Parchment School District Technology Plan

http://www.parchmentschools.org/docs/district/plans/psd-techplan_2012-2015.pdf

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Executive Summary

Living in a global society where access to information is crucial has transformed the way we live, work and learn. Technology provides the efficiency and competitiveness that is required to function in our ever-changing world. We need to prepare our students to live and learn in this world. To meet these challenges, the Parchment School District has developed this technology plan.

In June 2002 the district completed the deployment of approximately $2.8 million worth of technology purchased through bond funds. We are continuing to maintain this infrastructure and are upgrading it as needed to maintain the same or better level of service. More extensive upgrades occurred at the high school due to a successful bond initiative in September 2007. Almost $700,000 was allocated from this bond to upgrade technologies throughout the building with additional technology added to the classrooms. To give a clear vision and sense of direction to our technology integration efforts and make optimal use of the equipment, the district has selected the following six technology goals:

1. Use technology to deliver curriculum and instruction and increase integration of technology literacy skills into instruction and the district's core curriculum as aligned to the state's expectations and standards.
2. Use data for measurement and analysis of student achievement so that administrators and educators have the information they need to increase efficiency and improve student learning.
3. Provide professional development to assure effective and competent use of technologies by all employees and/or integration of technology into instruction by staff and administrators.
4. Support and improve the District's ability to carry out management functions.
5. Maintain a safe, reliable district-wide technology system with sufficient capacity, resources and staffing to meet the district's instructional and operational needs.
6. Use technology as a communication tool for all stake holders.

The evaluation of these goals will help provide data to measure the district's successful use of technology. Four methods of evaluation will be used:
- Technology Plan Evaluation Checklist – used to evaluate the progress toward completion of the existing technology plan.
- Technology Support Index – used to evaluate the support systems needed to integrate technology into the curriculum.
- Teacher Evaluations – technology implementation is a portion of the annual teacher evaluation process.
- Instructional Staff Evaluation Tool – used by teachers and administrators to evaluate their personal technology literacy.

The plan defines a number of strategies that are being implemented to assist the district in achieving its goals. A description of professional development strategies and other types of support for technology use and integration, as well as various requirements of the Michigan Department of Education, are also included. We believe that this plan will improve teaching and learning in the district as well as the efficiency and effectiveness of the entire Parchment educational community.

Introduction/District Mission

The Parchment School District is responsible for preparing its students to be productive, contributing members of society. The District's mission is: "To ensure that all students are challenged to excel in their individual social and intellectual growth, while achieving those essential academic and inter-personal skills necessary to become a successful, contributing member of society." Part of this mission is to provide the students with the technological skills to live and learn in the 21st Century.

District Demographics and Infrastructure Overview

The district includes the city of Parchment and surrounding areas in northern Kalamazoo County. The September 2011 student count indicated the Parchment School District serves 1786 students in PK-12. There are 90 teachers with additional support staff to assist student learning.
The free and reduced lunch percentage is currently at 50%. Approximately 10.5% of the student population receives special education services. The ethnic composition of the student population was 75% White/Caucasian, 8.3% Multi-racial, 3.9% Hispanic/Latino, 10.5% Black/African American, and 2.3% Asian American, American Indian/Alaska Native and Native Hawaiian/Pacific Islander.
The physical plant includes three K-5 elementary buildings, a 6-8 middle school, a high school, a 6-12 alternative school and an administrative office.

The district is connected to the Intermediate School District (Kalamazoo Regional Educational Service Agency, KRESA) via fiber. This is the district's connection to the Internet. It also allows access to shared services provided by the ISD and REMC. All of the district's buildings are networked together with fiber. Internet service, e-mail and phone service are provided to each building using this fiber.
 Each building has a local area network that provides connection to the services on the wide area network. Most K-8 classrooms are equipped with computers, televisions with cable access, VCRs and telephones. Teacher computers are used for management and instructional purposes. At the Middle School the television is connected to the teacher computer for large group presentation of computer programs and DVDs. In the elementary and alternative buildings, data projectors are connected to the teacher computer for improved viewing of computer and video images. Document cameras are also available in most classrooms with data projectors.
In September 2009 the high school technology was upgraded as part of an extensive renovation funded via a bond issue. Each classroom is equipped with a data projector and sound system. All audio and video goes through these systems. Each classroom also has a document camera and interactive white board. The television system was upgraded from a coax system to a digital system. This technology positions the district to provide access to selected television channels via the district's wide area network to all other buildings in the district. While all classrooms are wired for data the building has sufficient Wireless Access Points (WAPs) to provide full wireless coverage in the building. As part of the renovation, door access and camera security systems were added to the building. These systems can be expanded in the future to include other buildings in the district.

District Technology Planning Process

The District Technology Committee includes representatives from all buildings. Many of the representatives are Building Technology Coordinators. Additional volunteers from the administrative and teaching staff also participate. They provide vision and direction for the district's technology initiatives.

Representatives from the committee report to the Student Academic Leadership Team (SALT) which oversees all school improvement and curriculum initiatives throughout the district. Building administrators are asked to solicit parent volunteers to represent their buildings. Additional input is sought from members of the community. This is done by requesting suggestions on the tech plan via the district's web site (http://www.parchmentschools.org/page.php?menu_id=41 and by presenting the plan to the building parent associations for their input. The final plan is presented to the Board of Education for endorsement before it is submitted to the Michigan Department of Education for approval. The District Technology Director is responsible for annually evaluating progress toward completion of the existing technology plan. The information gathered is shared with the Technology Leadership Team team, SALT, building level parent associations, and the administration.

The committee focuses its efforts and attention on the following:
- Recommendation of technology-related goals and evaluation strategies as well as professional development needed to accomplish the goals.
- Suggestions to effectively integrate technology into subject areas and grade levels.
- Suggestions for modifications of the technology plan after the year-end evaluation by the District Technology Director.

Technology Vision

The technology plan for the Parchment School District is based on the reality that technology is an integral part of the way we work, teach and learn. Use of technology will result in improved productivity, performance and learning for students, administrators, teachers, and district/school staff. Technology will be used to connect Parchment's students and staff to each other and to the larger world. Our ultimate goal is to improve teaching and learning through the use of technology tools. The primary goal is not learning about technology but learning with technology through its integration into district curriculum.

Parchment Technology Goals and Objectives

Goal 1: Use technology to deliver curriculum and instruction and increase integration of technology literacy skills into instruction and the district's core curriculum as aligned to the state's expectations and standards.

Objective 1.1 Develop district-wide, grade-level assured experiences through collaboration between the teachers, administrators and curriculum leaders that integrate information literacy and technology skills within all curricular areas.

Strategies 1.1
- As part of the district's curriculum mapping process, work with grade level and content area groups to identify areas of instruction that can best be taught using technology resources.
- Identify Internet resources that can be used for instruction. Emphasize the use of resources that already correlate to Common Core Standards, Michigan's GLCE's and HSCE's. Examples currently in use are MORE, Net Trekker and Discovery Education.
- Work with teachers to incorporate resources into district lesson plans and make the resources easily accessible via the district's Intranet.
- Continue the use of an online curriculum, currently Odysseyware, for high school credit retrieval and enrichment at the elementary and middle school level.

Objective 1.2 Address NETS-S standards through technology-enhanced learning activities in each curriculum area as described by the Michigan Educational Technology Standards (METS).

Strategies 1.2
- Integrate the content area instruction with the METS as part of the process of curriculum integration.
- Continue to monitor and modify the current Technology Standards presented to the Board of Education in June 2004.
- Coordinate METS integration into the new library curriculum with technology standards taught in the classroom.
- Annually provide teachers with the technology standards for their grade/content area.
- Develop a pacing guide that will include lesson plans for teachers to use, adjust and adapt to their classroom instruction.

Objective 1.3 Ensure that all students are technologically literate by the end of 8th grade - meeting NCLB requirements.

Strategies 1.3
- Continue the opportunities for formal technology instruction at the middle school.
- Develop a literacy assessment tool and assess all 8th graders.
- Revise instruction and practices based on assessment results.
- Teach at all levels skills required to evaluate the reliability and validity of information obtained on the Internet.
- Increase the integration of technology in the elementary curriculum through the library skills classes.

Objective 1.4 Advance student acquisition of 21st century learning skills.

Strategies 1.4
- Implement the Google domain that has been created for parchmentschools.org.
- Expand the use of the district's Moodle Content Management system.
- Train teachers in instructional strategies that incorporate these skills and assess teachers on integration of the strategies into instruction.
- Train teachers on the uses of Web 2.0 tools such as blogs, wikis, and collaborative resources that can be used to facilitate this.

Objective 1.5 Instruct students in the district's appropriate use guidelines and issues related to Internet safety, cyber bullying and the ethical use of the Internet.

Strategies 1.5
- Complete development and implement an Internet curriculum specific to mandates of the recently revised Childrens Internet Protection Act.
- Continue efforts to educate the community and instructional staff and incorporate the information into all areas of instruction that make use of technology.

Goal 2: Use data for measurement and analysis of student achievement so that administrators and educators have the information they need to increase efficiency and improve student learning.

Objective 2.1 Support assessment needs related to standardized and state mandated tests.

Strategies 2.1
- Continue use of standardized testing to guide classroom instruction using Work Keys, MAP, ACT, MME, Dibels, MEAP, Delta Math, etc.
- Develop a district assessment schedule to coordinate standardized assessments to improve data quality.
- Train teachers and administrators to analyze results as a basis for change in curriculum and instruction.
- Continue using a data warehouse solution to compare testing results between different types of assessments.

Objective 2.2 Support assessment needs related to the district's internal assessments.

Strategies 2.2
- Provide data management tools to track student performance on district priority standards using Pinnacle Gradebook at all levels.
- Implement use of classroom performance systems as a means of collecting formative assessment data.
- Investigate integrating classroom performance systems with Pinnacle Gradebook.
- Investigate implementation of Pinnacle Instruction to tie instructional resources to assessments.

Goal 3: Provide professional development to assure effective and competent use of technologies by all employees and/or integration of technology into instruction by staff and administrators.

Objective 3.1 Ensure that all media specialists and building technology coordinators serve as the leaders in technology and 21st Century information literacy skills within their school buildings.

Strategies 3.1
- Reorganize the district's technology leadership team.
- Schedule regular meetings of the technology leadership team to explore new hardware and software technologies.
- Add a technology component to staff meetings led by building experts that occurs on a regular basis.
- Provide training time during weekly staff meetings and/or periodic professional development days for building staff to be trained by the tech leaders.

Objective 3.2 Provide professional development to ensure that staff are adequately trained to teach the METS and integrate technology into instruction.

Strategies 3.2
- Develop and implement a self-assessment for technological competence of media staff, teachers and administrators and use it to identify gaps in learning.
- Provide training on technology skills that align with NETS-A and NETS-T.
- Train staff on instructional methods that integrate technology with the existing core curriculum.
- Ensure that staff is aware of new hardware technologies and the use of them to improve instruction and learning.
- Continue training teachers and administrators to use data productively to analyze student performance on national state and local assessments as a means to provide more targeted instruction.
- Develop a library of past trainings and FAQ resource on the district's Intranet as a self-help resource.
- Train administrators on evaluation criteria for integrating technology skills into the curriculum.

Objective 3.3 Provide professional development to ensure that support staff are adequately trained to efficiently perform their job tasks.

Strategies 3.3
- Provide support staff with appropriate training to use the management software required for job responsibilities. (e.g. e-mail, work orders, student information system, POS (Point of Sale), etc.)
- Develop or implement an existing assessment of secretarial skills using MS Office products needed for job classification.
- Provide training to eliminate knowledge gaps identified in the use of MS office products.

Goal 4: Support and improve the District's ability to carry out management functions.

Objective 4.1 Continually evaluate district management systems to ensure the most up-to-date implementations possible with available district resources.

Strategies 4.1
- Informally meet with teacher, library and administrative/secretarial and support personnel functions to determine needs.

- Improve the integration of data systems as much as possible so that administrators, educators and support personnel have the information they need to increase efficiency.
- Assess and revise any changes that occur as needed.

Objective 4.2 Implement or revise existing management functions.

Strategies 4.2
- Implement a new library circulation system.
- Pilot a new helpdesk ticket system.
- Phase in usage of a new web-based financial accounting and human resources package.

Goal 5: Maintain a safe, reliable district-wide technology system with sufficient capacity, resources and staffing to meet the district's instructional and operational needs.

Objective 5.1 - Update and maintain voice, video, and data systems.

Strategies 5.1
- Ensure continued maintenance and support of existing infrastructure and end user technology.
- Implement an assessment of the telecommunications services, hardware, software and other services that will be needed to improve education.
- Support and maintain communication systems for staff and students.
- Provide video surveillance systems as needed to ensure student safety and reduce building vandalism.
- Begin upgrading classroom technologies as funds allow. Upgrades for consideration currently are sound field integration, use of data projectors to manage all video and the addition of document cameras.

Objective 5.2 Maintain district protocols related to Technology Policies

Strategies 5.2
- Evaluate and revise as necessary the policies and procedures related to maintenance of hardware, software, infrastructure and security.
- Ensure that staff and students are aware of safe and secure network policies that support and meet CIPA regulations.

