Pittsfield School District Technology Plan
2008-2011

SAU #51
Pittsfield School District

School Board Approval On _____

Pittsfield School District, SAU 51 Technology Plan 2008-2011

Reviewed and approved by the Pittsfield School Board this

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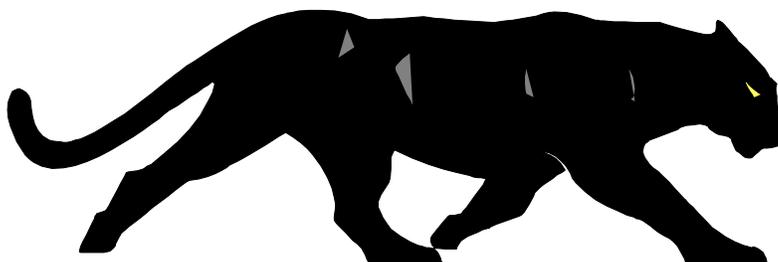|	
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PITTSFIELD SCHOOL DISTRICT

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ACKNOWLEDGEMENTS

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District Demographic Description

Pittsfield is a working class town located in the Suncook River Valley. According to the New Hampshire State Data Center, Pittsfield's population in 2000 was 3,931. The projected population for the year 2007 is 4,353. The median 4-person family income, approximately 10 years ago in 1999, was $44,233 (U.S. Census Bureau). The rural school district consists of two schools: Pittsfield Elementary School and Pittsfield Middle High School. Pittsfield Elementary School is a PS-6 school with a student population of 365 (May 2008). In essence, Pittsfield Middle High School functions as two schools within one building: a middle school, serving 95 students in grades 7-8, and a high school, serving 196 students in grades 9-12. The Pittsfield School District (SAU 51) has administrative offices located approximately one mile from the schools.

The Pittsfield School District is committed to providing all students with opportunities and supportive environments that promote academic achievement, intellectual growth, and responsible citizenship.

TECHNOLOGY VISION

The mission of the Pittsfield School District is to provide all students with opportunities and supportive environments that promote academic achievement, intellectual growth, and responsible citizenship. Technology in our district exists to support this educational mission. To ensure that all of our students are successful, we must employ a variety of strategies to connect with each individual, and help each student develop skills to acquire information, communicate effectively, and analyze data. Technology provides additional avenues for all members of the educational community to reach these goals.

Our vision for district technology is that it will become less visible, as it becomes seamlessly integrated throughout the educational environment. We want students and staff to employ the most effective tool for a given situation, reaching for technological tools as naturally as they apply more traditional tools. Over the next three years, we must continue to ensure that students and staff have access to a variety of technological tools and possess the skills to use them.

Pittsfield School District needs to continue to emphasize basic skills in core subject areas as identified in the NH Curriculum Frameworks. Computer literacy instruction in grades K-9 helps ensure that all students have the basic skills to employ a variety of technologies, regardless of socioeconomic status. Access to online instructions and skilled staff members helps students employ tools they find effective, regardless of the skill level of an individual classroom teacher.

At the present time, reading literacy and mathematic literacy are the priorities in our district. The PES school community is in their fourth year of implementing *Everyday Mathematics* and in their eighth year of implementing the *Four Blocks Literacy Framework*. The PMHS school community is presently concentrating on continued development of their advisory program to increase personalization of a student's educational experience. However, as a district we seek to ensure that all our students gain proficiency with 21st Century technology tools regardless of socioeconomic status. As indicated in the federal No Child Left Behind Act and in recent state revisions to Ed 306 (minimum standards for school approval), technology literacy is fundamental for success in the 21st Century. We seek to maintain the level of our current technology with modest gains toward technological literacy.

Every teacher needs to recognize that technology may provide an effective tool for a given student to accomplish an educational objective. In plans for assessment, teachers need to be flexible enough to accommodate the variety of means students may use to communicate as well as their present level of skill with the curriculum. The district is beginning to use *Performance Pathways* and *NWEA MAP* to assess students and to guide instruction for both student groups and individual students. Though a teacher may not be prepared to teach a specific tool to the student,

teachers need to be aware of the tools available to their students and be prepared to direct their students to appropriate resources for the use of those tools. As teachers expand their repertoire of teaching techniques, responsible professional behavior demands that technological tools for enhancing instruction and assessing student progress receive due consideration.

As we acknowledge the varying technological skills of our students and encourage the growth of each individual, so we must also acknowledge the varying skill levels of our teachers. Consequently, professional development must be offered for teachers at a variety of levels and in many different forms. As we continue to raise our minimum expectations for technology literacy, we must simultaneously provide support for those teachers who use technology more extensively. While we are committed to maintaining at least one computer in each classroom, the more a teacher incorporates technology into the daily environment of his/her classroom, the greater the priority for bringing appropriate technology into that classroom.

Just as we expect students to use technology to support communication, productivity, and problem solving, we must use technology within our district to support such purposes within schools, between schools, and between schools and the community. We have established district web sites and email servers and expect to expand the use of such Internet-based communication. We have a database to centralize information about students and staff, and we are using it to improve the efficiency of information collection and access. Technology tools for school administration help ensure that we support all students.

ARTICULATING THE VISION: TECHNOLOGY GOALS

Access to Technology Resources

1. Maintain current level of access to Internet, servers, network equipment, software, and web site subscriptions.
2. Provide access to student assessment information through Performance Pathways.
3. Consolidate the servers at PES and PMHS so that e-Portfolios, student information, and other files can be accessed from both PES and PMHS.
4. Promote a K-12 technology environment for the district by creating a formal procedure for the two technology committees to communicate and to meet on a regular basis.
5. Provide technology support to teachers, departments, staff, students, and administration.
6. Continue to support access to off-campus resources through library media center (Inter-Library Loan, Internet-based subscription services, NHPTV Knowledge Network...).
7. Increase available hardware and software resources as needed to support programs.
8. Provide appropriate assistive technology to support the education of all students.
9. Provide online opportunities for high school students to study courses that do not fit into their schedules or that are not offered within the district.
10. Provide appropriate faculty/staff access to student information through a School Management Software Program that includes health, grade, discipline, and attendance information.
11. Continue to update the long-range replacement/maintenance plan for the network infrastructure.

Technology Literacy

12. Beginning in third grade, students will create and add artifacts to demonstrate technology skills applied across the curriculum in accordance with ICT Standards.
13. Eighth grade students will present e-portfolios for assessment purposes.
14. Graduate students proficient in the ethical and responsible use of information and communication technology.
15. Provide opportunities for students to employ 21st century technology tools across the curriculum and grade levels.
16. Offer additional courses and update curriculum to keep pace with increasing technology applications.
17. Maintain support for the technology mentor program as an avenue for improving general staff tech literacy and use of technology to enhance instructional units.
18. Annually review and make necessary changes to existing K-12 technology curriculum/competencies to address alignment with standards.
19. The technology committees at both PES and PMHS will annually review and update as needed the Authorized Use Policy as well as the District Technology Plan.

Professional Development

20. Enhance our professional practice through the use of technology.
21. Provide for regular feedback and ongoing conversations among teachers to promote integration of technology into the curriculum.
22. Continue to provide professional development in the integration of 21st Century technology skills into the teaching and learning process of all subjects.

23. Provide regular computer skills development opportunities for members of the educational community to enhance their professional practice through technology.
24. Provide timely technology support to individual teachers, departments, staff, and administrators, as appropriate to their skill levels and needs.
25. Annually assess the technology program through participation in the LoTi Survey and to assess this plan using collaborative evaluation as explained by NEIR TEC.

Community Involvement
26. Maintain an up-to-date web site to keep the community informed about the schools and events occurring in the schools.
27. Increase community awareness, involvement, and feedback via the school web site, email access, and technology workshops.
28. Increase parent-teacher contact via email, school web site, voice mail, and secure parental Internet access to student grades, discipline, and attendance information.
29. Maintain availability of district technology for community and adult education.

ACHIEVING THE VISION: ACTION PLAN

ACCESS TO TECHNOLOGY RESOURCES:
DISTRICT DESCRIPTION

Pittsfield School District consists of two schools that share support for technology. It is made up of two separate domains (one for PES and one for PMHS) that function on a trust relationship, making it easier to administer users and resources throughout the district. Internet access, email services, anti virus updates, Internet filtering, and web hosting are provided to all district buildings via servers and a cable modem located within Pittsfield Middle High School.

Though there is no hard-wired connection to the SAU building; administrative assistants in each school connect to a Citrix server at the SAU office via the district cable Internet connection. SAU employees can connect to the district network through a VPN connection. Pittsfield School District does not directly provide technology support to the SAU office, so the resources of the SAU are outside the scope of the district technology plan.

The district includes three separate buildings: Pittsfield Elementary School, Pittsfield Middle High School, and a "Tech Ed" building for the middle high school. The three buildings sit within a few hundred feet of one another and are connected in a local area network via two underground fiber optic cables. The star topology LAN is centered around a 3Com SuperStack 3 3300 switch in the PMHS building. One pair of a three-pair multimode fiber line connects the PMHS Tech Ed building to PMHS. One pair of a six-pair multimode fiber line connects the PES building to PMHS. All connections are through fiber ports in the respective switches; no transceivers are used.

Pittsfield School District LAN
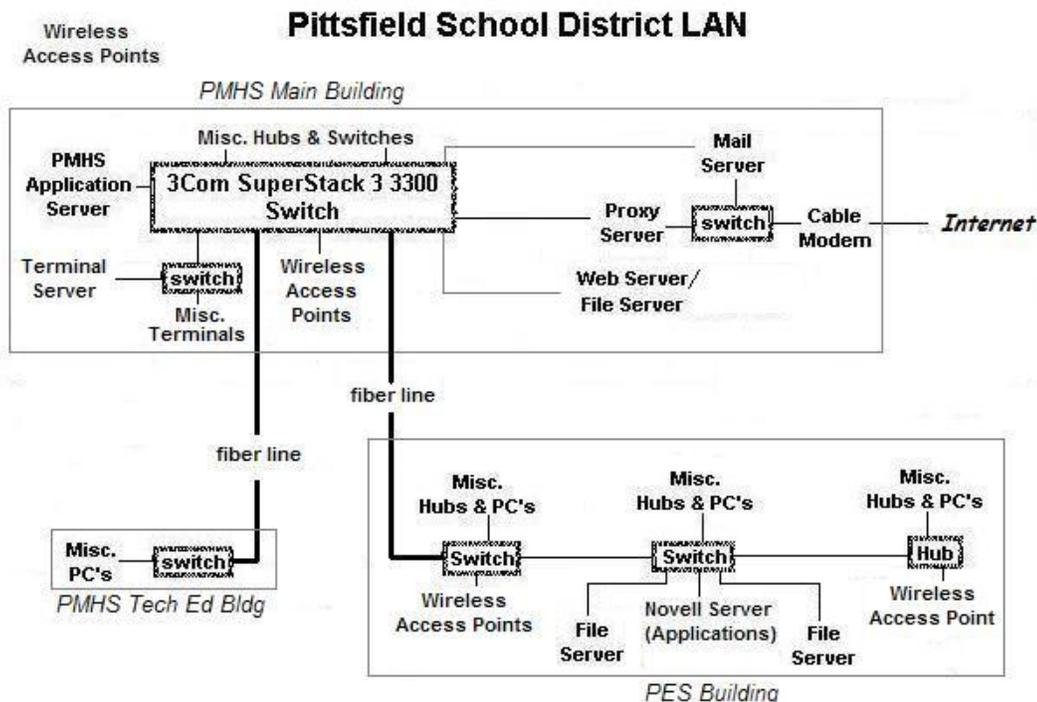
(LAN Diagrams for each school are maintained, but are not public information.)

