage Pro	2	HMS
Read Write Type	1	HCS
Reading Blaster 6-9	1	HCS
Star Reader 2.2.2	Site	Elem and Farms
Symantec Antivirus Corporate	50	HCS
Symantec BackUp Exec Cont Prot Svr Bun	1	HCS
Symantec BackUp Exec Win Agnet	7	HCS
Synchroneyes	Site	HCS
Synchroneyes Individual Lab	4 Lab	HMS
Trackit Server	600 User	HCS
Type to Learn 3	Site	CES, LES, RES, VES
Ultimate Writing & Creativity	200	CES, LES, RES, VES
Visio	3	HCS

Appendix IV Network Diagram



Appendix V

Hartland Consolidated Schools

Electronic Data Disaster Recovery Plan

In the event of a disaster, the Hartland Consolidated Schools recognizes that certain data processing functions must be restored in as short a time frame as possible. Student information and records, employee information and records, staff and student data necessary for completion of course work and operational data must all be restored.

Backup Procedures:

Student Information

Backups of all student information (MiStar) is stored on equipment at Wayne County RESA and are subject to the back-up and disaster recovery plan of Wayne County RESA.

Personnel and Payroll

Files for personnel and payroll are stored on equipment at Wayne County RESA and are subject to the back-up and disaster recovery plan of Wayne County RESA.

Local Data

We store our student, staff, and application data on a large file server located in Hartland High School. Each night, the primary file server replicates all data to a secondary file server. The secondary file server not only stores a current copy of the student and staff data, but it also archives the data to a backup partition. In the near future we will be reusing some of our older storage hardware to add additional replication targets to further protect our data offsite. We are also reviewing proposals for backup products that would allow us to store backup data at LESA and/or RESA.

Email

Email is stored and backed up on servers in Google's primary and secondary data centers. For more information about Google's backup/redundancy process, refer to this article:

https://www.google.com/support/enterprise/static/postini/docs/admin/en/admin_ee_cu/arch_secondary_data.html

Disaster Recovery Procedure

For situations when the disaster recovery plan must be used, the following steps would be employed:

1. Identification of affected systems.
2. Replace any hardware necessary
3. Attempt to recover affected systems without use of replication server
4. Use replication server to restore access to student and staff data
6. If data is unable to be recovered from the primary or secondary server, hire a third party company who specializes in data recovery.

Insurance

All electronic equipment used to store data is insured. By the end of each fiscal year, a current inventory is provided to the district's business office for submission to the insurance agent.

Contacts

<p>Dell Computer Company Steven Tippie Account Manager (615) 448-7542 steven_tippie@Dell.com</p>	<p>Network Services Servers and Cisco Gear Scott Sutherland Netech Wixom, MI (248) 773-0450 ssutherland@netechcorp.com</p>	<p>Wireless Scott Sutherland Netech Wixom, MI (248) 773-0450 ssutherland@netechcorp.com</p>
<p>Library Server Follette Software 800-722-7424 or 815-344-8700</p>	<p>Veritas Back-up Exec Agreement Number 100523 Customer Number 152661 Serial Number B8325526920</p>	<p>OnTrack Data Recovery 1-800-872-2599</p>
<p>Wayne County RESA Help Desk Support 734-334-1358</p> <p><u>Optiman (ISP)</u> Dave Preston 734-334-1351 presto@resa.net</p> <p><u>Network/Server</u> Vince Pizzo (734) 334-1591 PizzoV@resa.net Ann Marie Susalla SusallA@resa.net</p> <p><u>Supervisor</u> Jim Rarus 734-334-1349 RarusJ@resa.net</p>	<p>Content Filtering/SPAM Blocker Lightspeed Technologies Regular Number: 800-444-9267 After Hours: 661-301-5714 Main Number: 973-688-0060</p>	<p>Surveillance Cameras <u>Pelco Equipment</u> Interstate Security Rick 586-412-1202</p> <p><u>Ocularis and Sony</u> Scott Sutherland Netech Wixom, MI (248) 773-0450 ssutherland@netechcorp.com</p>
<p>Voice/Phone Scott Sutherland Netech Wixom, MI (248) 773-0450 ssutherland@netechcorp.com</p>	<p>Video Safari Monatge Sentinel Karina Hosington Ann Arbor, MI (734) 794-5700 khosing@sentinel.com</p>	

Appendix VI

Technology Responsibility Flowchart