Objective 5.3 Evaluate and support the district's technology plan.

Strategies 5.3
- Meet current and future funding requirements to support plan implementation.
- Annually apply for USF funding.
- Continue Consortium agreement to obtain reduced pricing on software packages.
- Evaluate and make changes to the technology plan on a yearly basis.

Goal 6: Use technology as a communication tool for all stake holders.

Objective 6.1 Continue use of the Honeywell automated phone dialer for communication of routine reminders and emergency situations.

Strategies 6.1
- Investigate options that may be available for parents to manage their alerts.

- Analyze call logs to improve data entry and notifications.

Objective 6.2 Continue use of a parent reporting system at the secondary level and implement a similar system at the elementary level.

Strategies 6.2
- Continue use of Pinnacle for communication of student achievement to parents.
- Expand PIV capabilities as more features become available.

Objective 6.3 Maintain and improve the district's current web presence.

Strategies 6.3
- Develop a grid that indicates when pages need to be updated.
- Train additional editors as needed to make sure the information is constantly updated.
- Monitor Google Analytics to optimize our website's delivery of current and accurate information.
- Continue use of Sitecheck to check for dead links and misspelled words.
- Highlight a district web page resource in each district newsletter to encourage visits to the web page.
- Post Technology Plan on the school website.
- Expand use of the District's Intranet.

Curriculum Integration

The primary motivation for the implementation of the Parchment School District's technology plan has been and will continue to be to use technology to deliver instruction and increase integration of technology literacy skills into instruction.

To help teachers teach digital literacy and citizenship in the classroom, we will use the online resources found at Common Sense Media http://www.commonsensemedia.org/educators/curriculum. These lessons teach students to become responsible Internet users. Completion of the lessons allows students to become aware of and take control of their digital legacy.

Our curriculum leverages the use of a variety of free online tools to improve student learning and teaching effectiveness. There have been, and continue to be numerous free web tools that are developed that have educational value. As tools are discovered or rediscovered they will be spread to the rest of the staff through the Technology Leadership Team, as discussed in the Professional Development section.

We will also explore ways in which technology can be used to promote independent student learning, which will develop high level thinking skills. One option allows groups of students to work collaboratively on a project or research topic. This style can be teacher-led and student-directed and foster interpersonal skills. The district has a Google education domain that can facilitate this once it is fully implemented. Another option allows students to work individually with technology (i.e. Internet research, Excel spreadsheet, web application project, etc...) to solve a problem or otherwise answer some curriculum based question. Whichever method is used or discovered, an interdisciplinary effort will often be required of the student to complete the technology based project or task.

A small group of teachers uses our current Moodle system in their classroom. Moving forward, we will explore the use of Moodle to further provide students with access to classroom lesson resources 24/7. Allowing students virtual tutoring anywhere they have Internet access will help boost student achievement. We will also explore the possibility of using the Moodle server for Professional Development to provide training resources to all staff.

Classroom Computers

Most classrooms have two or more computers to be used by students and teachers. One computer is used with a large screen TV monitor or data projector for whole class instruction. As funds allow, the televisions will be replace by a data projector which will project television, DVD, computer and document camera images. Additional computers are provided in each room "as needed" to be used by students for individual instruction. Classroom computers provide a powerful tool for whole class instruction, as well as independent group and individual student activities. A classroom response system is available for checkout to individual teachers. This system allows teachers to collect real-time data from their students and evaluate learning and understanding of concepts immediately. Examples of current and planned uses of technology within the curriculum include:

Reading

One of the district's school improvement goals is to increase reading comprehension skills as well as comprehension of information reading. The following programs are a supplement to the grade level curriculum in the classroom.

- *Accelerated Reader* software allows students to read books at their own level and their own speed. The computer tests their comprehension and gives them immediate feedback. The district

currently owns books and quizzes that include both works of fiction and non-fiction. Research has shown that working with this software program and other similar programs improves reading comprehension skills. This program is heavily used within the elementary buildings and still strongly encouraged in grades 6 and 7. Evaluation of student growth using this program is measured annually.

- *Read Naturally* software is used in each elementary building. Research has shown that student reading ability improves as students work through the reading fluency activities. Students who have been targeted for this instruction have made large gains in their reading skills.
- The district uses the 2001 Houghton Mifflin reading series in grades K-5. This program provides Internet links that supplement the adopted curriculum. Teachers also add technology resources that provide additional enrichment and remediation. This text is not correlated to Common Core so there will be changes coming in the future.

Writing
- School improvement teams in grades K-12 set a goal that students will improve writing skills across the curriculum. All teachers in the district have been trained to use the Collins Writing method of instruction. This will provide a unified instructional format that carries between levels.
- Technology programs such as Inspiration will be used to help students organize their thoughts and convert the resulting mind maps into an outline which can be used in the students' writing. Web based applications can be used; possibilities are Bubble.us, Mindomo and Mindmeister. Due to the visual nature of this software, it is ideal for many students who learn visually as well as for those students with special needs.
- Some teachers in the district are using MP-3 players for writing reflection and evaluation. Research supports the use of writing conferences to increase student success in writing. By utilizing MP-3 players as a form of feedback and evaluation, students have one-on-one communication from a teacher on how to improve their writing.
- With the addition of document cameras, writing teachers have the opportunity to evaluate authentic writing samples with students in real time. Student achievement in writing will be assessed through writing assignments as well as writing scores on the MEAP, MME and ACT.

Math
- The third school improvement goal is to improve math fluency problem-solving. Mathematics programs allow students to expand their math skills beyond the normal classroom curriculum. Software can be used to visually represent math concepts. By allowing students to enter data, make changes and see immediate results, these concepts are easier for students to understand. Using computers in these ways provides practice on the skills needed for math problem-solving. Web sites have been identified that provide these demonstrations. Teachers are making use of the Internet in this way.
- During the 2006-07 school year, the district purchased document cameras for the fifth grade teachers using Section 99 grant monies. Additional grant monies funded document cameras in the math classrooms at the Middle School. These cameras allow teachers to demonstrate more complex math concepts using manipulatives.
- Scientific and graphing calculators are used extensively at the high school. Teachers have TI presentation devices that allow them to display the calculator on the classroom television. A TI Navigator system was purchased via a grant program for a high school teacher. This system

provides even more interactivity on calculator use than the presentation device. Middle school teachers use scientific calculators in their instruction.

Computer Literacy
To ensure that students in Parchment are technologically literate, a curriculum framework based on the National Educational Technology Standards for Students, was adopted by the Board of Education in June 2004. (See Appendix I) The curriculum resources found at the Common Sense Media web site will be added to existing instruction. As of March 2012 they were freely available.

Computer Labs
Each building is equipped with 1-3 computer labs of 25-30 computers each. The labs at all levels are used for group instruction or individual practice as follows:

Computer Literacy - Students learn basic skills in keyboarding (typing) as well as the use of the Internet, database technologies, presentation and publishing software and spreadsheets. The creation of multimedia presentations utilizing data, voice and video is also ongoing. At the middle school, a career based curriculum has been adopted. This curriculum covers the skills needed for students to meet the state's on-line graduation requirement, assist in the development of an individual educational development plan (EDP) and pass the 8th grade literacy test. Students at Barclay are also involved in a career curriculum, similar to the Middle School.

Tool Software - Students use word processing, desktop publishing and presentation software to prepare papers and presentations for content area classes.

Curriculum Integration - An entire class works together using subject-specific software, tool software or pre-identified Internet sites.

Networks
Communication networks allow information to flow from classroom to classroom, from building to building and between the District and the community through e-mail and controlled data access. Other advantages of networking are as follows:

Internet Access - The network allows students and teachers from every classroom in the district to connect to the Internet and access information on a variety of topics. Teachers can access web sites that correlate to their textbooks to provide additional information, simulations, and supplemental activities on the concepts being taught. On-line software is used to provide learning opportunities that were not possible before. Odysseyware online instruction is being used for alternative education students and high school credit retrieval. It is being used at the elementary level for enrichment. Teachers at all levels have access to educational movies that can be video-streamed into the classroom or downloaded for later viewing via Discovery Education, YouTube and TeacherTube. Teachers are beginning to make use of the Moodle server provided by the district. This course management system allows teachers to manage assignments, discussions, and curriculum content. These assessments can provide item analysis on each question giving teachers the information they need to improve instruction for their students. Through the Michigan Electronic Library all students with Internet access can search periodical resources at home. Secondary buildings have implemented

Pinnacle Internet Viewer (PIV), a web-based communication system for use by parents and students. These systems can be used to provide personalized homework information, reference links, attendance and academic performance information.

Shared Resources - Library resources at the elementary, middle school and high school can be accessed from classrooms. Software and data can also be shared where appropriate between classes and buildings. Administrators can consolidate and analyze data from all buildings in order to evaluate the success of instructional initiatives.

Telephones - Today's teaching techniques require a significant amount of communication between teachers and parents. A telephone in each classroom facilitates this communication. Phone mailboxes have been set up to receive messages. The recorded voice message can provide information about such things as special events and assignments.

TV Monitors, Data Projectors, Document Cameras, VCRs and ITV - A large screen TV mounted on the wall in each room in all buildings, except the high school, provides a means for sharing information with the entire class. Data projectors have been installed in the high school, as well as a SMART Board in most classrooms. Output from a computer can be directed through the TV monitor or data projector to allow the entire class to share in a particular computer application (for example, an Internet demonstration of plate tectonics, JFK's inaugural address, examples of Impressionist Art, projections of microscope slides and instruction on using new computer software). Instruction via *PowerPoint* occurs frequently. Students are also given the opportunity to present their learning through presentations via *PowerPoint*. With the flip of a switch, the TV/Data Projector can be used to receive instructional TV programs via cable transmission. Switch again and VCRs/DVDs or document cameras can be used to project materials on the monitor pertaining to a wide variety of educational interests. Through a simple change of channels, teachers have access to the video network. This network provides building-wide computer and video presentations. Live video broadcasts can be produced within each building for live or time delayed viewing. Data projectors are available on a checkout system. They can project at sizes up to 7'x7'.

Curriculum Timeline

2012
- Coordinate METS integration into the new library curriculum with technology standards taught in the classroom.
- Develop a pacing guide that will include lesson plans for teachers to use, adjust and adapt to their classroom instruction.
- Develop a literacy assessment tool and assess all 8th graders.
- Explore the feasibility of moving AR to an on-line system. This may be dictated by hardware constraints imposed by moving to the Win 7 operating system.
- Expand the use of the district's Moodle Content Management system.
- Develop a district assessment schedule to coordinate standardized assessments to improve data quality.
- Complete development and implement an Internet curriculum specific to mandates of the recently revised Children's Internet Protection Act.

2012-15

- As part of the district's curriculum mapping process, work with grade level and content area groups to identify areas of instruction that can best be taught using technology resources.
- Identify Internet resources that can be used for instruction. Emphasize the use of resources that already correlate to Common Core Standards, Michigan's GLCE's and HSCE's. Examples currently in use are MORE, Net Trekker and Discovery Education.
- Work with teachers to incorporate resources into district lesson plans and make the resources easily accessible via the district's Intranet.
- Continue the use of an online curriculum, currently Odysseyware, for high school credit retrieval and enrichment in at the elementary and middle school level.
- Integrate the content area instruction with the METS as part of the process of curriculum integration.
- Continue to monitor and modify the current Technology Standards
- Annually provide teachers with the technology standards for their grade/content area
- Continue the opportunities for formal technology instruction at the middle school.
- Teach at all levels, skills required to evaluate the reliability and validity of information obtained on the Internet.
- Implement the Google domain that has been created for parchmentschools.org
- Continue use of standardized testing to guide classroom instruction using Work Keys, MAP, ACT, MME, Dibels, MEAP, Delta Math, etc.
- Investigate integrating classroom performance systems with Pinnacle Gradebook.

On-line Learning

Learning can take place in a variety of situations, not all of which are in a face-to-face setting with the instructor and learner in the same location. Online courses are used for credit retrieval, enrichment, and alternative learning situations. Odysseyware course work is currently used in the district to provide this opportunity. Online courses have been used by professional staff to maintain their certifications via Learnport. Michigan's Virtual High School has courses available for use by Parchment's students. The computer literacy class uses a Moodle course to manage the students and their instruction. All students graduating from Parchment's alternative high school are required to take an on-line course that prepares them to take the WorkKeys exam.

Odysseyware
This is an online comprehensive courseware system that delivers thousands of hours of standards-based, interactive curriculum, integrated assessment and student management & record keeping. This curriculum is aligned to Michigan's Merit Curriculum. The district currently has ten accounts. These are used by students for credit retrieval at the high school and alternative education opportunities. They are used at the elementary and middle school for enrichment and remediation. Odysseyware offers:
− An online library of interactive curriculum that includes multimedia lessons.
− Self-paced, interactive curricula that adapts to a student's needs.
− Testing, assessment, student management, record keeping, and communications tools.
− An easy-to-use instructional management system allowing for curriculum control and customization.