District Internet access is provided to all classrooms and workspaces through a cable modem at PMHS. Internet access is filtered through a PMHS server running Burstek software, providing compliance with the Children's Online Internet Protection Act (see Appendix III for Authorized Use Policies). Metrocast Cable is our Internet Service Provider. Metrocast provides secondary DNS services and a block of valid IP addresses for use with our remote access, email, and web servers. Our domain name, "pittsfield.k12.nh.us", is registered with the state. The available 500 Mbps bandwidth needs to be increased to a T1 line that would be able to keep pace with the increased demand of the Internet at both schools.

As a small school district with limited resources, we continue to pursue sources of course material we cannot offer in-house to enhance our course offerings. We have focused our attention on courses available online. PMHS is connected to educational resources through Virtual High School (VHS) and NovaNET**.** Both programs are online accredited high school programs. VHS offers AP, pre-AP, and enrichment classes for the high school and exploratory classes for the middle school. NovaNET is known for helping schools increase their graduation rates and decrease their dropout rates by offering students courses for credit recovery. Staff can individually purchase professional development classes through Connected University.

The state technology plan provides a mathematical expression for determining how many Full Time Educator equivalents are required for network administration, technician staff, and technology integration into the curriculum. Applying the staff time formulas as recommended in the state technology plan:

$$[(\#high\ end)/300] + [(\#mid\ range)/150] + [(\#low\ end)/75] + 0.5FTE/60FTE\ Staff$$

Training and support staff	FTE equivalent
PES required support (network admin/technician)	-0.50
PES required support (tech integration)	-0.70
PMHS required support (network admin/technician)	-0.80
PMHS required support (tech integration)	-0.50
Total Required Personnel	-2.50
Contracted MultiMedia Systems support	+0.63
Stipended technology coordinators	+0.34
PMHS school day release time	+0.12
PES Lab supervisor	+0.90
Total Available Personnel	+1.99
NET TOTAL	-0.51

Two district technology coordinators are paid a stipend to provide a total of ~0.34 FTE. One high school technology coordinator is given time during the school day equivalent to ~0.12 FTE. The PES Lab supervisor does much of the maintenance on the computers in her lab and spends most of her day teaching technology skills to students in grades 3-6.

In summary, according to the state's formula, Pittsfield School District has insufficient personnel for optimal support of the integration of technology into the curriculum. In practice, network administration and technical support issues usually receive the highest priority from the tech team, allowing us to maintain a moderate level of use by teachers and students. There is insufficient time for technology coordinators to increase the amount of help teachers receive as they learn to integrate the technology. We offer regularly scheduled workshops and lab support

time to assist the staff in their efforts at integration and rely heavily on the donated time of our teachers as they mentor one another. We are attempting to correct this need with our mentoring program and are making progress.

PITTSFIELD MIDDLE HIGH SCHOOL

Pittsfield Middle High School, serving grades 7-12, has traditionally had strong support for computer technology. Both the main school building and the "tech ed" building were renovated within the last 10 years, so the electrical system is sufficient for the foreseeable future. Networking infrastructure provides equitable access to resources throughout the school, and servers are maintained in a centrally located tech office. Hardware, including computers, printers, and miscellaneous devices are distributed throughout the school to provide the greatest educational benefit to all students. Software and online resources are standardized and provided throughout the school whenever practical; specialized software is used in specific locations.

The main PMHS building was expanded and renovated between March 1999 and September 2001. Category 5E Ethernet cable was run throughout, terminating in a central wiring closet. Wires for four classrooms and two offices were cut too short; consequently, category 5 couplers are used to extend these wires to the patch panels. All workspaces have been connected. All classrooms have at least four connections to the patch panels. As we increase the number of computers in our school, we will need to purchase additional network switches. There are presently 13 10/100MBps switches. Connections to the servers are 100MBps.

Wireless Access Points provide 802.11b/g connections for computers throughout most of the main building, including all classroom areas. Wireless access points allow computers on carts to be easily shared among classrooms, allowing more efficient use of computer resources. All laptops are purchased with built-in wireless connectivity. The wireless infrastructure needs to be updated to have a broader range while maintaining security.

Renovated in the summer of 2004, the tech ed building contains a wood shop and CADD lab. A locked cabinet in the CADD lab contains the building patch panels and one 16 port dual speed switch. All workspaces are connected to the patch panels with category 5E cable. Currently there is wireless access in the building. The fiber connection to the PMHS central switch provides 100MBps bandwidth.

A phone system provides an extension in every office and classroom as well as **voicemail** for each faculty member and administrative staff member. There are eleven phone lines serving the building, one of which is reserved for the fax machine and four of which are reserved for teacher calls outside the building.

In addition to the networking and phone system hardware, the wiring closet houses six **Microsoft**-based servers (Main server, Terminal server, Mail server, School Net, Moodle server, and an application server). The lack of ventilation in the wiring closet/server room is an ongoing concern. Because the servers are central to the use of technology by everyone in the school, purchases regarding servers, including the replacement/upgrade of one server each year, receive budgetary priority. When determining the specifications for each new server, we consider its primary function, recognizing that the server should be powerful enough to carry out that function for four years to accommodate the growing demands and expectations of the users. The servers need to be able to run all programs, mail, and safely store data, so if they are not given priority, the desktop computers purchased would not fill the needs of our students and staff. Symantec

Backup Exec is used to backup all servers. A full backup is done weekly on all servers for the district.

The first server functions as the application server for **WinSchool**, the school administration database for our district. This server shares a smart UPS in case of power failure. A tape drive is used to make nightly back-ups. This server also runs specialized curriculum applications used by small sets of students. The school uses Chancery *WinSchool* administrative software for record keeping, including daily and period student attendance; student contact, medical, and legal information; student scheduling; report cards; and transcripts. Our nurses use the *SNAP* program to maintain student health records, including immunization records and nurse visits. This administrative software supports the Student InterOperability Framework.

In the 2008-2009 school year, the district will investigate and budget for a new student information system (SIS), since WinSchool will no longer be supported. With the purchase of a new SIS, the district may be able to combine other programs, such as SNAP into the administrative software. This new software will be installed for the 2009-2010 school year with training scheduled for the summer of 2009.

A second server, Schoolnet, runs IIS 5.0 and hosts the district web site. This server is also the primary file server for PMHS. The server is connected to a SMART UPS to support the system in the event of power interruptions. The 100MBps connection to the central network switch provides sufficient internal bandwidth for current use; the 100MBps connection to the cable modem provides greater bandwidth than our current cable Internet access allows. Staff and students can request remote access permission for their accounts, enabling them to access network resources and update web pages from home; we provide instructions for people with Windows XP to set up a VPN connection to the school, but we cannot provide further tech support for home computers.

A third server runs MS Exchange to provide email services for the district. This server also runs certificate server to provide secure access to district email from home computers. A mirrored hard drive provides additional protection.   The server is connected to a SMART UPS. The 100 MBps connections provide sufficient bandwidth for current use.

A fourth server, the main server, runs MS Internet Security and Acceleration Server. This provides district firewall services and secure routing services for the district. This server also runs DNS (Domain Name Service) DHCP, and Remote Access for the district. All Internet traffic in the district passes through this server. The 100 MBps connections provide sufficient bandwidth for current use.

The fifth server runs **MS Terminal Server**. (Terminal Server allows us to extend the life cycle of the oldest computers in our school by turning them into "dumb terminals" that just serve as connections to this server.) Programs that can be used through these terminals include Internet Explorer and Microsoft Office.

The sixth server runs Moodle, a course management software. It is a free Open Source software package designed to help educators create effective online courses. At the present time, it is used only within the school, but the server will be able to be accessed outside of the school during the summer of 2008. This will make it easier for teachers to keep up with the content and students will be able to access the information and make posts from outside of our network.

Pittsfield Middle High School employs a variety of software and online resources. All computers are *Windows*-based PC's, simplifying and standardizing our software support. At the present time, all stand alone computers are running Windows XP Professional and the terminal clients are running Windows 95. We have adopted *Microsoft Office* for all office software, **SOPHOS** for anti-virus software, and Burstek for filtering software. Annual subscription agreements with Microsoft, SOPHOS, and Burstek ensure that we maintain current versions of the software, including virus definition files. We also have a site license agreement with *Macromedia* for graphics software, including *Freehand* and *Flash.*

PMHS has a student to computer ratio of about 2.5:1, when student-use, full function computers are counted. We attempt to replace computers every five years, meaning that we must replace approximately 20% of our computers each year. Given the total cost of ownership of a computer, including licensing fees and replacement, we cannot afford to substantially improve this ratio by purchasing additional computers. Therefore, we have implemented a terminal server. Computers at the end of their life cycles become terminals to be used for basic MS Office and Internet tasks. When all school computers are included, our student to computer ratio improves to 2:1. We are committed to maintaining at least two computers in each classroom.

The primary use of computers in our school is to integrate technology within the curriculum. Technology is seen as a tool to be used when it will enhance what is being taught. Consequently, we have placed 14 computers in our library media center, which is the central resource point for acquiring information. Our library software catalogs web sites, as well as print and traditional materials. Our media generalist coordinates our subscription to services such as *EBSCO* and *FirstSearch*, an online database of magazine articles. Discovery Education United Streaming offers over 7,000 videos, which are used by teachers to show content appropriate video. The library media center uses *Winnebago Spectrum* software. This software is no longer being supported. The high school librarian is working on a State of NH library committee to find a new automation program that would address the needs of both schools in the district. In addition to cataloging the library collection, web sites are cataloged. The client aspect of this program is available in classrooms, allowing students to look for reference material of any form from any room. Winnebago provides online training in the use of its software. A handheld barcode scanner is used for inventory

We encourage teachers to view computers as one of the many instructional tools in a classroom. As an increasing percentage of our students have home access to word processing and other office software, we discourage teachers from providing "typing time" during class. Currently, several classrooms with intense computer usage have high student-to-computer ratios; these classroom "labs" include locations where Desktop Publishing, Computer Literacy, and CADD are taught. The business and computer classroom labs have 16 student computers each. These two classrooms, along with the library, are the first rooms to receive updated computers. Within the computer lab, one computer station has **Pinnacle Studio 9,** video editing software, installed as well as a video capture card. The computers from these labs are upgraded with additional ram and moved into classrooms to replace outdated machines. When possible the outdated machines are turned into terminals. Terminals are used predominantly in the English classrooms where most of the computers are used for word processing and research on the Internet. All students have access to school computer resources during their study halls and in the library for one hour after school and 20 minutes before school each day.