Internet Resources/Web 2.0 Tools
Teachers are beginning to use more interactive Web 2.0 Internet Tools. Pilot programs using wikis, blogs, Moodle, podcasting and digital storytelling are being used for instruction. This usage will be expanded as teachers develop technology integrated lessons.

Online Learning Timeline

2012
▪ Expand the use of the district's Moodle Content Management system and train teaches in its use.

2012-2015
▪ Continue use of Odysseyware or comparable alternative each year as dictated by program needs.
▪ Increase enrollment by students in coursework offered via Michigan Virtual High School.
▪ Investigate the feasibility of offering more on-line coursework as a means for students to complete Michigan's Merit Curriculum requirements.

Communication

In order for technology integration to be successful there needs to be a shared vision between the school and the supporting community (parents). Therefore, it is imperative that communication between the groups be maintained. The Parchment School District has successfully used a variety of methods in the past to communicate aspects of technology to the public. Technology is the fundamental vehicle for communication with our community and families. E-mail, telephones in every classroom, *Pinnacle Internet Viewer (PIV),* Honeywell Alerts and the district web page promote parental involvement in a child's education.

Pinnacle Internet Viewer
The district will continue using the *Pinnacle Internet Viewer* to communicate with parents in grades 6-12. This communication system allows parents to receive personalized information for their students about grades, attendance, and homework assignments. *Pinnacle Internet Viewer* authenticates every user and securely displays only the content that the district wants that user to see. A similar system called *JupiterGrades* is available at the elementary level. The intent is to move all levels to PIV over the next 2 years.

District Newsletters
The district's newsletter, *The Panther Press*, is published quarterly and sent to all residents in the district. It is also posted on the district's web site. Building level newsletters are also posted on the website. These newsletters are published weekly, bi-weekly or quarterly depending on the grade levels the building services.

District Web Page
The district maintains a web page as a means of communication with the community. It is located at http://www.parchmentschools.org/. The web page includes general district information and the district technology plan as well as specific building information. Parents can access lunch menus, bus schedules, sports schedules, and student handbooks. From this link parents can access information about their student's class via *Pinnacle Internet Viewer*. Additional features were added during a major revision in January 2009 that allowed for RSS feeds and alerts. The web page received another major update in March 2011. The success of this revision will be evaluated using web statistics as generated by the web host.

Intranet
The District's Intranet is accessible via secure login for employees of the district. Currently it is to schedule building usage and communicate setup needs to custodial staff. We want to expand this to provide lesson resources for technology integration and instruction. It will also be used to post professional development resources.

Parent Notification System
The parent notification system, Honeywell, allows administrators to easily create personalized and timely voice messages, emails or correspondence. Messages can be scheduled for delivery at any time to alert parents, students and staff of absences, events, emergencies and other important issues. We hope to provide additional flexibility to the system so that parents can choose their notification method. This functionality is being investigated.

Communications Timeline

2012
- Explore options available in Honeywell for increased reporting flexibility.
- Develop a grid that indicates when pages on the web site require updates and who is responsible for completing the task.
- Highlight web site features in the Panther Press.

2012-2015
- Monitor and adjust the district's web site as needed. Add additional features and content as indicated by the evaluation.
- Continue use of parent reporting systems individualized by student. Investigate additional features and implement if they meet the needs of the district and the community.
- Transition K-5 to Pinnacle Internet Viewer (PIV)
- Expand the functions provided by the Intranet.
- Analyze Honeywell call logs to improve data entry and notifications.

Collaboration

Adult & Community Education
Beginning with the 2009 school year the district discontinued its Adult Education/GED program. The community education program was also discontinued. If these programs are added in the future, collaboration with the appropriate parties will become part of the technology planning process.

ESL
The district does not have an ESL program. Less than .5% of our students require these services.

Professional Development

Technology is ever-present in today's society. The world is readily infusing technology into our daily lives. In addition to these realities, educational technology is creating innovative and exciting learning environments. Technology is affecting how teachers teach and work with curriculum. It is affecting how students learn. The world is changing and the educational needs of the 20th century are not those of the 21st. In order to fully realize the potential of educational technology we must train teachers not just in the mechanics of operating the equipment, but in the creation and implementation of technology integrated lesson plans that address these changes. Data suggests that when teachers are given specific instruction and practice in integrating technology into learning activities that involve student use of technology, they more frequently develop and use such strategies in their own classroom. This research was originally published at
www.teachnet.org/TNPI/researchgrowthswanmull.htm

Professional development offerings are consistent with skills teachers need to acquire in order to promote integration of technology in their classrooms. They follow the NETS standards from the International Society for Technology Education (ISTE) and facilitate teacher use of technology to help students accomplish the technology literacy outcomes at all levels. In Parchment, most of the teachers have received training on basic computer and software operations. While we will continue to offer this training as needed, the focus is training on integration strategies and development of lessons that incorporate technology into the district outcomes. It is also important to train support staff. Use of technology allows the staffs to more efficiently perform their jobs.

Previously teachers completed an annual self-evaluation on technology use. This instrument was originally based on the Code 77 Rubrics for the Mankato School District. The tool was used to measure the effectiveness of the training program. It was also used as a self-evaluation to assist teachers in determining the concepts they needed to learn and practice. Beginning in 2010 the district switched to using the educator evaluation tool that was developed by the REMC Instructional Technology Specialists (RITS) in Michigan. We were not happy with the results of this assessment and felt it was not aligned to the expectations the district has set for basic technology literacy. Our intention is to develop our own assessment that is aligned to our expectations and the NETS for Teachers.

To effectively evaluate staffs technology skills, administrators need to have a minimal level of educational technology ability. ISTE has also developed NETS for School Administrators. These standards are a national consensus among educational stakeholders of what best indicates accomplished school leadership for comprehensive and effective use of technology in schools.

Professional Development Strategies and Initiatives for Technology

Currently the District Technology Director implements the district's overall technology training with supervision by the District's Assistant Superintendent for Curriculum & Instruction. This allows for coordination of the training necessary to meet the district's technology and instructional needs. As training needs are determined, all instructional staff, teachers, aides, support staff and administrators are considered. When it is necessary trainers are brought in from outside the district to provide additional viewpoints and resources.

Technology Leadership Team Training - In January 2008 the district working with the One to One Institute, formed the One-to-One committee. This committee was comprised of teachers from all district buildings. In addition to serving as the district's technology committee, the focus of the group was on being the pioneers of new technology in their own classrooms. These teachers then shared their experiences and expertise with other teachers in their building during inservice days and staff meetings. Due to limited resources, this group became inactive during the 2010 and 2011 school years. It was a successful model and we are planning on reactivating the group. They will meet monthly to learn 21st Century instructional skills and strategies for integrating technology into instruction.

Administrator Training –During the 2008-09 school year, administrators met monthly for a two hour training session. These sessions provided training on the use of data, Web 2.0 tools, classroom technology implementation strategies and technology visioning. Additional sessions are scheduled as training needs are identified.

Other
- All new staff are required to attend the new employee workshop. This takes place before the start of the school year and as needed during the year. The information covered includes technology protocols, network access, and email / voicemail procedures.
- All staff is required to access the Safe Schools website to annually complete training on bloodbourne pathogens, sexual harassment, hazard communications and other state and federal laws affecting K12 education in Michigan.
- Support staff is required to attend technology training necessary for them to perform their jobs.
- Tune Ups - After school tune-up sessions are available by request throughout the year. Attendance is voluntary and not compensated. Content changes based on perceived needs of the staff as recommended by Building Technology Coordinators and teachers or administrators. These are also used to introduce integration strategies for district curriculum software.
- The SALT committee recommends additional technology training. This allows technology training to be coordinated with a component of the district's building level school improvement plans.
- The school district supports staff attendance at technology workshops offered by the local ISD and state professional organizations.
- Staff can earn professional development credits in a wide-range of software applications online via the district's subscription to www.atomiclearning.com. This model promotes flexibility and convenience. The service allows users to search by state standard, by ISTE NETS-S, publisher or platform.

Staff Development Timeline

2012
- Reorganize the district's technology leadership team.
- Develop and implement a self-assessment for technological competence of media staff, teachers and administrators and use it to identify gaps in learning.
- Develop a library of past trainings and a FAQ resource on the district's Intranet as a self-help resource.

- Develop or implement an existing assessment of secretarial skills using MS Office products needed for job classification.
- Train administrators on evaluation criteria for integrating technology skills into the curriculum.

2012-2015
- Expand the number of staff attending conferences such as MACUL to develop teacher knowledge of hardware/software technology available for use in classrooms.
- Provide training time during weekly staff meetings and/or periodic professional development days for building staff to be trained by the tech leaders.
- Schedule regular meetings of the Technology Leadership Team to explore new hardware and software technologies.
- Provide training for teachers in the characteristics of 21st century learners as determined by current brain research and instructional techniques needed to address these characteristics.
- Train teachers on the uses of Web 2.0 tools such as blogs, wikis, and collaborative resources that can be used to facilitate this.
- Provide training on technology skills that align with NETS-A and NETS-T.
- Ensure that staff is aware of new hardware technologies and the use of them to improve instruction and learning.
- Continue training teachers and administrators to use data productively to analyze student performance and provide targeted instruction.

Supporting Resources

Policies
Technology protocols have been written to address issues related to computers and associated peripherals, copyright, data network security, electronic mail, Internet, software, substitute staff, web page publishing, telephone and voice mail. All personnel and students must sign an AUP annually indicating they have read and agree to abide by each of the protocols before receiving access to the district's networks.

Documentation
Documentation was written or provided by the companies contracted to set up the voice, video and data networks. Copies are on file in the district's technology office.

Michigan Electronic Library (MEL)
Michigan Electronic Library provides a free electronic library that provides access to databases containing full text magazine and newspaper articles archived as far back as 1986. Project MORE (Michigan Online Resources for Educators) correlates Internet resources to the Michigan GLCE's and HSCE's.

REMC
The video and materials lending library is available online via SNAP which is a searchable database. The REMC has also negotiated lower costs for Discovery Education's video streaming resources.

K-RESA and Mi-Case Consortiums
- Parchment currently partners with KRESA for student information systems, financial accounting and human resources programs. KRESA also provides support for the state reporting required by CEPI. Access to Odysseyware and Discovery Education video streaming is improved as the ISD provides hosting services for these programs. The ISD also provides a data warehouse, District Data Analyzer (DDA)
- The district is a member of the KRESA Consortium. This provides lower cost Internet access for the district's Internet use.
- Staff training in computer use and software programs is available through our membership in the consortium.
- Large scale purchases of technology and software have previously been coordinated through KRESA resulting in lower costs as well as coordinated training for member districts.
- School district technology coordinators attend every other month technology meetings. The meeting provides an opportunity for human networking and idea sharing. New product information is often presented. A similar monthly meeting devoted to instructional technology also is available. Current information regarding state and federal initiatives and regulations are presented at these meetings.
- Students with special needs who require adaptive devices for the use of technologies receive these from KRESA.

Support Contracts
Support contracts are maintained with several outside contractors. They provide programming and repair services. The systems supported are:
- Telephone/Voicemail
- Security cameras and Door security
- Novell network
- Evideon video system

Curriculum Software
Software purchases are made with curriculum funds to insure coordination with the district's outcomes. Software was also purchased through two TLCF grants in 1999 & 2001. These purchases included large-scale adoptions of *Accelerated Reader*, *Inspiration*, and *Cornerstone Math & Reading*. While the software is old by technology standards it is still effective at meeting curriculum needs. Updating of these programs may be required as the district moves to Windows 7 or higher operating systems. The main tool software used by the district is comprised of MS Office products, specifically *Word, Excel,* and *PowerPoint.* The District's Technology Director and Assistant Director provide troubleshooting, training, and integration support for the software provided by the district.

Management Software
Management software is provided in all departments as listed below
- *Pinnacle Student Information System by Global Scholar* is used for all student information. The school district also uses Human Resources (*HR*), Financial Accounting (*FA*) management software which was developed and is supported by KRESA.
- *VersaTrans* – The transportation department uses this software to create and track the busing system. It is part of a county-wide system to improve transportation of students in shared programs.
- *MealMagic* – This POS food service software is used for inventory, free and reduced meal application processing, and student meal accounting.
- *Athena & Follett* – are the library cirulation systems currently in use in the district. The plan pending funding is to move to the online version of Follett. This is forced by the update in computer operating systems.
- *School Dude* – This is an on-line tracking system for maintenance and custodial work orders.
- *Schedule Star* – This on-line software is used to manage the Athletic programs at the high school.
- *CMS* – This software is used to manage the district's web site.
- *Spiceworks* - this free online service is being piloted as a means of tracking technology help tickets.

On-line Subscription Services
The district currently subscribes to the following on-line services.
- *JupiterGrades* - a communication tool, gradebook and report card program that provides parents access to their child's personalized information in grades K-5.
- *Odysseyware* – curriculum modules.
- *Career Cruising* - provides an interactive web-based program that assists students with personal exploration and career investigation. It also provides a method of creating and storing a student's EDP. These are required of all students grades 7-12.
- *Discovery Education* – Provides educational movies for downloading or live video streaming.

- *School Dude* – on-line tracking system for work orders.
- *Barracuda* – e-mail spam service and content filtering
- *TrendMicro* – desktop virus protection
- *ScheduleStar* – management of the high school athletics program
- *MARC Wizard* - library circulation software used to identify gaps in the collection and assist with cataloging

Training Manuals
Teachers that attend district sponsored technology training receive a training notebook. Additional chapters are added for each workshop that participants attend. The chapters provide help sheets for the different operations that are demonstrated as well as suggestions for instructional applications and Internet resources. Plans are to include these on the District's Intranet

Web Site
Routine maintenance and updating of the district's web site is managed locally. More sophisticated programming is contracted out. The district determines what information is delivered via this medium.

Infrastructure

Wide Area Network
Maintaining the existing infrastructure and equipment levels is essential to achieve Parchment's technology vision of improving teaching and learning through the use of technology tools.
The district's buildings are networked together with district owned fiber. Direct connect Internet service, e-mail and phone service are provided to each building using this fiber. The district connects to the Internet using 100MB fiber. Currently we pay for 12Mb of service but this will be increasing to 20Mb in the 2012-13 school year with the potential to go higher if necessary. All of the districts servers are centralized and access to these is possible via the WAN. With the exception of the backup server all of the servers were new as of July 2011. The backup server was replaced in April 2009. The network's content filtering, spam filter, and firewall services are provided by individual hardware devices housed at the Middle School. A security server and a media server were added to provide services for the high school. Adding them to the district's Network Operating Center (NOC) allows for expansion into other buildings in the future.

Local Area Network
Each building is connected to centralized services via a LAN utilizing switches. Each building is equipped with 1 – 3 computer labs with access to the Internet and networked services through the LAN/WAN. Configuration of the labs is flexible enough to allow for adaptive devices and wheelchair access.
A video distribution system is available in each building. This network is self-contained by building. Using this network, it is possible to show a VHS tape, present a live broadcast or run a computer presentation throughout the building. At the high school this is a digital system that will eventually be available to all buildings throughout the district. The roadblocks to full usage in the other buildings are the lack of cabling and funding. These issues will be resolved over time.
A digital surveillance system is available at the high school. This system is flexible enough to permit additional cameras to be installed throughout the district as funds become available. This would ensure an additional layer of student security and reduce vandalism.

Telephones
The district's phone system was upgraded in July 2009. The previous PBX had reached end of life. The new system allows more management by district personnel resulting in a significant cost savings. This system also permits call accounting. We can determine from which room/building in the district 911 calls originated and track in-coming and out-going calls if necessary for security reasons. 911 calls are automatically routed to copper lines so that they are always available.
Administrators all have smart phones for instant access both via voice and email.

Classrooms
Most classrooms are wired to support the connection of five computers. This allows for future growth. Classrooms are currently equipped with 2-3 computers for management and instructional purposes. Each computer has access to the Internet.
Each K-8 classroom is equipped with a 32" television and VCR. Data projectors and sound systems are installed in the high school classrooms. The local cable company provides CATV. The TV/data projector is also connected to the teacher computer for large group presentation of computer programs. Each classroom is equipped with a telephone.

Teachers have access to data projectors, DVD players, CD burners, digital cameras, document cameras, scanners, and video streaming. The high school has a classroom configuration that includes a data projector, computers, DVD player, interactive whiteboard, and document camera. The data projector's remote is used to select which device is viewed by students.

Infrastructure Timeline

2012-2015
- Continue preventive maintenance as scheduled.
- Assess district hardware to determine necessary upgrades.
- Continue district replacement plan for desktops. (see Appendix V)
- Conduct district-wide inventory of system hardware and software.
- Investigate requirements to make the district E911 compliant by December 2016.
- Provide video surveillance systems as funds are available to ensure student safety and reduce building vandalism.
- Begin upgrading classroom technologies as funds allow. Upgrades for consideration currently are sound field integration, use of data projectors to manage all video and the addition of document cameras.
- Ensure continued maintenance and support of existing infrastructure and end user technology.
- Implement wireless networking in K-8 buildings as funds allow.

Technical Support

Generally there is a quick response time for troubleshooting hardware repairs and problems with network connectivity. It is understood that maintenance of the technological infrastructure and support systems is necessary to accomplish the district's technology vision. Previously this was managed via voicemail and email. To help track and respond to these problems from this point on we will be testing a helpdesk ticket system.

Personnel

Contracted
- Maintenance contract for phone service is maintained.
- Support contract is maintained for data networking services. This provides approximately 50 hours per year for network maintenance, troubleshooting, repairs and training.
- Support contracts are maintained for the following management systems: Athena, Follett, MARC, MealMagic, VersaTrans, School Dude, Schedule Star, HR, FA, and Pinnacle SIS.

In-house
- Full time District Technology Director (33 yrs. experience) oversees and implements the district technology plan and support systems.
- Full time Assistant Technology Director person (6 yrs. experience) is responsible for hardware maintenance and repair and assists with other day-to-day duties.
- Building Technology Coordinators provide as needed hardware and software troubleshooting service.

Equipment
- The existing video equipment was purchased through bond funds from September 1999 to June 2002. The equipment is now out of warranty.
- The main switches at all buildings were replaced in April 2005. An extended warranty on the main district switch provides an additional 3 years of warranty service.
- Most of the districts servers were replaced in July 2011. Novell is the operating system used for these servers. A SAN (storage area network) was implemented resulting in the need for fewer servers.
- Teacher/Staff desktop computers and lab computers are replaced every 5-6 years according to the desktop replacement plan (see Appendix V). These computers are a minimum 2.8Ghz computers with 2Gb or RAM as of August 2009. Additional back of the room classroom computers are older but most have been upgraded to a minimum of 512K of RAM.
- Lab functionality is available via netbook/laptop carts in the secondary buildings. These may be checked out to the individual classrooms.
- The phone system was replaced in July 2009 and is under warranty for 5 years. A maintenance contract is in place to provide phone system support that cannot be done by district personnel.
- It is anticipated that dollars will be budgeted to provide upgrades and replacement as needed after the warranty period expires.
- Hardware is inventoried and audited every two years. The inventory is on file with the insurance company.

- Computers are physically cleaned and reformatted as needed.

Security
- Access to the network is controlled through network login. Access is granted after users agree to follow district technology protocols.
- Firewalls are in place to control access to the network from outside the school district using a Watchguard hardware solution.
- A Barracuda content filtering hardware solution was installed Spring 2009. This system allows for authentication to the Internet. Student Internet access is given only if a signed AUP is on file in the district. These must be renewed annually.
- A Barracuda hardware solution also provides e-mail spam and virus filtering.
- Trend Micro Anti-virus is installed on all desktops with automatic virus definition updates occurring weekly.
- Desktop security is controlled through Novell Policy Manager and Zenworks.

Technical Support Timeline

2012
- Pilot a new helpdesk ticket system

2012-2015
- Continue support contracts.
- Implement a new library circulation system.
- Phase in usage of a new web-based financial accounting and human resources package.
- Continue Consortium agreement to obtain reduced pricing on software packages.
- Expand use of the Intranet
- Evaluate and revise as necessary the policies and procedures related to maintenance of hardware, software, infrastructure and security.
- Ensure that staff and students are aware of safe and secure network policies that support and meet CIPA regulations.
- Meet current and future funding requirements to support plan implementation.
- Annually apply for USF funding.

Evaluation

All technology evaluations will be overseen by the District Technology Coordinator. The evaluations will be done annually. The district's progress toward implementing technology is currently evaluated using two instruments, the *Technology Support Index,* and the *Technology Plan Evaluation Checklist*. The *Teacher Self Evaluation Rubric* was used in the past to evaluate teacher computer skills. This was discontinued as no longer necessary since it assessed only basic usage skills not integration skills. Beginning in 2010 the district switched to using the educator evaluation tool that was developed by the REMC Instructional Technology Specialists (RITS) in Michigan. For the 2012 submission, we will be developing our own tool to report teacher literacy in the Registry of Educational Personnel (REP). The results obtained from all evaluations will be shared with the Assistant Superintendent for Instruction, building administrators and the district technology committee. The affected committees will identify focus areas for improvement. They will also identify strategies to solve the identified deficiencies. These will be implemented the following year.

School Improvement
School improvement teams continually look for ways to incorporate technology when implementing strategies for School Improvement. The district is working on the following goals:
* Increase reading comprehension skills as well as comprehension of informational reading.
* Improve writing skills across the curriculum.
* Increase understanding of key math concepts using strategies that increase math fluency and problem solving in math.
All of these goals lend themselves to the integration of technology and each have strategies using technology associated with them as indicated earlier in the curriculum section of the plan. Each will be evaluated as part of the school improvement process.

Technology Plan Evaluation Checklist
The District Technology Director evaluates technology goals, objectives and implementation strategies. The tool is used annually to evaluate progress toward completion of the existing technology plan. The annual checklist is derived from the timelines within the technology plan. The categories will include accomplishments and progress toward goals. The information gathered will be shared with the District Technology committee and the administration. A sample of the checklist to be used in 2012-13 is included in the appendix. Strategies that were not effective or that were not implemented are moved to the next school year if it is determined by the committee that the strategy is viable and valuable.

Technology Support Index
This evaluation tool is used to assess equipment, staffing, professional development and management of the infrastructure necessary to provide the support necessary for integration of technology into the curriculum. It was developed by Dr. Chip Kimball in conjunction with The International Society for Technology Integration (ISTE) and the Gates Foundation. The evaluation is done by the technology support staff annually. The information is used to determine infrastructure needs and updates.

Evaluation Matrix

Evaluation Tool	Evaluated By:	Purpose	Timing
Instructional Staff Evaluation Tool	Self Evaluation	Self evaluation of a teacher's technology literacy	October
Technology Plan Evaluation Checklist	District Tech Coordinator, District Technology Committee	Assess the strategies used to achieve the stated goals and outcomes. Strategies assessed are those that are listed in the timelines for each school year.	Evaluate in June, report and revise in September
Technology Support Index	District Technology Coordinator, Technology Support Personnel	Assess equipment, staffing, professional development and management of the infrastructure needed to provide integration of technology into the curriculum.	Evaluate in April

Timeline for Evaluation

2012
- Develop and implement a self-assessment for technological competence of media staff, teachers and administrators and use it to identify gaps in learning.

Annually
- Annually complete Technology Plan Evaluation, report the results and revise the plan for the following school year.
- Annually complete the Technology Support Index

Coordination of Resources

Grants
The district is always looking for additional finding sources. Examples of successful funding via grants are:
- TLCF grants for staff development & technology integration in 1999 and 2001 from the MDE.
- Parchment Foundation grants for pilot programs in technology integration.
- MACUL grants for video editing system and multi-media software.
- NFL grant that provided a video editing system for the HS Athletic program
- A Gilmore foundation grant for library circulation software.
- District grants were awarded to 11 teachers in the district for hardware that was required for integration of curriculum.
- MI Champions grant for teacher teams at the MS and Northwood Elementary.

Other Sources
- Parchment's Parent Associations and other building fund raising efforts have providedsoftware for classroom use.
- Microsoft has donated software as part of a matching donation program for employees.

In District Coordination
The district has and will continue to pool resources from various funding sources to purchase technology and provide training. An example of sources used in the past include: technology budget, curriculum budget, Title I, Title II, special education, staff development budget, and building budgets.

Universal Service Fund
The district applies annually for USF reimbursement.

Coordination of Resources Timeline

2012-2015
- Application for USF funds is submitted.
- Alternative funding sources for software and training are sought.
- Technology budget is evaluated and adjusted as needed.

Timelines

Note: These timelines are a compilation of all timelines listed in other sections of this document.

2012
- Coordinate METS integration into the new library curriculum with technology standards taught in the classroom.
- Develop a pacing guide that will include lesson plans for teachers to use, adjust and adapt to their classroom instruction.
- Develop a literacy assessment tool and assess all 8th graders.
- Explore the feasibility of moving AR to an on-line system. This may be dictated by hardware constraints imposed by moving to the Win 7 operating system.
- Develop a district assessment schedule to coordinate standardized assessments to improve data quality.
- Complete development of and implement an Internet curriculum specific to mandates of the recently revised Children's Internet Protection Act.
- Expand the use of the district's Moodle Content Management system and train teaches in its use.
- Explore options available in Honeywell for increased reporting flexibility.
- Develop a grid that indicates when pages on the web site require updates and who is responsible for completing the task.
- Highlight web site features in the Panther Press.
- Reorganize the district's technology leadership team and begin regular meetings.
- Develop and implement a self-assessment for technological competence of media staff, teachers and administrators and use it to identify gaps in learning.
- Develop a library of past trainings and a FAQ resource on the district's Intranet or Moodle server as a self-help resource.
- Develop or implement an existing assessment of secretarial skills using MS Office products needed for job classification.
- Train administrators on evaluation criteria for integrating technology skills into the curriculum.
- Pilot a new helpdesk ticket system
- Implement a new library circulation system.
- Conduct district-wide inventory of system hardware and software.