As the use of computer resources becomes a natural reflex, seamlessly integrated into the teaching and learning process, additional computers will be needed in the classroom. It is not always financially feasible for us to maintain multiple computers in every classroom. We are continuing to bring "terminals" into classrooms, focusing on locations with high demand for basic Internet research and word processing. The more a teacher incorporates technology into his/her classroom environment, the more computers we place in that classroom. Given the high teacher turnover in our district, technology coordinators annually reevaluate the distribution of computers.

Teachers often feel that having only one or two computers in the classroom limits how the technology can be used. Wireless networking allows additional computers to be available for specific projects. This is especially important for teachers who are transitioning from the whole class "computer time" method of using technology. Because of the high cost of laptop computers, as well as questions about durability and upgrading, we chose to use standard workstations on rolling carts.

We distribute network printers so that people must walk no further than the classroom next door to retrieve hard copy. Teachers in the classrooms housing a printer are expected to maintain the laser printer. We have two laser color printers, which are located in the computer classroom and the art room. Due to the high cost of toner, access to color copies is limited to specific, justifiable applications.

There are a variety of multimedia-related computer technology devices throughout the school. We have placed scanners in the library, art room, graphics lab, computer lab, and one science lab. Digital cameras are available for teachers and students to sign out through the graphics lab. The biology lab has a flexible camera for projecting views of microscopic and macroscopic items to a larger screen. There are two digital camcorders available for loan from the library, one for teachers and one for students. Two digital camcorders available for digital video class; these camcorders can also be signed out by teachers.

We have several different means of projecting computer information to a larger audience. Six Projection Devices are available for use, including one that may be signed out for use by community members. The projectors have been used for classroom instruction, technology training, student PowerPoint presentations, and large screen videos. Several classrooms have AverKey devices for projection of the computer screen to the classroom television.

A one-semester course in Robotics uses **LEGO RCX** "bricks," which are miniature computers. A *LEGO Robolab* software site license allows students to program LEGO robots they've designed. The software is mainly used in the Robotics course, but robotics mini-courses and competitions are offered during the summer and on special event days.

Science courses use **PASCO** interface**s** and a large variety of probes to collect data. *PASCO Science Workshop* is software that enables science students to use probeware to collect and analyze data. It is used frequently in physical science, chemistry, and physics.

STAR Reading software is used to test the reading level of students in middle school yearly. Results are used to aid placement decisions and guide the choice of reading texts. *Accelerated Reader* software is used to encourage and assess individual student reading assignments in grades 7-10.

Though teachers are encouraged to use computer technology to support the teaching and learning process, usage varies considerably. Teacher requests for subject-specific software are evaluated by the technology coordinators for compatibility with existing systems. Coordinators also check that teachers have an investment in using the software to teach school curriculum and that the software does not duplicate the content of software used by other teachers in the building. Teachers with similar student objectives are encouraged to use the same software. Network/site licenses are purchased when feasible to allow students to access software from multiple points within the building. Teachers are using online resources. A few teachers, notably the art and middle school social studies teachers, are using **WebQuests** as a means of engaging students in self-paced discovery of content.

With ten licenses for *Inspiration,* middle school teachers are exploring the use of this brainstorming and concept-mapping software for the pre-writing organizational process.

Larson Learning Math software has been purchased to supplement middle school math classes. The software can be used to address basic math skills through Algebra 1.

A 50-user site license for *Geometer's Sketchpad* allows math students to discover and reinforce geometrical relationships.

Students in middle and high school computer literacy use *Mavis Beacon* software to learn keyboarding skills.

Teachers are beginning to provide links to specific sites through class web pages, using Internet content to supplement textbook reading. Middle school and the 9th grade core teachers regularly post assignments to class pages. Teachers use primary-source material available through the web. Students frequently use the Internet for research, and teachers continue to tap the Internet for available resources. Though our library personnel and some faculty teach effective search strategies for finding information on the web, more professional development is needed.

PITTSFIELD ELEMENTARY SCHOOL

Pittsfield Elementary School has two separate LAN networks. The first is a token-ring network connecting old "EduQuest" computers in the first and second grade classrooms to a Novell server running educational software from the late 1980's. This network is being phased out; as computers fail, they are not replaced. When all the computers have failed, the token ring wiring will be removed.

The second LAN is a star-bus topology, category 5 Ethernet network that runs throughout the building. The hubs originally installed in this network are being upgraded to switches as funds allow. The hubs are past their life expectancy and switches will increase the speed of the traffic on our network. All workspaces have been connected to this network, with five connections in most classrooms. All connections terminate to patch panels in one of four wiring closets. Two servers run Windows Server 2003 and provide building-level authentication and file serving. All servers have SMART UPS; the main file server is backed up weekly on a tape drive and the second server is backed up to a separate hard drive. The servers are located within the second grade classroom of the building technology coordinator to allow a minimum of disruption to students if there is a problem with the network that the coordinator must attend to.

Internet access, email services, and web hosting are provided through the connection to PMHS. The 100 MBps fiber connection is adequate for current needs. Though connecting the fiber line to the central switch of the PES building network would maximize connection bandwidth for all classrooms, the physical layout of the building in relation to the terminus of the fiber line presents a considerable obstacle. Wireless hubs now provide efficient access for traveling teachers and administrators improving the availability of technology for student use. Our plan is to add a mobile lab in the future that would provide additional resources and increase our computer to student ratio. Approximately 95% of the building is covered by 3 wireless access points. There is the need to improve the signal to the downstairs classrooms.

The PES building was constructed in 1988 and the electrical connections are adequate for current needs. The building has a new digital phone system (2007) that includes voice mail for each staff member. All classrooms have telephone access.

Pittsfield Elementary School has networking hardware, servers, computers, printers, projection devices, and miscellaneous subject-specific hardware.

Networking hardware includes the hubs and switches needed to maintain our LAN connections throughout the building. There are ample 10baseT ports for each office and classroom for the foreseeable future. Our hubs need to be replaced with switches to increase the speed of our network to 100Mb. The present hubs are past their life expectancy, and we anticipate having to replace them during this tech plan cycle. We have 27 classrooms, several offices, and a few meeting areas with network and Internet access.

PES currently maintains three servers. The first is an IBM server running Novell and IClass. This server provides student files and programs through a small token ring network to our first and second graders. It holds our learning software packages such as **IBM's *Measurement, Time and Money, Pattern Blocks, Edmark's Stories and More I and II,*** and ***Learning Company's Children's Writing and Publishing***. This server is serving 10 IBM Eduquest machines that have no hard drives of their own. As these machines fall into disrepair, they are taken out of use permanently as they are well over 10 years old. The second server, running ***Microsoft Server 2003*** is the primary authentication and file server. It is over seven years old and is nearing its full capacity of use. The third server provides backup authentication and stores our school-wide software programs like ***Microsoft Office Pro, Print Shop, Inspiration, Kidspiration2,*** and ***Everyday Mathematics Games***. This server also stores our student files*.* It is our hope to add a terminal server in the future to prolong the life of our older computers in the building.

PES has a computer ratio of 6:1 if you consider all computers located in the building. If the computers used only by administration, office personnel, and our computers older than 10 years are subtracted, the ratio drops to 8:1. This is creating a difficult situation as we attempt to teach our students to use technology as a tool in their learning. We have at least one Windows XP minimum computer per classroom and a lab of 26 Windows XP computers available to students in grades 3 through 6. The lab computers were upgraded from Windows 98 and so are approaching their limit of usefulness without upgrades to increase their memory and speed. So although the operating systems are new, the machines are older. They were purchased with grant funds received in 2001. All special education case managers have access to a laptop with wireless capabilities to make their work within classrooms more effective.

Classroom teachers have expressed that they would find laptop computers to be useful for a range of instructional and support tasks. They believe that the portability and smaller size of laptops would allow for the accomplishment of tasks not easily done at this time with desktop computers. Some of these tasks include preparing report cards, taking attendance, preparing instructional materials, and using online resources more effectively. They feel that the need for mobile wireless computing is increasing. This is particularly true for consultants and administrators who conduct student or teacher observations in many classrooms.

We will be setting up a terminal server for the start of the 2008-2009 school year to make use of the more than 20 older Windows 95 and 98 machines that we have available. This will improve our student/computer ratio and will also increase access, instruction, and/or research in our library. In 2003, we added a scanner to the library to provide this service to teachers and students. The current circulation computer has recently been upgraded, but we need an upgrade to our library circulation software. We are at risk of losing our entire circulation data base.

Teachers can sign out our digital projector for classroom instruction, but we do not have that capability in every classroom as standard equipment as yet. Because we only have one projector, this limitation discourages teachers from using this technology on a frequent basis.

We are phasing out ink jet printers and replacing them with laser desktop printers because of their more efficient use of toner and paper as well as their quieter operation. We still have several teachers using their own printers brought in from home to avoid the walk to the next room to the available printer. We have a color laser printer, stationed in the computer lab, that provides color copies to the entire building. We have chosen Lexmark monotone laser printers as our preferred printer because of their proven reliability and high quality. We have one Lexmark dot matrix printer that has been in steady use since 1989 and, although a little noisy, still makes fine quality copies for a low cost.

We have two older digital cameras available to teachers, as well as a scanner in the lab. We have one computerized microscope and one Vernier probe for measuring temperature.

Pittsfield Elementary School employs a variety of subject-specific software programs. We currently use *Microsoft Office PRO 2003* as our productivity software and **Sophos** for anti-virus software. The following programs are available throughout the school with at least a 50-user or site license:

The Learning Company: *Print Shop Essentials*
  Type to Learn
  Inspiration 6
  Kidspiration2
Everyday Mathematics Games for Grades 1-3, and Grades 4-6

ACCESS TO TECHNOLOGY RESOURCES: ACTIONS

Goal #	Actions	2008	2009	2010	2011
1	Business Manager applies for ERATE	X	X	X	X
1	Tech coordinators complete DOE technology survey to maintain eligibility for state funding	X	X	X	X

1	LoTi Survey completed by staff	X	X	X	X
1	Purchase 3 laptops/yr for PES to increase laptops available for teacher use	3,600.	3,600.	3,600.	3,600.
1	Increase laptops available for PMHS teachers & administrators by purchasing at least 5 additional laptops/yr	6,000.	6,000.	6,000.	6,000.
1, 7	Increase available computers for student use by converting "replaced" end-of-life computers to terminals at PES	$700.	X	X	X
1, 11	Server maintenance: replace 1 per year for Pittsfield district	5000.	5000.	5000.	5000.
1, 7, 11	Maintain regular replacement cycle for PMHS pcs by replacing 20%/yr (replacement cycle of 5 years)	20000.	20000.	20000.	20000.
1, 11	Maintain district antivirus software licenses for SOPHOS	X	1500.	X	1500.
1	Maintain district Microsoft Software Assurance agreement for Office software	9800.	X	9800.	X
2	Participate in Performance Pathways program	X	X	X	X
1	Maintain productivity software licenses at PES	X	$2,000.	X	$2,000.
1	Provide Internet access to both PMHS and PES	$900.	$900.	$900.	$900.
3	Technology Committees at PES and PMHS formally develop a plan for consolidating technology resources and annually review the process.	X	X	X	X
5	Multimedia Systems provides technical support for the district.	46,000.	46,000.	48,000.	48,000.
8	Assistive technology needs are gathered annually based on the student population.	Varies	Varies	Varies	Varies
4	PES and PMHS Tech Committees develop a formal system of communication and a schedule for meeting 4 times per year.	X	X	X	X
2	The District Tech Committees annually review technology needs for Performance Pathways and NWEA	X	X	X	X
10	District reviews and adopts a district-wide student management software package.	X	20,000	X	X
9	Continue NovaNet and VHS online class offerings for grades 7-12.	14500.	14500.	15000.	15000.
11	Upgrade Internet connection to a T1 line	X	1500.	1500.	1500.
7	Upgrade classroom audiovisual equipment (TV's need to be able to connect to DVD players and cable)	X	2000.	2000.	2000.
6	Media Specialists budget and coordinate off campus tech resources for the district. (in Media Center budgets)	X	X	X	X

X = no cost for this item

TECHNOLOGY LITERACY

PITTSFIELD MIDDLE HIGH SCHOOL

Providing the right tools for specific educational needs continues to be a major concern for PMHS. The challenges include funding the purchases of software, the upkeep of licenses for the software that we presently have and use, identifying the educational needs, educating faculty about the solutions available, training faculty to utilize the new tools, and assessing the success that the software/hardware has had addressing the needs.

A major focus of technology literacy for our staff is the integration of technology into the curriculum. PMHS wants technology to be part of the curriculum, not an 'add on.' It needs to be used to enhance learning. Technology courses for students are taught through the computer department's curriculum. In the rest of the curriculum, PMHS stresses using technology to teach.

Professional development activities for the staff in the area of technology need to concentrate on developing **technology integration** skills. To assist us as a district in determining a standard for the proper use of technology integration by staff and students, we need a proven model to compare our progress to. The National Education Technology Standards for Students (NETS for Students) is being used in all departments as they write their course competencies, although formal adoption of the NETS for students and staff has not been thoroughly investigated by the school or district. By adopting NETS for students and staff, PMHS could establish consistent technology practices by all faculty members. Even with these benchmarks, we will need to continue to invest additional efforts into working with teachers regarding the implementation of these standards into the classroom.

Pittsfield Middle High School has increased the training opportunities for faculty through the use of tech mentors and tech integrators. PMHS has six classroom teachers who serve in these roles. They meet once a month with the tech committee to facilitate the tech integration in the classrooms. The training needs of the teachers are assessed through the PMHS survey. A technology workshop day is offered at the start of the school year. There are also various workshops offered throughout the year.
    A.
In addition to the faculty tech mentors, PMHS has a student computer club. There are presently four students who make themselves available to the faculty to help them with hardware and software issues throughout the day. The students attend workshops offered by the technology coordinator/ media generalist.

Finding an appropriate distance learning model has been a priority for PMHS. We started offering classes through Virtual High School starting in the fall of 2005. The VHS program expands the number of classes that we are able to offer to students. The classes are offered asynchronously, so scheduling is not an issue. Students will be able to use the computers at school to access their classes. Classes are offered year round. During the summer, a student would be able to take a class to make up credits or for additional credit. NovaNET is available year round to students for credit recovery. Students are scheduled for the classes like a face-to-face class. During the summer, a teacher is scheduled during the day so students can continue taking courses for credit recovery. Community members have the opportunity to use NovaNET to get ready for the GED exam.

Middle school students have a half year, 45-minute computer class that meets daily. Middle school students are able to work with technology in computer class, but also integrate it into their core classes. With a computer teacher available during that time, students are given guidance as to the best tool to use to complete the task.

Eighth grade portfolios are a compilation of students' work from grades 3-8. The students use a rubric to evaluate their work and reflect on what they have learned. The work samples, the rubric, and the reflection are used by the technology team and middle school teachers to evaluate the portfolios. If the portfolio meets the 8th grade competency requirements, the student is able to move on to a higher level computer class in high school. The students' transcripts reflect that they have fulfilled the portfolio requirement. If the student needs more time to refine their skills, the student is scheduled for computer literacy in 9th grade.

To fulfill the high school ½ credit completion, PMHS offers several courses. At the present time, most of the course competencies have been written, but some are still being completed. They will all be completed by July 1, 2008.

Courses to complete the ½ credit:

- Introduction to robotics
- Web design
- Introduction to computer literacy
- Computer applications
- Introduction to computer science with Java
- Desktop publishing

PITTSFIELD ELEMENTARY SCHOOL

At **Pittsfield Elementary School**, the daily use of technology is based on teacher experience and skill with the hardware and software we have available. Teachers are expected to have a basic working knowledge of *Microsoft Office Pro 2003* and its individual programs, such as *Microsoft Word* and *Outlook*, so that they can interact with others in this educational community, perform management tasks, and prepare appropriate instructional materials for students. We annually assess the technology literacy of teachers through the LoTi survey as well as our own local technology survey.

Students in grades 3 through 6 are scheduled for two half hour computer lab classes per week. During these classes, they begin to develop basic computer literacy skills and keyboarding skills. They create ICT literacy artifacts for their ePortfolios. The classroom teacher and computer lab instructor determine the tasks and projects completed. The activities are integrated into the core curriculum areas and not completed solely for the sake of using technology. The curriculum artifacts are used later for developing their e-Portfolios in middle school. Students in grades K-2 have at least one computer in their classrooms. Most classrooms have two. Children are slowly introduced to the computer within the classroom curriculum. These lower primary students are limited in their use of the computer by their age and the skills of their classroom teacher in using the technology.

Technology literacy has also been addressed within the development of our *Understanding By Design* units. Grade level teams design units of study and include the use of technology where appropriate to do so. We also have two volunteer technology integrators that work with teachers on an as-needed basis. Monthly tech support opportunities are available in our lab and a professional development opportunity around the use of technology in held at least six times per year.

More and more teachers are using their email and voicemail to communicate with each other, their professional groups, and parents. We are using email to notify teachers of special education meetings with parents. We use our local network to provide both professional development forms and special education forms to teachers.

Goal #	Actions (goal #)	2008	2009	2010	2011
17, 18	LOTI survey results evaluated by Tech Leaders and Administrators	X	X	X	X
17,18	Local PES & PMHS Technology Survey by Staff	X	X	X	X
17	Coordinators and Tech Integrators work with teachers	X	X	X	X

17	Mentors work with mentees.	X	X	X	X
16, 17	Monthly workshops by coordinators and/or integrators	X	X	X	X
12, 15	PES Grade level teams work on *Understanding by Design* units that incorporate 21st Century technology tools.	X	X	X	X
9, 16	VHS Online classes annual subscription (25 seats)	8500.	8500.	8500.	8500.
14	Possible Adoption of NETS for Students	X	X	X	X
16	Curriculum development in technology (Mapping with Performance Pathways)	X	X	X	X
12, 14	PES students (Gr 3-6) participate in Internet Safety activities and curriculum projects and store artifacts with reflections and evaluations.	X	X	X	X
13	Eighth grade students present e-Portfolios for evaluation	X	X	X	X
11	Technician upgrades all computers in district to Office 2007 (MS software assurance)	X	$5000.	X	$5000.
16, 18	NovaNET credit recovery annual subscription (4 ports)	$6000.	$6000.	$6250.	$6250.

X = NO COST FOR THE ITEM IN THAT YEAR

PROFESSIONAL DEVELOPMENT

Pittsfield School District computer training and support is currently handled through a tiered team approach. Each building has one technology coordinator. We have a number of contracted support hours with an educational technology company, mainly working with one technology consultant/technician.
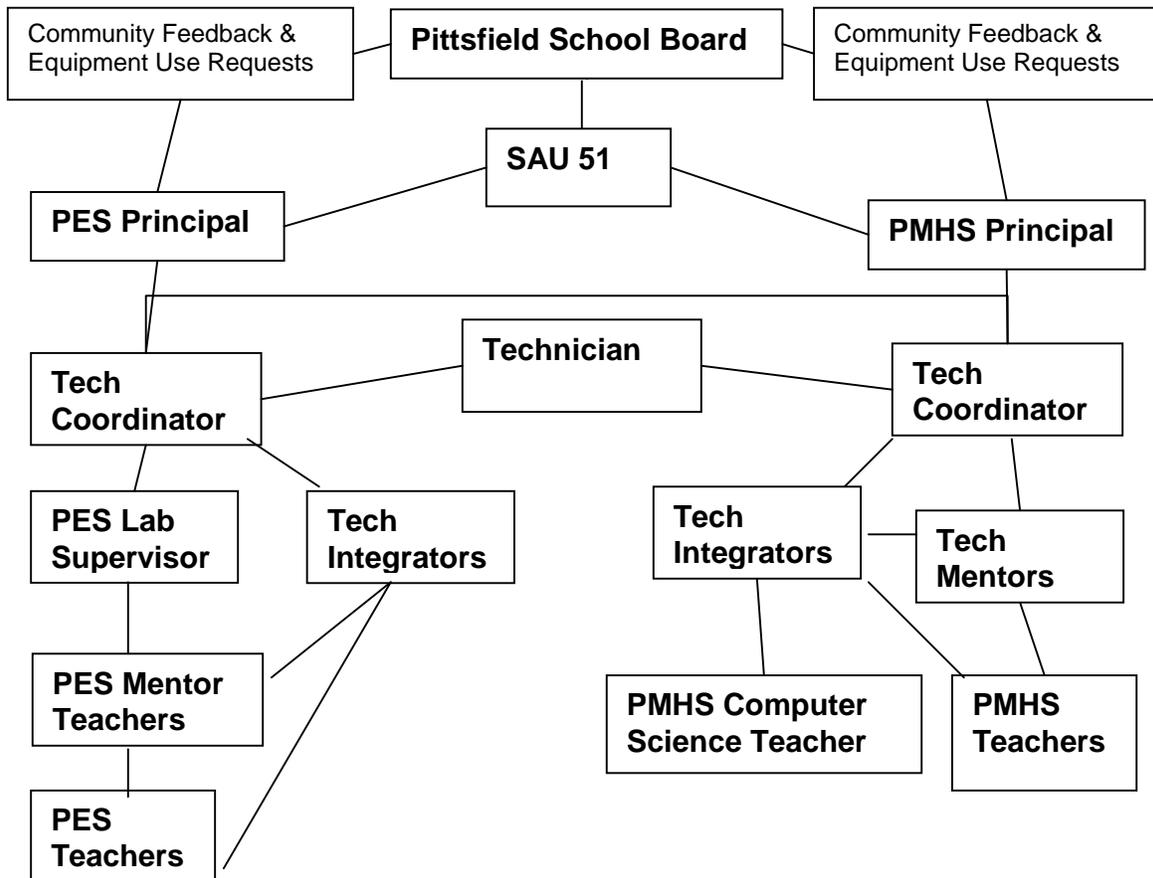
Pittsfield Elementary School has a technology coordinator, a computer lab supervisor, and 2 technology integrators. Kathy Mahanes, a second grade teacher and certified technology educator, serves as the technology coordinator. Deb Darrah, a certified paraprofessional, has supervised the computer lab since 1986 and is one of our technology integrators. Darlene Stewart, a fifth grade classroom teacher, is the other technology integrator. Various teachers are available to provide basic technology training and support.