Annually
- As part of the district's curriculum mapping process, work with grade level and content area groups to identify areas of instruction that can best be taught using technology resources.
- Identify Internet resources that can be used for instruction. Emphasize the use of resources that already correlate to Common Core Standards, Michigan's GLCE's and HSCE's. Examples currently in use are MORE, Net Trekker and Discovery Education.
- Work with teachers to incorporate resources into district lesson plans and make the resources easily accessible via the district's Intranet.
- Integrate the content area instruction with the METS as part of the process of curriculum integration.
- Continue to monitor and modify the current Technology Standards
- Annually provide teachers with the technology standards for their grade/content area
- Continue the opportunities for formal technology instruction at the middle school.

- Continue use of standardized testing to guide classroom instruction using Work Keys, MAP, ACT, MME, Dibels, MEAP, Delta Math, etc.
- Continue use of Odysseyware or comparable alternative each year as dictated by program needs.
- Investigate the feasibility of offering more on-line coursework as a means for students to complete Michigan's Merit Curriculum requirements.
- Monitor and adjust the district's web site as needed. Add additional features and content as indicated by the evaluation.
- Continue use of parent reporting systems individualized by student. Investigate additional features and implement if they meet the needs of the district and the community.
- Analyze Honeywell call logs to improve data entry and notifications.
- Expand the number of staff attending conferences such as MACUL to develop teacher knowledge of hardware/software technology available for use in classrooms.
- Provide training time during weekly staff meetings and/or periodic professional development days for building staff to be trained by the tech leaders.
- Train teachers on the uses of Web 2.0 tools such as blogs, wikis, and collaborative resources that can be used to facilitate this.
- Provide training on technology skills that align with NETS-A and NETS-T.
- Ensure that staff is aware of new hardware technologies and the use of them to improve instruction and learning.
- Continue training teachers and administrators to use data productively to analyze student performance and provide targeted instruction.
- Continue preventive maintenance as scheduled.
- Assess district hardware to determine necessary upgrades.
- Continue district replacement plan for desktops.
- Ensure continued maintenance and support of existing infrastructure and end user technology.
- Continue support contracts.
- Continue Consortium agreement to obtain reduced pricing on software packages.
- Evaluate and revise as necessary the policies and procedures related to maintenance of hardware, software, infrastructure and security.
- Ensure that staff and students are aware of safe and secure network policies that support and meet CIPA regulations.
- Annually apply for USF funding.
- Technology budget is evaluated and adjusted as needed.
- Annually complete Technology Plan Evaluation, report the results and revise the plan for the following school year.
- Annually complete the Technology Support Index evaluation tool.

2013-15
- Implement the Google domain that has been created for parchmentschools.org
- Investigate integrating classroom performance systems with Pinnacle Gradebook.
- Transition K-5 to Pinnacle Gradebook
- Expand the functions provided by the Intranet.
- Investigate requirements to make the district E911 compliant by December 2016.
- Provide video surveillance systems as funds are available to ensure student safety and reduce building vandalism.

- Begin upgrading classroom technologies as funds allow. Upgrades for consideration currently are sound field integration, use of data projectors to manage all video and the addition of document cameras.
- Implement wireless networking in K-8 buildings as funds allow.
- Phase in usage of a new web-based financial accounting and human resources package.
- Expand use of the Intranet.

Projected Technology Expenditures 2012-2015

	2012-13	2013-14	2014-15	3 Year Total
Maintenance & Repair				
Equipment Repair	6500	6500	6500	19,500.00
Network Service Contracts				
-Network Support	5500	5500	5500	16,500.00
-Voice System	3000	3000	3000	9,000.00
-Level Data	2200	2400	2600	7,200.00
Phones				
Basic Service	24000	24000	24000	72,000.00
Long Distance	100	100	100	300.00
Cell Phones	9600	9600	9600	28,800.00
Pagers	500	500	500	1,500.00
Software & Supplies				
Toner	7500	7500	7500	22,500.00
Projector Bulbs	4460	4460	4460	13,380.00
Career Cruising	600	600	600	1,800.00
Odysseyware (10 users)	6000	6000	6000	18,000.00
Jupiter Grades	1575	0	0	1,575.00
Discovery Streaming	3870	4050	4200	12,120.00
Staff				
Technology Director	90000	90000	90000	270,000.00
Assistant Tech Director	65000	65000	65000	195,000.00
Building Technology Coordinators	8760	8760	8760	26,280.00
Summer Help	1500	1500	1500	4,500.00
Staff Development	4000	4000	4000	12,000.00
Support Contracts				
-Accelerated Reader	???			
-Anti-virus Software - Trend Micro	12000	0	0	12,000.00
-Athletic Software - Schedule Star	300	300	300	900.00
-Document Archival	5300	5400	5500	16,200.00
-Evideon support	2000	2000	2000	6,000.00
-Food Service Software - Meal Magic	1800	1800	1800	5,400.00
-GPS for Buses	4500	4500	4500	13,500.00
-Internet	15000	15000	15000	45,000.00

-Library Software - Follett	3700	3700	3700	11,100.00
-Maintenance Software - School Dude	1400	1500	1600	4,500.00
-Novell	3910	4000	4100	12,010.00
-Parent Notification	3000	3000	3000	9,000.00
-Pole Rental	360	360	360	1,080.00
-Security Cameras	4000	4000	4000	12,000.00
-Spam Filter	500	500	500	1,500.00
-Student & Office Management	35354	36000	36700	108,053.87
-Transportation Software - VersaTrans	450	450	450	1,350.00
-Web Content Filter - Barracuda	3000	3000	3000	9,000.00
-Web Site - LKF	6000	6000	6000	18,000.00

Upgrades / Replacements				
Computer Replacements	125000	120000	115000	360,000.00
Server Replacement	0	0	0	0.00
New Library Circ System	15150			15,150.00
New Equipment (Data Projectors)	7000			7,000.00
		Total Expenses for 3 years		$1,400,698.87

Standard One - Basic Operations and Concepts

- Students demonstrate a sound understanding of the nature and operation of technology systems.
- Students are proficient in the use of technology.

Computer Labs & Classroom Technology Resources

K	1	2	3	4	5	6	7	8	Introduced		Reinforced		Proficient
									Demonstrate proper use and care of hardware, software, and other media (disks, CD's, etc.)					
									Demonstrate logging in, logging out, using passwords, selecting applications, opening and saving files					
									Explain what a Local Area Network and Wide Area Network are.					
									Explain the purpose of a LAN and WAN (saving files, printing, Internet access, access to network servers)					
									Select appropriate software for specific tasks					
									Troubleshoot problems in the operation of computer hardware and software					

System Components - their function and importance

K	1	2	3	4	5	6	7	8	Introduced		Reinforced		Proficient
									Identify a monitor					
									Identify a CPU (Central Processing Unit)					
									Identify a keyboard					
									Identify a mouse and demonstrate its functions (click, double-click, click and drag, scrolling)					
									Identify a floppy drive, hard drive and other storage devices					
									Identify printers (laser and inkjet) and other peripherals (speakers, microphones, scanners)					
									Identify RAM (Random Access Memory) and it's impact on running programs					

Operating System

K	1	2	3	4	5	6	7	8	Introduced		Reinforced		Proficient
									Demonstrate the use of navigation, file and folder management					
									Identify the term Operating System					
									Identify various Desktop operating systems in use now (Windows 98, 2000, XP, Mac OS)					
									Identify a Network Operating System (Novell, NT, etc.)					

Standard One - Basic Operations and Concepts

Understanding Operating System Terminology

K	1	2	3	4	5	6	7	8		Introduced		Reinforced		Proficient
		░	░		▓	▓	▓	▓		Define Desktop				
		░	░		▓	▓	▓	▓		Identify icons and shortcuts				
			░	░	▓	▓	▓	▓		Identify Taskbar (Windows environment)				
				░	░	▓	▓	▓		Identify the difference between folders and files				
				░	▓	▓	▓	▓		Identify a window				
				░	▓	▓	▓	▓		Demonstrate minimize, maximize, and resizing windows				
				░	▓	▓	▓	▓		Demonstrate Right-click (Windows environment)				

Maneuvering Within Operating System Environment

K	1	2	3	4	5	6	7	8		Introduced		Reinforced		Proficient
	░	░	▓	▓	▓	▓	▓	▓		Demonstrate opening and closing programs and files from hard drive or network				
			░	░	▓	▓	▓	▓		Demonstrate booting up, logging in, logging out, and shutting down				
				░	▓	▓	▓	▓		Demonstrate switching between open programs				
				░	▓	▓	▓	▓		Demonstrate how to change printers				
				░	▓	▓	▓	▓		Demonstrate accessing Help from on-screen menus				

File Management - Using Explorer File Management

K	1	2	3	4	5	6	7	8		Introduced		Reinforced		Proficient
		░	▓	▓	▓	▓	▓	▓		Explain the purpose behind saving & backing-up information				
		░	░	▓	▓	▓	▓	▓		Demonstrate how to use other program components within operating system, My Computer, Accessories (calculator, notepad, etc)				
				░	░	▓	▓	▓		Demonstrate copying or moving files/folders				
				░	░	▓	▓	▓		Demonstrate cutting/pasting/files/folders				
				░	░	▓	▓	▓		Demonstrate naming/re-naming files/folders				
					░	▓	▓	▓		Demonstrate creating directories for file/folders				

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Standard 2 - Social, Ethical and Human Issues

- Students understand the ethical, cultural, and societal issues related to technology.
- Students practice responsible use of technology systems, information, and software.
- Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

K	1	2	3	4	5	6	7	8		Introduced = (white), Reinforced = (gray), Proficient = (hatched)
	R	R	P	P	P	P	P	P		Help maintain all computer equipment and software
	R	R	P	P	P	P	P	P		Help maintain the appearance and cleanliness of labs and classrooms
			R	R	P	P	P	P		Demonstrate awareness of the district's Acceptable Use Policy (AUP)
			R	R	P	P	P	P		Explain Internet Netiquette
			R	R	P	P	P	P		Demonstrate awareness of Copyright © Infringement and plagiarism as it pertains to Internet and software issues
				R	R	P	P	P		Demonstrate ethical use of student's files, accounts, and work
				R	R	P	P	P		Explain the importance of having updated virus definitions.
				R	R	P	P	P		Develop legal and ethical network behavior (awareness of computer viruses, hacking, etc.)

Standard 3 - Technology Productivity Tools

Students use technology tools to enhance learning, increase productivity, and promote creativity.

Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.

Keyboarding (Type to Learn, Typing Tutor, etc)

K	1	2	3	4	5	6	7	8	Introduced — Reinforced — Proficient
									Demonstrate simple, practical recognition of keyboard layout
									Participate in intermediate keyboarding instruction: proper finger placement/technique, use of Home Row, posture
									Develop keyboarding speed and proficiency

Word-processing (MS Word)

K	1	2	3	4	5	6	7	8	Introduced — Reinforced — Proficient
									Open a word processing application
									Create documents reflecting classroom assignment needs - stories, poems, letters, etc.
									Edit text with mouse or keyboard
									Use the undo and redo function - deleting and restoring text
									Demonstrate naming files and saving files in different formats
									Use various fonts, font sizes and styles (boldface, underline, italics)
									Demonstrate sentence and paragraph formatting (justification, spacing, indentation)
									Identify parts of the application screen - Title, Menu, Tool, & Formatting bars, Rulers, Scroll, Task, & Status bars, Help
									Use Spell check, grammar check, and proofread
									Insert clipart, or photos - positioning and sizing
									Demonstrate page setup - margins, page orientation
									Use paragraph indentation - tabs, and hanging indents
									Print specific pages, print multiple copies
									Copy, cut, paste, and move text
									Use bullets and numbering
									Select a printer
									Insert Text Boxes, Word Art, drawing tool objects
									Insert page breaks, headers and footers, page numbering
									Create, format, and edit tables

Identify and Use the Various Elements of a Spreadsheet (Excel)

K	1	2	3	4	5	6	7	8	Introduced	Reinforced	Proficient

K	1	2	3	4	5	6	7	8	Skill
					R	R	P		Identify rows, columns, cells, worksheets, workbooks
					R	R	P		Determine type of formula needed and insert simple formulas
					R	R	P		Use basic functions (AutoSum, AutoFill, etc.)
					R	R	P		Save and print a worksheet
					R	R	P		Format cells (font, size, justification, style)
					R	R	P		Enter data in a worksheet
					R	R	P		Change column width and row height
					R	R	P		Insert/Delete Rows and Columns
					R	R	P		Spell Check
					R	R	P		Use spreadsheet templates
					R	R	P		Create a Chart and use the Chart Wizard
					R	R	P		Change data in Cells
					R	R	P		Explain the purpose of using a database
					R	R	P		Use a spreadsheet as a data base
							R		Find and Replace Data in a Worksheet
							R		Format cell attributes (currency, date, etc.)
							R		Sort Data
							R		Edit a Chart (delete, size, move, elements, etc.)
							P		Insert Header and Footer

Desktop Publishing - (MS Publisher, MS Word)