Pittsfield Middle High School has one technology coordinator, a computer teacher, 6 technology integrators, and technology mentor teachers. MaryAnn Hatab, our library media generalist, serves as technology coordinator. MaryAnn Hatab is A+ certified and has currently passed two of the exams towards her MCSE certificate. Sue Sanborn, special education administrative assistant, will serve as our webmaster with teachers being responsible for their own class pages. Various teachers and staff members assist one another with basic training and support.

Multimedia Systems provides 120 person-days per fiscal year. Adam Israel, Microsoft Certified Systems Engineer, provides almost all of this contracted support. He is on-site in the district two and a half days per week, with additional days or people as necessary. His responsibilities include

troubleshooting network, email, and Internet problems; installing network wide software, new servers, and workstations; and repairing and configuring hardware and cabling. He also acts as our network administrator and assists the technology coordinators in each building with integrating new technology and training the staff as needed. He is vital to our long range planning.

PITTSFIELD TECHNOLOGY SUPPORT ORGANIZATIONAL CHART

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┌─────────────────────┐      ┌─────────────────────────┐      ┌─────────────────────┐
│ Community Feedback & │      │  Pittsfield School Board │      │ Community Feedback & │
│ Equipment Use Requests│     └─────────────────────────┘      │ Equipment Use Requests│
└─────────────────────┘                  │                     └─────────────────────┘
                               ┌──────────────────┐
                               │      SAU 51      │
        ┌───────────────┐      └──────────────────┘      ┌────────────────┐
        │ PES Principal │                                 │ PMHS Principal │
        └───────────────┘                                 └────────────────┘

        ┌──────────────┐      ┌──────────────┐      ┌──────────────┐
        │ Tech         │      │  Technician  │      │ Tech         │
        │ Coordinator  │      └──────────────┘      │ Coordinator  │
        └──────────────┘                            └──────────────┘

  ┌──────────────┐  ┌──────────────┐      ┌──────────────┐  ┌──────────────┐
  │ PES Lab      │  │ Tech         │      │ Tech         │  │ Tech         │
  │ Supervisor   │  │ Integrators  │      │ Integrators  │  │ Mentors      │
  └──────────────┘  └──────────────┘      └──────────────┘  └──────────────┘

  ┌──────────────┐               ┌──────────────────┐  ┌──────────────┐
  │ PES Mentor   │               │ PMHS Computer    │  │ PMHS         │
  │ Teachers     │               │ Science Teacher  │  │ Teachers     │
  └──────────────┘               └──────────────────┘  └──────────────┘

  ┌──────────────┐
  │ PES          │
  │ Teachers     │
  └──────────────┘
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With this team approach, no single person is expected to master such diverse skills as faculty training, configuration of an Exchange server, maintenance of a website, and replacement of hard drives. The technician is not knowledgeable in the educational use of the software being used by the staff. The teachers are not network experts, but can troubleshoot network problems. Being such a small district, communication among team members has never been an issue, so this team approach works for us.

Team members offer workshops and one-on-one support to staff, based on annual needs assessment surveys and influenced by building goals. Staff members also have access to Connected University online courses, Tech Tutor CD's, and courses offered through WebEd.com. Library media generalists receive online training in the use of the Winnebago library cataloging software. Teachers

are encouraged to mentor one another. According to our Master Plan for Staff Development, staff members may log all technology hours, including those between technology mentor and mentee.

The technology coordinators attend the annual Christa McAuliffe Conference and other workshops as appropriate. The technology coordinators regularly read the NHSTE ListServ and regularly check the ISTE and NHSTE websites, taking action when appropriate and forwarding information to the appropriate individuals.

Professional Development

Goal #	Actions, with responsible person specified (goal #)	2008	2009	2010	2011
20 23	Tech Admin coordinates introduction of new technologies & classroom applications	X	$500.	$500.	$500.
25	Administrators require all faculty & staff to complete the annual tech survey	X	X	X	X
25	Administrators require all faculty to complete the LOTI, in order to maintain eligibility for state funding	X	X	X	X
20	Tech coordinators and tech committee members attend McAuliffe Conference	2 people	4 people	6 people	6 people
22, 25	Ongoing Mentor/Mentee relationships	X	X	X	X
21, 23, 24	Ongoing individual support to faculty & staff by tech coordinators	X	X	X	X
20	Regular workshops organized by tech coordinators with topics based on annual survey results	X	$1,000.	$1,000.	$1,000.
25	Tech Admin apply for Title IID funding	X	X	X	X
20	Technology team maintains membership in professional organizations in technology	$40.	$160.	$160.	$160.

X = NO COST FOR THIS ITEM IN THAT YEAR

COMMUNITY INVOLVEMENT

Community Involvement with the technology program has several facets. The Parent/Teacher Organizations in both buildings support technology projects of limited scopes with their fundraising. Local residents with technical knowledge assist the schools when needed. For example, a local electrician may assist with cabling or power needs. Local businesses support us by dropping off used printer cartridges for recycling. Their participation is limited but vital to our program.

The PMHS library and its technology resources are available daily to students and community members until 4:00PM. We have an active GED program that uses our technology resources. We have also loaned projection equipment to community organizations. The PMHS library uses the online inter-library loan system that gives our students the opportunity to obtain books from any

library in the State of NH. The Pittsfield Carpenter Library offers adult literacy services to the public. If these students need computers during the day when the town library is not open, the adult students can use the computers in the PMHS library. The PMHS library and lecture hall are used for public meetings. During these meetings, the school's technological capabilities are often utilized.

Teachers communicate with parents via email. PMHS has email distribution lists for student's parents by grade level, so information that is specific to that grade can be sent. The email addresses are available to teachers, so they can communicate directly with the parent. Some teachers will set up their own distribution lists for the students and the parents in a specific class. Written assignments are passed in through email and parents can be notified about a class event. Teachers are posting information to class web pages; Internet communication is used more each year. As we look at a new student information system, one feature that will be important for communication will be the ability to post student conduct, attendance, and academic information to a secure website, which parents will access via a password unique to their child. This will increase our communication with parents exponentially.

Community Involvement

Goal #	Actions (goal #)	2008	2009	2010	2011
28	Create email distribution lists for parent/student groups	X	X	X	X
26,27	Maintain web sites for district & each school	X	X	X	X
27	Make district workshops open to community members on a space available basis	X	X	X	X
28	Enable parent access to PMHS student information	X	X	X	X
27, 29	Continue to expand community use of the district's technology	X	X	X	X
29	Continue computer training for the senior center	X	X	X	X
29	Continue year round GED preparation training at PMHS	Grant	Grant	Grant	Grant

X = NO COST FOR THIS ITEM IN THAT YEAR

DATA COLLECTION

The Pittsfield School District continues to find ways to collect and analyze data generated by state and federal testing as well as data we collect ourselves to drive decision making in the district. As data is analyzed, changes are made as to the best use of technology. The schools use many different tools for data collection and analysis:

- Statewide and Federal testing scores
- Teacher survey (LoTi and school)

- Lesson plans
- Internet websites
- Professional Growth Plans
- Students generated projects
- Professional development technology workshops
- Online library collection software
- Software review analysis
- Inventories of equipment, supplies, and materials
- NWEA (beginning 2008-2009 school year)
- Performance Pathways
- Service records of hardware
- Web traffic assessment
- Minutes from Technology and Educational Leadership Team Meetings

Budget process

The technology coordinators meet annually to analyze results of staff and student surveys and to reassess distribution of technology based on staff turnover. In August and September, the school board sets parameters and goals for the year and communicates them to the building administrators, who pass this information on to the teachers and staff. Then the technology committee discusses technology budget requests. The technology coordinators determine costs as necessary and combine all reasonable requests into the building technology budget requests. The coordinators then submit the requests to the building principal, who prepares the building budget requests for review and consideration of the superintendent and business agent. The districts' administrators make a presentation of the budget to the school board. The school board prepares a budget request for presentation to the budget committee. Following deliberations with the budget committee, a budget is presented to the voters at the annual school district meeting. At the school district meeting, the community votes to authorize a specific amount of money for the overall educational budget.

After the school district meeting, the principal relays to the technology coordinators the actual amounts available in the various lines of the technology budget. The technology coordinators prepare purchase orders to meet the spirit of the initial requests. Because technology can change substantially in the 8-9 months between the initial requests and the orders for purchases, technology coordinators are not tied to the exact specifications of the initial requests. This flexibility allows us to accommodate the dynamic nature of technology and consider emerging technologies. School and SAU administration have the authority to authorize regular budget purchases.

The middle high school budget is considerably larger than the elementary budget, since the 6 main servers that are and the hub of the network infrastructure are physically at the high school building.

While the Multimedia Systems technology consultant serves as an invaluable resource to building technology coordinators, he does not prepare budget requests or purchase orders.

Throughout the school year, technology coordinators also consider various grant opportunities. Coordinators apply for those grants that may fulfill the vision and current technology of the school or district, and assist with technology portions of other grants.

As additional money for technology becomes available through diverse sources, technology coordinators serve as resources to ensure that all district purchases will work with the available hardware and software, and can be supported appropriately. Building principals or grant project managers make all final monetary decisions with approval of the superintendent of schools.

Technology coordinators base all budget recommendations on the following priority list:
1. Maintenance of network hardware and software (servers, site licenses of MS Office, antivirus, internet filtering)
2. Maintenance of the current level of technology integration in all areas, including the use of administrative and subject-specific software
3. Support for technology integration/professional development programs, especially those driven by building goals and having direct investment of classroom teachers
4. Support for subject/classroom-specific use of technology driven by teachers, including purchase of curriculum-specific software and resources for individual classrooms

BUDGET TABLES

The following tables are organized by year and purchasing categories. The code used for the categories are:

H   Hardware
S   Software
N   Networking
PD   Professional Development
ST   Staffing expenses

The current year's costs and the estimated costs for the duration of this plan are included in the table. Associated professional development costs are drawn from the regular budget and so are not detailed here. In the early fall, the administrators and technology coordinators review the plan to prepare the budget requests for the following year. This table and the tables previously viewed in the action plan section of this plan are used to develop the next year's technology budget plan.

Purchase Category		Annual Funding Needs – PMHS			
		Actual Costs	Estimated Costs		
	Description	2007-2008	2008-2009	2009-2010	2010-2011
ST	Stipends for Tech Coordinator	$ 4500.	$ 4500.	$ 4500.	$ 4500.
ST	Professional and Contracted Services	23000.	26000.	28000.	28000.
ST	Social Security and NH Retirement	603.	603.	620.	620.
N	Technology dues and fees (Sophos, Burstek, & conferences)	6500.	6500.	6700.	6700.
N	Data Communications (possible reimbursement from Erate)	5000.	5000.	5000.	5000.
H	New Computer Equipment (New computers, projectors, etc.)	14500.	27500	21000.	21000.
H	General Repair and Maintenance (monitors, printers, & internal computer components)	4000.	4000.	4000.	4000.
H	Technology Supplies (includes, power strips, network cards, memory, cables, disks, CD's, mice, etc.)	5000.	6000.	6000.	6000.
H	Replacement Computer Equipment (Replace one server/year & replace computers)	25000.	26,250.	26,250.	26,250.
S	Subject-specific software	5130.	10000.	10000.	10000.

	upgrades and purchases				
S	District Microsoft Software Assurance Licensing	9,800.	X	9,800.	X
S	Upgrade library software	X	X	7,500.	X
	PMHS Annual Needs and Identified Requests SUBTOTALS:	103,033.	116,353.	129,370.	121,870.