K	1	2	3	4	5	6	7	8	Introduced	Reinforced	Proficient

K	1	2	3	4	5	6	7	8	Skill
						R			Identify the advantages of desktop publishing compared to word processing
						R			Identity the various elements of a desktop publishing document (text boxes, pictures, word art, design objects, tables, etc.)
						R			Identify and properly use the tools on the toolbars
						R			Identify common desktop publishing products (newsletter, brochure, sign, banner, business cards, etc.)
						R			Insert images, clipart, WordArt
						R			Zoom in/out and change layout views (two page to single page)
						R			Insert borders (line, art, etc.)
						R			Format text (size, style, color, bullets, alignment)
						R			Create a desktop publishing document using a template
						R			Save and print documents
						R			Create a desktop publishing document from "scratch" (without the aid of a template)
						R			Explain how to paginate desktop publishing documents
						R			Link and unlink columns of text (Publisher)

Multimedia Slide Shows (MS PowerPoint)

K	1	2	3	4	5	6	7	8	Introduced ▒ Reinforced ▓ Proficient
				▒	▒	▓	▓		Plan and create a presentation using a template
				▒	▒	▓	▓		Insert and edit text
				▒	▒	▓	▓		Insert and edit clipart and/or digital images
				▒	▒	▓	▓		Save a presentation
				▒	▒	▓	▓		Run a slide show
					▒	▒	▓		Insert drawing objects
					▒	▒	▓		Add slide transitions
					▒	▒	▓		Use the various view and print options
						▒	▓		Evaluate slides and presentations for effectiveness
						▒	▓		Deliver an effective presentation
						▒	▓		Plan and create a presentation from scratch
							▓		Insert background
							▓		Insert sounds
							▓		Insert video clips
						▒			Add animation to presentations
						▒			Add animation effects to each component in a slide (PowerPoint)
						▒			Insert and format action buttons
									Save presentation using "Pack And Go" (PowerPoint)

Graphic Organizers - (Kidspiration, Inspiration, Graph Club)

K	1	2	3	4	5	6	7	8	Introduced ▒ Reinforced ▓ Proficient
				▒	▒	▓	▓		Navigate between various views within the graphic organizer (picture view, writing view)
				▒	▓	▓			Create a simple diagram in picture view
				▒	▒	▓			Save, close, open, and print project
				▒	▒	▓			Add, edit, format links connecting ideas
		▒	▒	▓	▓	▒			Categorize ideas
				▒	▒	▓			Add, move, edit, link symbols in the diagram and add text to symbols
				▒	▒	▓			Add ideas in writing or outline view, format and spell check
				▒	▒	▓			Cut, copy, and paste ideas
				▒	▒	▓			Create a well-developed web, idea map, or concept map using the picture and diagram or writing view
					▒	▒			Move ideas up or down in the hierarchy
						▒			Align or position symbols and adjust page breaks for printing

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Browser Applications - (Internet Explorer)

K	1	2	3	4	5	6	7	8	Introduced ▢ Reinforced ▨ Proficient
	I	I	R	R	R	P	P	P	Navigate by clicking on links in web pages
			I	I	R	P	P	P	Use the toolbar to navigate web pages
			I	I	R	P	P	P	Use common search engines to locate information
				R	R	P	P	P	Use common Internet directories to navigate and locate information
			I	R	R	P	P	P	Use proper search techniques and strategies to locate information
				R	P	P	P	P	Create Bookmarks/Favorites
				R	P	P	P	P	Type URL's directly into the Location box
			I	R	P	P	P	P	Copy and paste text from a web page into a word processing document with citing
							I	I	Explain the parts of a URL
								P	Edit Bookmarks/Favorites and Organize into folders

Graphics and Graphic Editing

K	1	2	3	4	5	6	7	8	Introduced ▢ Reinforced ▨ Proficient
					I	I			Properly use a scanner to scan pictures, images, drawings, etc. and save to network, floppy disk, or hard drive
					I	I			Bring a scanned image into an application
					I	I			Properly use a digital still camera to capture images
					I	I			Bring an image into an application from a digital camera
					I	I			Bring an image into an application from the Internet
					I	I			Adjust the size of a digital image using graphics editing software (PhotoShop, Photo Editor, etc.)
					I	I			Adjust the brightness and contrast of a digital image using graphics editing software (PhotoShop, Photo Editor, etc.)
					I	I			Crop or trim a digital image using graphics editing software (PhotoShop, Photo Editor, etc.)
						I			Identify common graphic file types, their advantages and disadvantages, when to properly use each

Standard 4 - Technology Communication Tools

- Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
- Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

K	1	2	3	4	5	6	7	8		Introduced		Reinforced		Proficient
				R	R	P	P	P		Develop capable, responsible, legal, and ethical use of telecommunication systems and tools (cell phones, PDAs, Chat Rooms, IM, etc.)				
				R	R	P	P	P		Describe the Acceptable Use Policy in relation to use of telecommunication resources				
				R	R	P	P	P		Describe the Internet				
				R	R		P			Define Internet terminology - browser, search engine, URL, HTTP, HTML, download, virus ·				
										Research and gather information online or from online electronic databases as needed for a variety of projects				
				R	R					Describe how to evaluate web sites based on the 4 W's (Who, What, Where, When)				
				R	R					Describe e-mail				
				R	R					Identify email netiquette and appropriate behavior for online communications via email				
				R	R					Describe Chat Rooms				

Standard 5 - Technology Research Tools

- Students use technology to locate, evaluate, and collect information from a variety of sources.
- Students use technology tools to process data and report results.
- Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.

K	1	2	3	4	5	6	7	8		Introduced		Reinforced		Proficient
			R	P	P	P	P	P		Use Cyber Hunts and Web Quests				
				R	P	P	P	P		Research and gather information online or from online electronic databases as needed for a variety of projects				
			R	R	P	P	P	P		Utilize The Big Six Skills Approach To Information Problem Solving (by Eisenberg and Berkowitz)				
										Locate information from preselected Internet sites and web pages				
					R	P	P	P		Apply proper citation				
						R	P	P		Evaluate site accuracy and relevance by understanding the necessity and importance of the 4 Ws of site evaluation (Who, What, Where, When)				
				R	P					Copy/paste web information to another application				
					R	R				Use biographical dictionaries, thesauri, and other common reference tools in electronic format				
					R	R				Determine when to use a general or specialized electronic reference tool				
					R	R				Use other databases of print and electronic resources to locate and retrieve information including MEL (Michigan Electronic Library)				
					R	R				Construct effective electronic searches using keywords, phrases, Boolean logic, and limiters				
					R	R				Search for information by subject, author, title and keyword in Athena				

Standard 6 - Technology Problem-Solving and Decision-Making Tools

- Students use technology resources for solving problems and making informed decisions.
- Students employ technology in the development of strategies for solving problems in the real world.

K	1	2	3	4	5	6	7	8	Introduced Reinforced Proficient
									Conduct research to determine the effect something may have on a real-world problem or natural occurrence
									Utilize applications to create a finished project that will share curricular ideas to all audiences using graphs, charts, drawings, or typed descriptions
									Through a careful decision making process, utilize the correct software application to complete an assignment or collaborative project, in school or the community
									Utilize computer applications to replicate, and help with an evaluation process to evaluate articles and reports in the popular press, in scientific journals, on television, and on the Internet, using criteria related to accuracy, degree of error, sampling, treatment of data, and other standards of experimental design

Digital Safety Curriculum

Gr	Internet Safety	Online Behavior	Cyberbullying
1	• Lesson: Going Places Safely (K-1) My Online Neighborhood-video		
2	• Lesson: Follow the Digital Trail (2-3)	• Lesson: My Online Community (2-3)	• Lesson: Screen Out the Mean (2-3)
3	• Lesson: Keep It Private (2-3) • Lesson: Staying Safe Online (2-3)	• Lesson: Show Respect Online (2-3)	• What You Need to Know About Cyberbullying-video
4	• Lesson: Talking Safely Online (4-5)	• Lesson: Rings of Responsibility (4-5)	• Lesson: The Power of Words (4-5)
5	• Lesson: You've Won a Prize! (4-5)	• Lesson: Writing Good Emails (4-5)	• Lesson: Group Think (4-5) • Amaya's Story - video
6	• Lesson: Private and Personal Information (6-8) Digitallife 101 Student Intro-Digital Footprint Privacy Video - Ela's Story Cyberbullying-Crossing the Line	• Digital Life 101 (6-8) -Lesson for 6th graders Pride lesson possibility The Ups and Downs of Digital Life (great resources for parents also)	• Lesson: Chart It
7	• Build your Ideal Community (6-8) My media What's the Big Deal Interne Privacy Student video Brittney's Story	• My online self (6-8)	
8	• Creating Video Ups and Downs of Digital Life	• Lesson: Private Today, Public Tomorrow (9-10)	
HS	• Lesson: Scams and Schemes • Lesson: Does It Matter Who Has Your Data. • Lesson: Overexposed: Sexting and Relationships (9-10) • Lesson: College Bound (11-12).	• Lesson: My Online Code (9-12) • Lesson: Risky Online Relationships (9-12) • Lesson: Who Are You Online? (9-10) Lesson: Digital Life 102 (9-12)	• Lesson: Turn down the Dial on Cyberbullying and Online Cruelty (9-10) • Lesson: Breaking Down Hate Speech (11-12) • Lesson: Taking Perspectives on CyberBullying (11-12)

Barclay	• Lesson: Overexposed: Sexting and Relationships (9-10),
	• Lesson: College Bound (11-12),
	• Lesson: Private Today, Public Tomorrow (9-10)
		• Lesson: My Online Code (9-12);
		• Lesson: Risky Online Relationships (9-12);
		  Lesson: Who Are You Online? (9-10);
		  Lesson: Digital Life 102 (9-12)
			• Lesson: Turn Down the Dial on Cyberbullying and Online Cruelty (9-10)
			• Lesson: Taking Perspectives on Cyberbullying (11-12)

Source: http://www.commonsensemedia.org/educators/curriculum

Domain One – Equipment Standards

	Support Capacity and Efficiency				
	Low Efficiency	**Moderate Efficiency**	**Satisfactory Efficiency**	**High Efficiency**	**Fiscal**
Cycling of Equipment	No replacement cycle has been defined.	Equipment is placed on a replacement cycle greater than 5 years.	Equipment is placed on a 4–5-year replacement cycle.	Equipment is placed on a 3-year or better replacement cycle.	$$$$
Brand Selection (e.g., Compaq, Dell, Apple, IBM, etc.)	No brands are specified; purchasing is done by price only, and is site controlled.	A district brand is selected, but changes from year to year depending upon what vendor is providing the best selection at the time.	A district brand has been selected, typically for more than one year, but is not strictly enforced allowing for purchasing of some equipment that is outside the standard.	A district brand has been specified, and all purchases are made within that brand over an extended period of time.	Neutral
Model Selection	There are no limitations on model selection.	A model line has been selected, but many choices are given within that line.	A model line has been selected, and choices are limited to 3–5 models.	Model selection is limited to one or two, with few variations.	Neutral
Platform (e.g., Apple, Windows, Sun)	The district supports two or more platforms, and platform choice is left to individuals in the district.	The district supports two or more platforms, but choices are made by schools at large and are generally uniform.	The district supports two platforms with one predominant platform for general use, and a second platform for specific programs and/or instructional applications.	One platform only is selected for district computers regardless of application. Instructional applications may be compromised.	Neutral
Standard Operating System (OS) (e.g., Win 3.x, Win95, Win98, Win2K, Mac 8, Mac 9, Apple II, etc.)	Four or more OS versions are used, and all are "supported" by the district.	Three OS versions are used, and the older OS computers are either migrated or receive no support.	Two OS versions are used, with most equipment migrated to the most recent OS.	One OS version is used district-wide, with all computers migrated to that OS.	$$
Application Software Standard	No software standards have been established.	Software standards are established. Nonstandard installations are permitted and some support is provided.	Software standards are established. Nonstandard installations are allowed but no local support is provided.	Software standards are established and only those applications on the list are permitted on computers.	Neutral
Donated Equipment	Donated equipment is accepted with no regard to whether it meets district equipment standards.	Donated equipment is accepted with minimum performance requirements with no regard to brand or age.	Donated equipment is accepted with minimum performance requirements and suggested brand. Equipment is less than 3 years old.	Donated equipment is accepted but only if it meets specific brand, model, performance, and system requirements. Equipment is less than 2 years old. Cash donations are encouraged so new standard equipment can be purchased.	Neutral
Granted Equipment	Grant equipment decisions are made by the grantee or grantor and are not influenced by the district.	The district is consulted regarding grant equipment. Cash grant equipment is purchased according to the standard. Equipment grants are readily accepted regardless of brand.	All cash grants meet district specifications. Equipment grants are approved before submittal, by the technology department. Standardization is encouraged.	All grant equipment, purchased and given, must meet district specification or it isn't allowed on the district network or in the school.	Neutral

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Technology Support Index

Domain One – Equipment Standards

Support Capacity and Efficiency

	Low Efficiency	Moderate Efficiency	Satisfactory Efficiency	High Efficiency	Fiscal
Peripheral Standards (e.g., printers, scanners, digital cameras, projectors, video, etc.)	No peripheral standards are set.	Peripherals are standardized by brand but models within the brand are not. The peripheral standards change frequently and are rated for consumer use.	Peripherals are standardized by brand and model, but the list contains many options with some consumer-rated items.	All peripherals are standardized, with specific models identified that are primarily rated for industrial/school use. Brands and models are limited.	$
Surplus Practice	Equipment isn't added to surplus until it is no longer usable and is supported as resources allow.	Surplus equipment is supported by district personnel but as a low priority.	Surplus equipment is no longer supported by district personnel but can be used by schools until it breaks.	Surplus equipment is taken out of service when it reaches the replacement age even if it still works. Equipment is donated to students when possible.	Neutral
Break/Fix Agreements (Warranties)	No additional warranties are pursued beyond the standard warranty (1 year).	Extended warranties are purchased but do not cover the life of the equipment and does not include peripherals (3 year, computers only).	Extended warranties are purchased to extend the standard warranty on computers and peripherals but do not cover the equipment lifespan (3 year, all equipment).	Warranties are purchased to cover the life of the equipment (5 or more years).	$$$
Security Procedures	Security guidelines and common practice are loosely defined or do not exist creating substantial security vulnerabilities .	Fairly secure guidelines are in place but are not followed closely. Both guidelines and practice provide vulnerabilities.	Fairly secure guidelines are in place and followed, but more stringent guidelines would provide better security (e.g. no password rotations, etc.).	Very secure guidelines are in place and are consistently practiced including limited admin access, password rotations, and alpha-numeric password protocols.	Neutral
Security Hardware and Software	No firewall exists and there are no security software standards in place.	A firewall is in place but ports are commonly opened. Software security standards are limited to promises by the vendor with no auditing activity.	A firewall is in place and opening of ports is limited. Software security standards are in place for major systems along with periodical security audits.	A firewall is in place and opening of ports is very limited. Software security standards are in place for ALL systems along with periodic security audits.	$$

Technology Support Index

Domain Two – Staffing and Processes

Support Capacity and Efficiency					
	Low Efficiency	**Moderate Efficiency**	**Satisfactory Efficiency**	**High Efficiency**	**Fiscal**
Organizational Structure	Direction comes from multiple points within the organization, and reporting is not functionally logical. Cross-functional collaboration is difficult or non-existent.	The reporting structures are difficult to identify, and direction comes from multiple points in the organization. Cross-functional collaboration exists.	The technical support functions and instructional technology functions report differently, but each unit is cohesively organized and there is communication between units.	All of the technology functions report through the same unit in the organization, providing for a logical chain of command and communication structures with the unit clearly supporting the district mission.	Neutral
Contracted Primary Support	No contracts are used for **primary** support. Contracted support may be used as a supplementary strategy.	All support is contracted out, but the contract provides personnel minimums rather than a performance contract.	All support is contracted out and written to a specific performance contract requiring a 5 day maximum turnaround.	All support is contracted out and written to a specific performance contract requiring no more than a 72 hour turnaround.	$$$$$
If Contracted Primary Support is used, skip to the Escalation Process at break, otherwise continue					
Contracted Supplemental Support	Contracted support is not used.	Contracted support is used for emergencies, but not as a part of the overall support strategy.	Contracted support is used as part of the overall support strategy, but has not been evaluated to determine the most strategic places and circumstances to use contractors.	Contracted support is strategically used as an effective part of the overall support strategy to solve complex problems and/or realize savings and efficiencies.	$$$
Staffing to Computer Ratio	Computer-to-technician ratio is over 250:1.	Computer-to-technician ratio is between 150:1 and 250:1.	Computer-to-technician ratio is between 75:1 and 150:1.	Computer-to-technician ratio is less than 75:1.	$$$$$
Formula-Driven Technology Staffing (e.g., X computers + X network drops + X applications divided by Y = # of technicians)	Staffing formulas are not used or considered.	Formulas for staffing are considered but are limited in scope and are not used to drive staffing.	Comprehensive formulas have been developed, considering multiple dimensions of the environment, but are only used as a guide and do not drive staffing.	Comprehensive formulas have been developed and drive staffing as a normal part of operations. Formulas include multiple dimensions of the environment.	$$$$$
Certification of Technical Staff	Certification is not a priority in the organization and concerns are raised about time away from the job to pursue certification.	Appropriate technical staff is encouraged to become certified, but no support is provided towards certification.	Some technical staff is certified in appropriate areas, others are involved in district-supported programs towards certification.	Most technical staff is certified in appropriate areas (e.g., A+, Cisco, CNE, MCSE, etc.) and new certifications are strongly encouraged and district supported.	$$
Differentiated Job Descriptions	Technical support employees do it all creating redundancies and inefficiencies.	Technical support employees do it all, but redundancies are not created due to size and/or staffing levels.	Some differentiation in jobs has occurred, although assignments are not provided based upon skill-set competencies.	Job descriptions are fully differentiated creating specialization and efficiencies, and a clear avenue for support.	Neutral
Technician Retention	Employee turnover is high primarily due to low employee satisfaction.	Employee turnover is high primarily due to other employment opportunities.	Employee turnover is moderate (excluding retirement), and employee satisfaction is good.	Employee turnover is low (excluding retirement), and employee satisfaction is high.	$

Domain Two – Staffing and Processes

Support Capacity and Efficiency					
	Low Efficiency	**Moderate Efficiency**	**Satisfactory Efficiency**	**High Efficiency**	**Fiscal**
Competitive Compensation	Technical positions are poorly competitive, offering compensation in the bottom 50% of equivalent organizations in the area.	Technical positions are moderately competitive, offering compensation in the 50th to 75th percentile of equivalent organizations in the area.	Technical positions are competitive, offering compensation in the 75th to 90th percentile of equivalent organizations in the area, and offering competitive non-compensation benefits.	Technical positions are very competitive, offering compensation in the 90th percentile of equivalent organizations in the area, and in some cases, competing with private businesses for talent.	$$$
Continue from here if Primary Contracted Support was selected, all others continue					
Escalation Process for Technical Issues	No escalation process is in place, and the path for resolution is unclear.	A clear path for resolution is in place, but no escalation process is recognized.	An escalation process is in place with two steps of escalation and significant crossover between levels.	A well-defined escalation process is in place, with three or more steps of escalation, and a clear path for resolution.	$
HelpDesk	No HelpDesk support is provided.	A HelpDesk is provided but is not adequately staffed. The HelpDesk is used for emergencies, not as the first line of defense.	A central HelpDesk is in place and staffed, but it is not used systemically as the first line of defense.	A central HelpDesk is in place with trained staff, and the district culture embraces the HelpDesk as the first line of defense.	$$
Use of Online Knowledgebase for Technical Help	Staffs seek no help from online help both due to availability of resources and district culture.	Some staff seeks online help, but the behavior is not pervasive and the resources are limited.	Many staff seeks online help and there are several broad resources available. Use is not organizationally pervasive.	Most staff seeks help from online knowledge bases as their first resource for help from diverse and comprehensive resources. This is a pervasive part of the culture.	$$
Software Support Protocols and Standards	No list of supported software is provided for users.	A list of supported software is provided, but no differentiation is made for the kind of support a given category of software will receive.	A list of supported software is provided and differentiation is made for the kind of support a given category of software will receive; however, users do not follow the different processes closely.	A list of supported software is provided, with clear differentiated support processes for each set of software that are consistently used.	Neutral
New Equipment Deployment	The school and local staff are responsible for the deployment of new equipment.	The technical staff manages deployment of new equipment requiring a substantial reduction in regular service during deployment.	Additional help (internal or contracted) is utilized for imaging and tagging of equipment, but setup is the responsibility of the regular technical staff creating some delays in regular service.	Additional help (internal or contracted) is utilized for all deployment functions providing no delays or disruptions in regular technical service.	$$
Documented Procedures	Little or no documentation exists for technical tasks — requiring users and technical staff to invent their own solutions.	Some documentation exists for technical tasks but is not widely shared or used. Most documentation is limited to few technical staff only.	Documentation exists for many technical tasks but is not well written and is not systematically updated as procedures are developed.	Documentation exists for most technical tasks and is used by most user groups. Well-written documentation production is a normal part of operations.	$$

Domain Two – Staffing and Processes

	Support Capacity and Efficiency				
	Low Efficiency	**Moderate Efficiency**	**Satisfactory Efficiency**	**High Efficiency**	**Fiscal**
Support by Teachers	Teacher(s) provide all of the technical assistance in the building.	Teacher(s) provide much of the technical assistance in the building with release time or stipend.	Teacher(s) serve as the contact point, and perform some of the technical work in conjunction with technical staff.	Teacher(s) are used as the contact point in the building, but do not perform technical support work.	Neutral
Student Support	Students provide support for the school in an ad-hoc manner due to limited district support. No technical support curricular program exists for students.	Students are used extensively, in an official capacity and substantially supplant district support.	A curricular program is designed to train students in technical support. Students are used to supplant some of the district's support system but are not considered the official technical support strategy.	A curricular program is designed to train students in technical support. They support district technology but in a peripheral way as part of their instructional program only.	Neutral

Technology Support Index

Domain Three – Professional Development

	Support Capacity and Efficiency				
	Low Efficiency	**Moderate Efficiency**	**Satisfactory Efficiency**	**High Efficiency**	**Fiscal**
APPLIES TO ALL STAFF					
Comprehensive Staff Development Programs	There is no formal staff development program in place, and training is provided infrequently. The organization depends upon individuals' own motivation to build expertise.	A staff development program is in place but is limited, voluntary, and uses a single dimension in its delivery.	A staff development program is in place. It is not comprehensive in nature in that it does not impact all staff and does not offer the depth required to change the organization.	A comprehensive staff development program is in place that impacts ALL staff. The program is progressive in nature and balances incentive, accountability, and diverse learning opportunities.	$$$$$
Online Training Opportunities	Online training opportunities do not exist.	Online training opportunities exist, but are limited in scope and are available to a limited number of employees.	Online training opportunities are available for staff onsite and remotely, but are limited in their offerings.	Online training opportunities are provided for staff both onsite and remotely, and represent a diversity of skill sets.	$$
Just-in-time Training	No just-in-time training process or delivery system has been put into place.	Just-in-time training is used, but the process and delivery system has not been refined so that it can be used realistically within the organization.	A process and delivery for just-in-time training is in place, but has not been adopted by the organization as a mechanism for solving issues.	A process and delivery system has been established for just-in-time training organization-wide and is used consistently.	$$
Expectations for All Staff	Expectations of staff are not clearly defined and are not part of the organizational culture.	Expectations of staff are articulated but are limited in scope.	Expectations of staff are articulated and are broad in scope, but have not been adopted as part of the organizational culture.	Expectations for all staff are clearly articulated and are broad in scope. Performance expectations are built into work functions and are part of the organizational culture.	Neutral
Troubleshooting as Part of Professional Development	No form of troubleshooting is integrated into the professional development program.	Troubleshooting is built into the professional development program but is limited in scope and is provided inconsistently. Roles and responsibilities are not clearly defined.	Troubleshooting is built into the professional development program and is used as a major strategy for technical support. Technical versus end-user roles and responsibilities are not clearly defined.	Basic troubleshooting is built into the professional development program and is used as a first line of defense in conjunction with technical support.	$
APPLIES TO TECHNOLOGY SUPPORT STAFF ONLY					
Training for Technical Staff	Technical staff is only given training to take care of the immediate issues in the district. Advanced training is not encouraged.	Technical staff receives consistent training around emergent issues. Advanced training is not district sponsored but is encouraged.	Technical staff receives consistent training around emergent issues and have limited district-sponsored opportunities for advanced training.	Technical staff receives ample training as a normal part of their employment, including training towards certification.	$$

Technology Support Index

Domain Four – Enterprise Management

Support Capacity and Efficiency				
	Low Efficiency	**Moderate Efficiency**	**Satisfactory Efficiency**	**High Efficiency**	**Fiscal**
Trouble Ticketing System	No trouble ticketing system exists.	A simple trouble ticketing system is in place, but is not electronic and/or is simple in its implementation, not allowing for universal tracking of issues and establishing trends.	A trouble ticketing system is in place and is used extensively for responding to technical issues. Analysis of issues, response times, and possible trends is not done systematically.	All technical issues are recorded and delegated to appropriate resources through an electronic trouble ticketing system. All technical issues are tracked and evaluated through this system.	$$
Virus Protection	No virus software is used.	Virus software is used, but it is client-based and therefore often out of date.	Server-based virus software is used, but the parameters for its use are loosely defined and updates are not consistent.	Server-based virus software is available, used, and automatically updated.	$$
Network Infrastructure and Bandwidth	Network access is limited and is not available in every location.	Network access is available to all locations, but does not impact all computers and is limited in bandwidth.	Network access is available to all locations but segments of the network are limited in bandwidth.	Robust broadband network access is available to all locations allowing for network tools to be effectively utilized.	$$$$
Desktop and Software Standardization Tools (Profiles)	No desktop standardization tools or practice are used.	Desktop standardization tools are in place, but are mostly ignored once the equipment is deployed.	Desktop standardization tools are in place, but changes users make are not automatically corrected.	Desktop standardization tools are used to provide a common desktop for all users and access to common software. Changes to the desktop are automatically corrected.	$
Network Sniffing Tools	No network sniffing tools are used.	Network sniffing tools are used for problem diagnosis only.	Network sniffing tools are used for problem diagnosis and limited preventative maintenance.	Network sniffing tools are used to both diagnose problems and establish performance matrices for preventative maintenance. The network is systematically monitored using these tools.	$$
Online Knowledgebase	No online knowledgebase is present.	An online knowledgebase is in place, but it is limited in scope and is not readily used in the organization.	An online knowledgebase is in place and is employed by users. It is not designed to easily expand and users do not use it as a first line of defense.	An online knowledgebase is in place and is expansive in its detail. It is used readily and automatically grows based upon trend data generated in other tracking systems.	$$
Integrated and Systemic Electronic Communication	Electronic communication is limited and has little use for providing technical support.	Electronic communication is available to many staff but is not integrated at all into the daily work of employees.	Electronic communication is available to everyone in the organization but is not readily used for technical support.	Electronic communication is available to everyone in the organization and is integrated into daily work so that it can be used for technical support.	$
Remote Computer Management	No remote management is available.	Remote management is available for servers only.	Remote management is available for all computers but is not used extensively.	Remote management is available for all computers and is used as a primary strategy of support.	$$$

Developed by Dr. Chip Kimball (ckimball@iste.org) in conjunction with ISTE and the Gates Foundation.