		Annual Funding Needs – PES			
Purchasing Category		**Actual Costs**	**Estimated Costs**		
	Description	**2007-2008**	**2008-2009**	**2009-2010**	**2010-2011**
ST	Stipends for Tech Coordinator	4,000.	4000.	4,500.	4,500.
ST	Professional and Contracted Services	20,497.	22,000	24,000	24,000
ST	Social Security and NH Retirement	397.	397.	420.	420.
N	Technology dues and fees (Sophos, Burstek, & conferences)	10,600.	7,820.	8,000.	8,000.
N	Data Communications (possible reimbursement from Erate)	4,200.	4,200.	4,200.	4,200.
H	New Computer Equipment (New computers, printers, projectors, wireless access points, hubs, etc.)	0	11,600.	11,600.	11,600.
H	Computer replacement (switches, servers, computers, hubs, wireless access points)	21,000.	1,800.	5,000.	5,000.
H	Adaptive Equip. for Special Needs Students				
H	General Repair and Maintenance (monitors, printers, & internal computer components)	2,500.	4,000.	4,000.	4,000.
S	Spectrum or other Library Software (Brings Elementary Library up to PMHS standard)	X	X	7,500.	500.
H	Technology Supplies (includes, power strips, memory, cables, disks, CD's, mice, etc.)	3,500.	5,000.	5,000.	5,000.
S	Subject-specific software upgrades and purchases	0	0	1,000.	1,000.
		66,694.00	60,817.00	68,220.00	68,220.00

	PES Annual Needs and Identified Requests SUBTOTALS:				

EVALUATION

Various types of data are needed for the many technology-related decisions made each year. We use formal surveys, informal conversations and notes, and classroom and NECAP assessment results, NWEA MAP Tests, and e-Portfolios to gather data to evaluate professional development needs and opportunities, student improvement in technology-related curriculum objectives, and overall progress toward the goals in this tech plan.

All staff members annually complete the LoTi technology surveys. The State of New Hampshire requires the Level of Technology Integration (LOTI) survey. In the past we have also asked staff and students complete a written survey based on federal surveys issued for use with the Technology Literacy Challenge Fund money (*An Educator's Guide to Evaluating the Use of Technology in Schools and Classrooms*). The comprehensive written survey gives us information regarding:
- staff skill levels with various types of technology
- types of technology currently used in the classroom
- accessibility of shared school or district technology resources
- ways in which technology is currently used in the classroom
- types of technology staff would like to have available to use
- technology-related professional development desired by staff
- technology-related professional development taken by staff outside of the district

Selected subsets of students complete technology surveys to provide information regarding:
- student skill levels with various types of technology
- students' level of home access to technology
- accessibility of school technology resources
- ways students use school technology
- ways students use technology for academics

Next year the technology team will investigate the use of the "***Collaborative Evaluation Led by Local Educators: A Practical, Print- and Web-Based Guide***" by Ann Brackett and recommended by NEIR TEC for our technology grant evaluation process at PES.

In accordance with our "Follow the Child" philosophy, each student's progress is individually evaluated and remediated as needed. Students in grades K-6 are assessed informally by their classroom teachers based on student performance on curriculum tasks involving the use of technology. All middle school students take one quarter of basic computer literacy. Since the revision to the minimum standards for public school approval (ED 306), we use a digital portfolio of student work to evaluate whether students have demonstrated sufficient competence to receive high school credit for their middle school work. Students whose portfolio does not demonstrate sufficient computer literacy will be required to pass an additional ½ credit basic literacy course prior to graduation.

The New Hampshire State Curriculum Frameworks include content objectives specifically related to technology. Teachers annually review the NECAP results, analyzing the released questions item by item. Weaknesses in any area, including the technology-related objectives, are addressed by department/team curriculum changes.

As technology is one of many tools for supporting academic achievement, it makes sense that the NECAP results would also reflect to some degree our success with technology integration. At PES, students in grades 3-6 produce technology rich projects in curriculum areas such as Social Studies and Science. Many of these projects are included in students' e-Portfolios. For example, Grade 3 completes a research project on the regions of the United States. The students use actual town web sites to collect information and then use technology again to organize and produce a project based on their knowledge and understanding. These curriculum driven activities provide fine examples for students of how technology can assist them in their academic endeavors. They also help us to evaluate the technology literacy level of our students and the progress and quality of our technology integration.

During the course of the school year, informal conversations with the technology coordinators help keep professional development offerings in line with staff needs. These informal conversations and notes also allow mid-year corrections of resource placement to maximize technology use.

POLICY AND PROCEDURES

APPENDIX I:

Pittsfield Elementary School
Computer Literacy and Application Curriculum
Updated May 2008

In this school district it is curriculum which determines our technology needs. This curriculum is not static but changing constantly depending on the skills of the teacher, student, and the hardware available for their use. This curriculum is combined with the NH Curriculum GLE's, the ISTE Standards for Technology (NETS) and local subject area curriculum to form a complete program of studies. It is important to note that our school district has not formally adopted the NETS as our local standards. They are used here to show a comparison of our local standards to a set of nationally accepted standards.

The following skills are identified by grade level up to grade 6. After each set of local objectives is a list of the ISTE Performance Indicators that are stressed at that grade level.

KINDERGARTEN

The student will:
1. Identify the components of the computer (monitor, keyboard, disk drive, printer, mouse)
2. Use proper handling of computer equipment and floppy disks
3. Use grade appropriate software games
4. Learn the position of alphabet keys on the keyboard and use two hands for typing. (Touch typing is **no**t formally taught at this level)
5. Learn to use the mouse for maneuvering through Windows start up menu, and other programs
6. Participate in Internet or Email projects under the supervision of teacher.

ISTE Performance Indicators Stressed:
1. Use input devices (keyboard, mouse)
2. Communicate about technology using developmentally appropriate and accurate terminology.
3. Use developmentally appropriate multimedia resources to support learning.
4. Work cooperatively and collaboratively with peers, family members and others when using technology in the classroom.

GRADE 1

The student will:
1. Demonstrate an understanding of a simple word processing program
2. Use a variety of programs: drill and practice, graphics, games, simulations, etc.
3. Demonstrate knowledge of the following function keys : Command, Option, Space Bar, Enter, Return, Delete, Escape, Shift and Arrows
4. Use close boxes in an application
5. Log-in and out of the network
6. Participate in Internet and Email projects under the supervision of a teacher. (keypals, traveling buddies, etc.)
7. Expand their understanding of the following vocabulary: CD_ROM, Copy Command, Cut and Paste, Hardware, Icons, Memory, Menu, Double Clicking, Scroll Bar, Click and Drag
8. Navigate the Windows desktop and use the Start Menu

ISTE Performance Indicators stressed:
1. Use input devices (mouse, keyboard,) and output devices (printers, monitors, to successfully operate computers and audiotapes.
2. Communicate about technology using developmentally appropriate and accurate terminology.
3. Work cooperatively and collaboratively with peers, family members and others when using technology in the classroom.
4. Demonstrate positive social and ethical behaviors when using technology.

5. Practice responsible use of technology systems and software.
6. Use technology resources(puzzles, logical thinking programs, writing tools, drawing tools) for problem solving, communication, and illustration of thoughts, ideas, and stories.

GRADE 2

The student will:
1. Open a file or application, log in and out of a network
2. Identify the hardware parts of a computer
3. Demonstrate the proper care of hardware and software
4. Use drill and practice programs
5. Use problem solving programs
6. Use a word processing program and insert graphics into a piece of writing.
   (Students write simple reports on animals, famous people, pen pal letters, etc.)
7. Develop a sense of responsibility and ethic in the use of computers
8. Use simple editing functions of a word processing program; add text, delete text, capitals,
9. Understand the following vocabulary: font, arrow keys, tabs, boot, cut and paste, edit, backspace, space bar, enter, escape.
10. Use favorites folder to access internet web sites set up by the teacher
11. Demonstrate how to execute the shut down process properly

ISTE Performance Indicators stressed:
1. Use input devices (mouse, keyboard,) and output devices (printers, monitors, to successfully operate computers and audiotapes
2. Use a variety of media and technology resources for directed and independent activities.
3. Communicate about technology using developmentally appropriate and accurate terminology.
4. Use multimedia resources to support learning.
5. Work cooperatively and collaboratively with peers, family members and others when using technology in the classroom.
6. Demonstrate positive social and ethical behaviors when using technology.
7. Practice responsible use of technology systems and software.
8. Use technology resources(puzzles, logical thinking programs, writing tools, drawing tools) for problem solving, communication, and illustration of thoughts, ideas, and stories.

GRADE 3

Beginning at Grade 3, students collect artifacts for their ePortfolios. They have two sessions per week in the computer lab where they participate in curriculum activities designed by the computer lab specialist and the classroom teachers. The following table shows the current portfolio tasks that are completed in grades 3-6. Artifacts are accompanied by rubrics and self-reflections and are stored on our network in the student's home folder. The folders are transferred to the middle school server at the completion of sixth grade.

Technology Portfolio Tasks
Grades 3-6

Grade	Subject	Assignment	Expectation	Date	Artifacts
Third	Social Studies	Webs of Regions of the US	• Use Inspiration program • Research information • Have one fact for each region	October	Inspiration Web
Third	Social Studies Language Arts	State Booklet	• Use the Internet to research	January	Word Booklet
Third	Language Arts	Who Am I?	• Font and formatting • Digital picture	September/ October	Word Document
Fourth	Social Studies Language Arts	Virtual Tour of New Hampshire Towns and Cities	• Internet research • Word Toolbar • Import Graphics • Wrap Around Text	September/ October	Word Document
Fourth	Social Studies Language Arts Math	New Hampshire ABC Book	• Internet Research • Making folders • Template	December	New Hampshire ABC Book
Fifth	Social Studies	PowerPoint	• Using PowerPoint	September	Explorers – PowerPoint presentation
Fifth	Language Arts Social Studies	Westward Expansion	• Use a brochure template • Import Clipart • Internet Research	April	Word - Brochure
Fifth	Mathematics	Calendar	• Creating calendar	December	Word Calendar
Sixth	Language Arts	Biographical Poetry	• Formatting	September	Word- Biographic Poetry
Sixth	Character Development	Self Survey	• Bullets and Numbering	October	Word- Self Survey
Sixth	Science Language Arts	PowerPoint – Erosion	• Internet research • Import graphics • Present to Class	December	PowerPoint – Erosion
Sixth	Language Arts	Advertisement	• Follow tutorial • Insert ClipArt	January	Word/Publisher – Advertisement
Sixth	Language Arts	Resume	• Formatting • Organization • Letter Format	May	Word - Resume
Sixth	Science	Brown Rat	• Internet search • Import picture • Use Inspiration Template	April	Inspiration – Brown Rat

The student will:
1. Use touch typing – 10 words per minute
2. Use application programs such as graphic programs, and drill and practice programs
3. Use word processing including the following functions of cut & paste, copying words within a document, using the thesaurus, using a Spell checker, copying a graphic from a file to a disk, using a simple graphics tools, specifying page breaks, and accessing a CD
4. Demonstrate an awareness of privacy and confidentiality issues as they relate to the use of computers
5. Demonstrate an awareness and appreciation of the influence of technology on their lives
6. Demonstrate an understand the following vocabulary; Justified, File Name, Ruler, Tool Palette, Left Alignment, Size Box, Text

ISTE Performance Indicators stressed:
1. Use input and output devices efficiently and effectively.
2. Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide.
3. Discuss basic issues related to responsible use of technology and describe personal consequences of inappropriate use.

4. Use productivity tools and peripherals to support learning, skill deficits, and personal productivity.
5. Use a variety of media and technology resources for directed and independent activities.
6. Communicate about technology using developmentally appropriate and accurate terminology.
7. Use telecommunications efficiently and effectively to conduct research and to communicate with others in support of learning.
8. Use technology resources (calculators, educational software) for problem solving and to support learning.
9. Work cooperatively and collaboratively with peers, family members and others when using technology in the classroom.
10. Demonstrate positive social and ethical behaviors when using technology.
11. Practice responsible use of technology systems and software.
12. Determine when technology is useful and select the appropriate tools and resources to address a variety of tasks and problems.

GRADE 4

The student will:
1. Use touch typing-20 words per minute
2. Use word processing including the functions of highlighting text within a document, formatting text, loading and running an application, setting margins and tabs, justifying and centering text to create letters, essays, reports, research papers, and stories
3. Use a CD ROM for doing research
4. Enter data into an existing database
5. Perform a simple data base search
6. Log onto an on-line service
7. Understand the vocabulary such as tab stop, tabs, text format, projection panel, right alignment, desk top publishing, network, output, option key, format, format character, electronic bulletin board, input, laser disk, margin, chooser, database, electronic mail, and document.

ISTE Performance Indicators stressed:
1. Use input and output devices efficiently and effectively.
2. Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide.
3. Discuss basic issues related to responsible use of technology and describe personal consequences of inappropriate use.
4. Use productivity tools and peripherals to support learning, skill deficits, and personal productivity.
5. Use a variety of media and technology resources for directed and independent activities.
6. Communicate about technology using developmentally appropriate and accurate terminology.
7. Use telecommunications efficiently and effectively to conduct research and to communicate with others in support of learning.
8. Use technology resources (calculators, educational software) for problem solving and to support learning.
9. Work cooperatively and collaboratively with peers, family members and others when using technology in the classroom.
10. Demonstrate positive social and ethical behaviors when using technology.
11. Practice responsible use of technology systems and software.
12. Determine when technology is useful and select the appropriate tools and resources to address a variety of tasks and problems.

GRADE 5

The student will:
1. Use touch typing-25 words per minute
2. Use word processing to complete assigned tasks including title pages, bibliographies, formatting, justification, tab stops and setting margins
3. Apply computer skills to assigned projects in subject areas
4. Access previously stored information
5. Work with tables and graphing, including entering data into records and fields in a database.
6. Use peripherals such as cameras, and scanners effectively.
7. Work with clip art and other graphics software.

8. Locate and access information within existing databases using Key Word Search strategies
9. Enter information into a spreadsheet
10. Understand vocabulary such as cell, clipboard, column, database, file, field, record, row, search, sort, spreadsheet, and telecommunications.
11. Use the Internet with guidance to conduct research, communicate with others and access web resources.
12. Understand the ethical, cultural, and societal issues related to technology

ISTE Performance Indicators stressed:
1. Use input and output devices efficiently and effectively.
2. Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide.
3. Discuss basic issues related to responsible use of technology and describe personal consequences of inappropriate use.
4. Use productivity tools and peripherals to support learning, skill deficits, and personal productivity.
5. Use a variety of media and technology resources for directed and independent activities.
6. Communicate about technology using developmentally appropriate and accurate terminology.
7. Use telecommunications efficiently and effectively to conduct research and to communicate with others in support of learning.
8. Use technology resources (calculators, educational software) for problem solving and to support learning.
9. Work cooperatively and collaboratively with peers, family members and others when using technology in the classroom.
10. Demonstrate positive social and ethical behaviors when using technology.
11. Practice responsible use of technology systems and software.
12. Determine when technology is useful and select the appropriate tools and resources to address a variety of tasks and problems.

GRADE 6

The student will:
1. Use touch typing – 35 words per minute
2. Distinguish types of information appropriate for databases and spreadsheets
3. Use multimedia
4. Make a presentation using a variety of applications including telecommunications, such as the Internet and email.
5. Desktop publishing (resume, business letter, Bibliography, brochures)
6. Use computer skills to complete assigned tasks in subject areas
7. Demonstrate an understanding of the Standard Toolbar and its functions.
8. Demonstrate the appropriate and ethical use of technology.

ISTE Performance Indicators stressed:
1. Use input and output devices efficiently and effectively.
2. Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide.
3. Discuss basic issues related to responsible use of technology and describe personal consequences of inappropriate use.
4. Use productivity tools and peripherals to support learning, skill deficits, and personal productivity.
5. Use a variety of media and technology resources for directed and independent activities.
6. Communicate about technology using developmentally appropriate and accurate terminology.
7. Use telecommunications efficiently and effectively to conduct research and to communicate with others in support of learning.
8. Use technology resources (calculators, educational software) for problem solving and to support learning.
9. Work cooperatively and collaboratively with peers, family members and others when using technology in the classroom.
10. Demonstrate positive social and ethical behaviors when using technology.
11. Practice responsible use of technology systems and software.
12. Determine when technology is useful and select the appropriate tools and resources to address a variety of tasks and problems.

APPENDIX II:

PITTSFIELD SCHOOL DISTRICT
Technology Resources & Internet Safety

Pittsfield School District recognizes that telecommunications and other new technologies shift the ways that information may be accessed, communicated, and transferred by members of our society. We recognize that in a free and democratic society, access to information is essential and support access by staff and students to these rich information resources along with the development of appropriate skills to analyze and evaluate such resources.

Students and staff are responsible for conducting themselves appropriately when using telecommunications resources just as they are in all other areas of school life. The Pittsfield School District provides access to telecommunications for staff and students to conduct research and communicate with others for educational purposes. Access to Pittsfield School District telecommunication services will be provided to students and staff who agree to act in a manner consistent with the Acceptable Use Policy of the individual schools.

Rules related to Internet and network use have been included in the Acceptable Use Policy in each staff and student handbook. Parents/guardians are asked to review the student handbook with their children each year. Failure to comply with the Acceptable Use Policy results in loss of network/Internet privileges for students/staff. Unacceptable uses include the following:

A. Sending or displaying offensive messages or pictures and/or using obscene language is prohibited.
B. Staff and students should not reveal personal information online. Such information includes but is not limited to name, address, telephone number and user password. Staff and students are NEVER to reveal any personal information about any other staff member or student.
C. Hate mail, harassment, discriminatory remarks and other antisocial behaviors are prohibited.
D. Malicious use of the network to develop programs that harass other users or infiltrate a computer or computing system and/or damage the software components of a computer or computing system is prohibited.
E. Violating copyright laws is prohibited.
F. Use of telecommunications to access or process pornographic materials, inappropriate text files, or files dangerous to the integrity of the local area network are prohibited.
G. Intentionally seeking information on, obtaining copies of, or modifying files, other data, or passwords belonging to other users, or misrepresent other users is prohibited.
H. No use of telecommunications shall serve to disrupt the use of telecommunications by others.
I. Hardware or software shall not be destroyed, modified, or abused in any way. The destruction of, modification of, and/or the abuse of hardware or software, in any way, are prohibited.
J. Intentionally wasting limited resources is prohibited.
K. Employing telecommunications for commercial purposes is prohibited.
L. Use of telecommunications for product advertisement or political lobbying is prohibited.
M. The foregoing will be subject to further determinations as to whether specific uses of telecommunications are consistent with the policies of Pittsfield School District.
N. There are no facilities provided by this system for sending and receiving private or confidential electronic communications. Mail received at any address provided by the Pittsfield School District is subject to review by system administrators. Messages related to or in support of illegal activities will be reported to the appropriate authorities.
O. Pittsfield School District reserves the right to log telecommunications use and to monitor file server space utilization by users and assumes no responsibility or liability for files deleted due to violation of file server space allotments.
P. Students are not permitted to use chat rooms, instant messaging, or any other form of instantaneous person-to-person electronic communication.

In order to match electronic resources to the approved district curriculum, whenever possible and feasible, district personnel will review and evaluate resources. In this manner, staff will provide developmentally appropriate guidance to students as they make use of telecommunications and electronic information resources to conduct research and other studies related to the district curriculum. Staff development opportunities related to the educational use of telecommunications is provided.

The availability of Internet resources within the educational forum does not imply endorsement of the content of those resources. However, we believe that the benefits to the educational process from access to telecommunications resources and opportunities for collaboration in the learning process, far exceed the disadvantages.

Pittsfield School District recognizes that the informational needs and the maturity to evaluate those needs will vary within the student population. Therefore, access to the network resources is based on the needs and maturity of the students. Students and staff receive network/Internet access only upon submission of a Network Account Authorization Form. This form is an agreement by parents of minor students (under 18 years of age), and by the students themselves, acknowledging expected behaviors and consequences as outlined by the Acceptable Use Policy. At the elementary level, students will only access telecommunication resources under the direct supervision of a member of the educational staff. Students in the Middle High School will be allowed more independent access. A log of Internet sites visited by students/staff is kept for 21 days and reviewed regularly for inappropriate access. Access to individual inappropriate sites can be blocked by the district technology protection measures in place.

Pursuant to the provisions of this policy, the administration of the respective schools is hereby authorized to facilitate the development and implementation of building level Acceptable Use Policies.

(Adopted: 08/09/01)

PITTSFIELD ELEMENTARY SCHOOL
ACCEPTABLE USE GUIDELINES FOR NETWORK AND TELECOMMUNICATIONS

I.   PURPOSE

The following regulations reflect Pittsfield School Board policy regarding the use of computers and the access to telecommunications.

II.   GENERAL STATEMENT OF POLICY

Permission for use of telecommunication resources is a PRIVILEGE, not a right. It demands legal, responsible, ethical and considerate behaviors by both staff and students. Each staff member and student is held responsible for his/her actions and activity within his/her account. Unacceptable conduct will result in disciplinary action.

All information and data storage areas are considered to be school property. This is to insure system integrity and insure that users are using the system responsibly. Users should not expect that files stored on our servers or other storage areas would always be private.

III.   LIMITED EDUCATIONAL PURPOSE

The school district is providing students and employees with access to the school district's computer system, which includes Internet access. The purpose of the system is not merely to provide students and employees with general access to the Internet. The use of the computer system is limited to educational purposes, which include use of the system for classroom activities, professional or career development, and limited Internet searches. Users are expected to use Internet access through the district system to further educational and personal goals consistent with the mission of the school district and school policies. Uses, which might be acceptable on a user's private personal account on another system, may not be acceptable on this limited purpose network.

In order to match electronic resources to the approved district curriculum, whenever possible and feasible, district personnel will review and evaluate resources. In this matter, staff will provide developmentally appropriate guidance to students as they make use of telecommunications and electronic information resources to conduct research and other studies related to the district curriculum.

Additionally, where possible, access to informational resources will be designed in ways, which point students to those resources, which have been reviewed and evaluated prior to use. While students may be able to move beyond those resources to others, which have not been evaluated by the staff, they shall be provided with guidelines for such use.

IV.   USE OF SYSTEM IS A PRIVILEGE

The use of the school district system and access to use of the Internet is a privilege, not a right. Depending on the nature and degree of the violation and the number of the previous violations, unacceptable use of the school district system or the Internet may result in one or more consequences. When appropriate the Pittsfield Elementary School School-Wide Discipline Plan will be used. The following are noted as forms of misconduct in the use of telecommunications.

V.   UNACCEPTABLE USES

A. Sending or displaying offensive messages or pictures and/or using obscene language is prohibited.

B. Staff and students should not reveal personal information online. Personal information includes, but is not limited to, name, address, telephone number, and password. Staff and students are never to reveal any personal information about any other staff member or student.

C. Hate mail, harassment, discriminatory remarks and other antisocial behaviors are prohibited.

D. Malicious use of the network to develop programs that harass other users or infiltrate a computer of computing system and/or damage the software components of a computer or computing system is prohibited.

E. Violating copyright laws is prohibited.

F. Use of telecommunications to access or process pornographic material, inappropriate text files, or files dangerous to the integrity of the local area network is prohibited.

G. Intentionally seeking information on, obtaining copies of, or modifying files, other data, or passwords belonging to other users, or misrepresent other users is prohibited.

H. No use of telecommunications shall serve to disrupt the use of telecommunications by others.

I. Hardware or software shall not be destroyed, modified, or abused in any way. The destruction of, modification of, and/or the abuse of hardware or software, in any way, are prohibited.

J. Intentionally wasting limited resources is prohibited.

K. Employing telecommunications for commercial purposes is prohibited.

L. Use of telecommunications for product advertisement or political lobbying is prohibited.

M. The foregoing will be subject to further determinations as to whether specific uses of telecommunications are consistent with the policies of Pittsfield School District.

N. There are no facilities provided by this system for sending or receiving private or confidential electronic communications. Mail received at any address provided by the Pittsfield School District is subject to review by system administrators. Messages related to or in support of illegal activities will be reported to the appropriate authorities.

O. Pittsfield School District reserves the right to log telecommunications use and to monitor file server space utilization by users and assumes no responsibility or liability for files deleted due to violation of file server space allotments.

VI. LIMITED EXPECTATION OF PRIVACY

A. By authorizing use of the school district computer system, the school district does not relinquish control over materials on the system or contained in files on the system. Users should expect only limited privacy in the contents of personal files on the school district system.

B. Routine maintenance and monitoring of the school system may lead to a discovery that a user has violated this policy, another school district policy, or the law.

C. An individual investigation or search will be conducted if school authorities have a reasonable suspicion that the search will uncover a violation of law or school district policy.

D. Parents have the right at any time to investigate or review the contents of their child's files. Parents have the right to request the termination of their child's individual Internet access.

E. School district employees should be aware that data and other materials in files maintained on the school district system might be subject to review, disclosure or discovery under New Hampshire Statutes.

F. The school district will cooperate fully with local, state and federal authorities in any investigation concerning or related to any illegal activities and activities not in compliance with school district policies conducted through the school district system.

VII.   NETWORK ACCOUNT AUTHORIZATION AGREEMENT

A. The proper use of the Internet, and the educational value to be gained from proper Internet use, is the joint responsibility of students, parents and employees of the school district.

B. This policy requires the permission of and supervision by the school's designated professional staff before a student may use a school account or resource to access the Internet.

C. The Network Account Authorization Form must be read and signed by the user and the parent on an annual basis. The form is filed with the office.

VIII.   LIMITATION ON SCHOOL DISTRICT LIABILITY

A. Pittsfield School District assumes no responsibility or liability for any equipment, the loss of data resulting from delays, non-deliveries or service interruptions, caused by negligence, error or omission. Use of any information is at the user's own risk. Any computer connected to our network should have anti-virus software installed.

B. Pittsfield School District specifically denies any responsibility for the accuracy or quality of information obtained through its services. There are no warranties, either expressed or implied, with regard to software obtained from this system.

C. Pittsfield School District reserves the right to remove a user account.

D. Employee misuse of telecommunications will be subject to disciplinary measures as provided by board policy and legal statute.

E. Although the school district may use technical means to limit students Internet access, these limits do not provide a fool proof means for enforcing the provisions of this acceptable use policy.

IX.   PARENT/GUARDIAN RESPONSIBILITY AND NOTIFICATIONS

A. Outside of school, parents bear responsibility for the same guidance of Internet use as they exercise with information sources such as television, telephones, radio, movies and other possibly offensive media. Parents are responsible for monitoring their student's use of the school district network and of the Internet if the student is accessing the school district network from home or a remote location.

B. Goods and services can be purchased over the Internet that could potentially result in unwanted financial obligations. Any financial obligation incurred by a student through the Internet is the sole responsibility of the student or the student's parents.

C. Should the user violate the school district's acceptable use policy, the student's access privileges may be revoked, and school disciplinary action and/or legal action may be taken.

D. All provisions of the acceptable use policy are subordinate to local, state and federal laws.

E. Student(s) may be asked to use the school district resources/accounts to access the Internet for completing individual class assignments or projects. The school district will provide parents the option to request alternative activities not requiring Internet access.

F. The school district's acceptable use policy is available for parental review in the Student/Parent Handbook.

G. Parents are encouraged to provide opinions regarding this policy, to the principal or technology coordinator.

X. CONSEQUENCES FOR THE MISUSE OF NETWORK RESOURCES AND TELECOMMUNICATION

A. General rules for school behavior apply when using media within the school system. The school-wide discipline program consequences will also be employed for any misconduct in the use of telecommunications or the network.

Level 1 Misconduct

Violation: Using telecommunications for purposes other than education and research.

Consequence: Loss of telecommunication privileges for up to one month. If a student, parent(s)/guardian(s) will be notified by the administration, or designee..

Level 2 Misconduct

Violation: Accessing or processing objectionable material; transmission of objectionable or harassing material.

Consequence: Loss of telecommunication privileges for a minimum of one quarter. If a student, Parent(s)/guardian(s) will be notified and a meeting between parent(s)/guardian(s), child and the Administration may be necessary to determine further consequences. Student will be held responsible for any costs incurred such as telephone charges, etc. If offender is a staff member, further consequences may be imposed by the Administration.

Level 3 Misconduct

Violation: Use of threatening comments, sexual harassment, or unlawful use of the Internet or Intranet or e-mail.

Consequence: Loss of telecommunication privileges for up to one year, notification of police, as well as parent(s)/guardian(s). Parent(s)/guardian(s) may be held responsible for any costs incurred, i.e.: Phone charges, court costs. A meeting between all parties involved may be necessary.

B. Level 2 or 3 violations are considered very serious and additional consequences may occur. The school reserves the right to revoke permission for the use of network and telecommunication resources available. Consequences will be determined by the Administration.

Pittsfield School District
Network Account Authorization Form
2008-2009

Each member of the staff, each student, and others who use computers and telecommunications in the Pittsfield School District must have an Network Account Authorization Form on file with a Network Administrator.

Print Name _____

Position/Grade _____ **Teacher** _____

Home Address _____

Home Phone _____ **Parent(s) Work Phone** _____

I have read and understand the Acceptable Use Policy and Regulations for use of computers, networks, and telecommunications of the Pittsfield School District. I agree to abide by these regulations when using the technology resources of the district. I understand that my child will be supervised at a level fitting his/her maturity, technology literacy, and grade level. I certify that the information contained on this form is correct.

_____   My child's picture, name and/or work may be published on the Internet.

_____   My child's picture, name and/or work **may not** be published on the Internet.

_____   I want to be **contacted** before my child's picture, name and/or work in published on the Internet.

_____   _____
Student/Staff Signature   Date

_____   _____
Parent's Signature (where applicable)   Date

Student/Staff authorizations are renewed each academic year

_____   _____
Network Administrator Initials   Date

APPENDIX III: COPYRIGHT AND FAIR USE POLICY

Copyright Protection. "A copyright is a legal creation that provides the creator of literature, design, art, or any other product of one's intellect, skill, or creativity the right to control how that work or art or literature will be used. The author owns the copyright and has exclusive rights over control and use of their work." Copyright laws provide protection; rights include the exclusive right to reproduce, distribute, adapt, and perform. Copyright materials can include worksheets, paintings, photographs, music, poetry, etc. Beginning in 1989, it has not been necessary to include the copyright symbol (©) to indicate that a copyright exists; it is always safe to assume that a copyright does exist.

"There are two ways to copy the work of an author without permission:
   A. If the work is in the 'public domain.' This means that the copyright has expired and the work can be copied without restriction…

   B. If the 'fair use rule' applies. This means that 'if you are using only a small portion of another's work and the use is to benefit the public and it is used in a non-competitive manner, there is probably no copyright violation…

   When applying the 'fair use rule:'

   1. <u>Don't be a glutton</u>. The more you take, the less fair your 'use' becomes. The teacher who regularly and routinely copies from a copyright protected math worksheet booklet is violating a copyright. The teacher who inadvertently copied one page of the workbook for a one-time use is probably not violating the copyright. Numbers do matter. Copying one page from a 100-page workbook doesn't violate the copyright. Copying 80-90 pages of a 100 page workbook is a violation…

   2. <u>Copying vs. creating</u>. Your intended use of the material copied is crucial to determining your fair use. Verbatim copying is a copyright violation. If you are using copyright protected work to create something new, you are not violating the copyright.

   3. <u>Commercial benefit</u>. Without the express permission of the author, as a rule, you cannot use another person's copyrighted work product for your commercial gain and his commercial detriment. For example, a teacher who copies math worksheets from a publisher without permission is impairing the publisher from a commercial benefit; i.e., the sale of the worksheet.

   4. <u>Mentioning the author's name</u>. Merely acknowledging the author does not excuse your copying. Some hold the mistaken belief that they can freely copy the protected work of another simply by attributing the copied material to the author. Acknowledgement and fair use are not the same.

   5. <u>Quality vs. quantity</u>. If you copy the most important excerpt of a work, the less likely your use will be considered fair use. For example, if you copy a key chapter from a book and that chapter was the heart of the book, more pivotal than the remaining chapters, more fascinating and essential than the rest, your copying could diminish sales of that book."

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