Technology Support Index

Domain Four – Enterprise Management

	Support Capacity and Efficiency				Fiscal
	Low Efficiency	**Moderate Efficiency**	**Satisfactory Efficiency**	**High Efficiency**	
Imaging Software	Imaging software is not used.	Imaging software is used in the most primitive sense — only providing recovery services with the imaging software provided by the vendor.	An image is used for delivery of the machine but is not used to clone all of the software on the machine. Only the basic OS and basic software is imaged. Imaging is used as a troubleshooting strategy.	Imaging software is used for delivery of new machines, and as a troubleshooting strategy. Software installed through the imaging process is comprehensive.	$
Metering and Application Push Technology (e.g. SMS or ManageWise)	Metering and Push technology is not used as a support strategy.	Metering and Push technology is used for metering but is not used for installation and updates, and its use is limited in scope.	Metering and Push technology is used for metering and some software updates, but major software installations are handled on the individual computer.	Metering and Push technology is used for all software distribution, technical updates, and for metering of software use on the district's computers.	$$
Server Farms and Centralized Services	Every site has its own server and, in some cases, multiple servers. Backup and server management takes place locally.	Each site has only one server with some services (e.g., e-mail, student information system, etc.) provided centrally.	Many servers are consolidated into a few locations and most services are provided centrally.	All servers and services are centralized requiring minimal server management outside of one location.	$$$
Application Service Providers (ASPs)	No ASP services are utilized.	One or two ASP services are used, but it does not impact support due to the peripheral nature of the product.	A number of district or commercial ASP services are used but is limited to one category of software (e.g., productivity, research, libraries, content, etc.).	A district or commercial ASP model is used for most major software applications after a thorough cost/benefit and risk analysis.	$$$
Thin-client Computing	Thin-client computing is not used.	Thin client is used but is limited to a small number of users for specific applications.	Thin client is used for most users of administrative systems and some productivity software. (Not instructional applications)	All administrative and productivity software for staff is delivered through a thin-client model. (Not instructional applications)	$$$
Vendor-specific Management (e.g., Insight Manager)	Vendor tools are not installed or considered when purchasing hardware.	Vendor tools are available and have been purchased but are mostly unused.	Vendor tools are used in a limited way for diagnosis and prevention.	Vendor tools are used extensively for diagnosis of issues, to streamline processes, and for preventive measures.	$
Quality Assurance (QA) and Customer Follow-up	Surveys are conducted generally as part of other departmental survey work within the organization or not at all.	QA surveys are conducted, but they are not automated and are only done annually.	Surveys specific to technical support are conducted. However, they are done only periodically, and the data is used sporadically.	QA is measured by a random and automatic system that tracks customer satisfaction and closed tickets. Data is collected throughout the year. Questions asked are specific to technical support and the data is used to make adjustments.	$

Domain Four – Enterprise Management

	Support Capacity and Efficiency				
	Low Efficiency	**Moderate Efficiency**	**Satisfactory Efficiency**	**High Efficiency**	**Fiscal**
Student/Fiscal/HR/ Assessment Systems	Student/Fiscal/HR/Assessment systems are not in place.	Student/Fiscal/HR/Assessment systems are partially in place, but are not reliable or intuitive.	Student/Fiscal/HR/Assessment systems are in place and are reliable, but do not integrate well with other systems and are not intuitive.	Student/Fiscal/HR/Assessment systems are in place, reliable, intuitive, and integrate nicely with other productivity tools.	$$$

Tech Plan Evaluation for 2012-13

	Coordinate METS integration into the new library curriculum with technology standards taught in the classroom.
	Develop a pacing guide that will include lesson plans for teachers to use, adjust and adapt to their classroom instruction.
	Develop a literacy assessment tool and assess all 8th graders.
	Explore the feasibility of moving AR to an on-line system. This may be dictated by hardware constraints imposed by moving to the Win 7 operating system.
	Develop a district assessment schedule to coordinate standardized assessments to improve data quality.
	Complete development of and implement an Internet curriculum specific to mandates of the recently revised Children's Internet Protection Act.
	Expand the use of the district's Moodle Content Management system and train teaches in its use.
	Explore options available in Honeywell for increased reporting flexibility.
	Develop a grid that indicates when pages on the web site require updates and who is responsible for completing the task.
	Highlight web site features in the Panther Press.
	Reorganize the district's technology leadership team and begin regular meetings.
	Develop and implement a self-assessment for technological competence of media staff, teachers and administrators and use it to identify gaps in learning.
	Develop a library of past trainings and a FAQ resource on the district's Intranet or Moodle server as a self-help resource.
	Develop or implement an existing assessment of secretarial skills using MS Office products needed for job classification.
	Train administrators on evaluation criteria for integrating technology skills into the curriculum.
	Pilot a new helpdesk ticket system
	Implement a new library circulation system.
	Conduct district-wide inventory of system hardware and software.

On-going

	As part of the district's curriculum mapping process, work with grade level and content area groups to identify areas of instruction that can best be taught using technology resources.
	Identify Internet resources that can be used for instruction. Emphasize the use of resources that already correlate to Common Core Standards, Michigan's GLCE's and HSCE's. Examples currently in use are MORE, Net Trekker and Discovery Education.
	Work with teachers to incorporate resources into district lesson plans and make the resources easily accessible via the district's Intranet.
	Integrate the content area instruction with the METS as part of the process of curriculum integration.
	Continue to monitor and modify the current Technology Standards
	Annually provide teachers with the technology standards for their grade/content area
	Continue the opportunities for formal technology instruction at the middle school.

	Continue use of standardized testing to guide classroom instruction using Work Keys, MAP, ACT, MME, Dibels, MEAP, Delta Math, etc.
	Continue use of Odysseyware or comparable alternative each year as dictated by program needs.
	Investigate the feasibility of offering more on-line coursework as a means for students to complete Michigan's Merit Curriculum requirements.
	Monitor and adjust the district's web site as needed. Add additional features and content as indicated by the evaluation.
	Continue use of parent reporting systems individualized by student. Investigate additional features and implement if they meet the needs of the district and the community.
	Analyze Honeywell call logs to improve data entry and notifications.
	Expand the number of staff attending conferences such as MACUL to develop teacher knowledge of hardware/software technology available for use in classrooms.
	Provide training time during weekly staff meetings and/or periodic professional development days for building staff to be trained by the tech leaders.
	Train teachers on the uses of Web 2.0 tools such as blogs, wikis, and collaborative resources that can be used to facilitate this.
	Provide training on technology skills that align with NETS-A and NETS-T.
	Ensure that staff is aware of new hardware technologies and the use of them to improve instruction and learning.
	Continue training teachers and administrators to use data productively to analyze student performance and provide targeted instruction.
	Continue preventive maintenance as scheduled.
	Assess district hardware to determine necessary upgrades.
	Continue district replacement plan for desktops.
	Ensure continued maintenance and support of existing infrastructure and end user technology.
	Continue support contracts.
	Continue Consortium agreement to obtain reduced pricing on software packages.
	Evaluate and revise as necessary the policies and procedures related to maintenance of hardware, software, infrastructure and security.
	Ensure that staff and students are aware of safe and secure network policies that support and meet CIPA regulations.
	Annually apply for USF funding.
	Technology budget is evaluated and adjusted as needed.
	Annually complete Technology Plan Evaluation, report the results and revise the plan for the following school year.
	Annually complete the Technology Support Index evaluation tool.

Computer Replacement Schedule

Focus	Fall 2009 MS & C		Fall 2010 HS			Fall 2011 N, NV & Adm		~~Fall 2012 Barclay~~				Fall 2012 N, NV, Adm & Barclay			Fall 2013 Catchup			Fall 2014 MS & C			Fall 2015 Barclay & HS Nets			Fall 2016 HS			Fall 2017 N, NV & Adm		
	S	T	L	S	T	S	T	~~Ł~~	~~S~~	~~Ŧ~~		L	S	T	L	S	T	L	S	T	L	S	T	L	S	T	L	S	T
Admin	0	0		0	0	0	7		~~0~~	~~0~~				10														3		10
Barclay	0	0		0	0	0	0	~~0~~	~~20~~	~~10~~			20	10	24							0	20	12						
Central	31	25	65	0	0	0	0		~~0~~	~~0~~								2	32	25										
High School	15	0		157	47	0	50		~~0~~	~~0~~				15							65			6	107	51				
Middle	7	43		0	0	0	0	~~31~~	~~52~~	~~2~~						93		3	8	42										
North	0	0		0	0	32	21		~~0~~	~~0~~		2	31	27													2	31	27	
Northwood	0	0		0	0	32	19		~~22~~	~~0~~		2	31	22													2	31	22	
Server Replacement																														
Sub Totals	53	68	65	157	47	64	97	~~31~~	~~104~~	~~12~~		4	62	59	24	93	0	5	40	67	65	20	12	6	107	65	7	62	49

Total CPU Purchased	2009	2010	2011	~~2012~~		2012	2013	2014	2015	2016	2017
	121	204	161	~~147~~		125	117	112	97	178	118
Estimated Cost (1000/CPU)	133100	183600	144900	~~147000~~		125000*	117000	112000	97000	178000	118000

* This plan replaces only labs and teacher stations. It does not
add to the fleet nor does it replace classroom computers. These
could be upgraded through a trickle down process but would
result in apx 10 year old computers in the classrooms.

Summary of Policy Adoptions Required by
- Children's Internet Protection Act of 2000 (CIPA)
- Neighborhood Children's Internet Protection Act (NCIPA)
- Protecting Children in the 21st Century Act of 2008

March 26, 2001 – Public Hearing and Board Approval for Policy 6161 – Network/Internet Activity/Filtering

May 23, 2011 – 1st reading of policy 7540.03 and 7540.04 Student and Staff Acceptable Use Policies at the Public Meeting of the Board of Education

June 20, 2011 – 2nd reading and adoption by the Board of Education of policy 7540.03 and 7540.04

Retain Internet Safety Policy documentation — including both the Policy itself and the adoption records — for a period of five years after the end of the funding year that relied on that Policy. (No earlier than July 2019) Although five years is the standard record retention rule, the FCC has been careful to note that this may mean the retention of Policy documentation far longer than five years.

All voted aye - motion carried.

The public hearing was closed at 8:24 p.m.

Policy No. 6161

PARCHMENT SCHOOL DISTRICT

Subject: Network/Internet Activity/**Filtering**

The overriding purpose of the Network/Internet, including e-mail, chat rooms and other forms of direct electronic communications, for both student and staff use is to support research and education by providing access to unique resources and the opportunity for collaborative work. For this reason, administrators reserve the right to monitor and restrict all student and staff Network/Internet activity including unauthorized access ("hacking"), unlawful activities,or unauthorized disclosure, use and dissemination of personal identification information regarding minors. Specifically prohibited are publications over the network of any information which would be abusive, profane, or sexually offensive to any average person, or which without the approval of system administrators, contains any advertising or any solicitations to us goods or services. Similarly, it is recognized that some network applications may contain defamatory, inaccurate, abusive, obscene, profane, sexually oriented, threatening, racially offensive or illegal material, and does not permit the use of such materials in the school environment. Students and/or staff knowingly bringing such materials into the school environment will be dealt with according to the discipline policies of the individual building and/or Board policy.

The District shall purchase and install technology for its computers with Internet access in order to filter or block Internet access, whether visual or written, through such computers for:
- Material that is obscene.
- Child pornography
- Material that is harmful to minors.
- Material the District determines to be inappropriate for minors.

An administrator, supervisor or person authorized by the Superintendent may disable the filtering technology during use by an individual who is not a minor, to enable unfiltered access for bona fide research or other lawful purposes.

Nothing in this policy shall be construed to prohibit filtering or blocking materials other than those referred to in this policy.

The Superintendent is hereby directed to establish regulations and guidelines in compliance with this policy, and to make students and parents of minor students aware of their responsibilities when using the Network/Internet. **The Superintendent is further directed to develop procedures to ensure the operation of filtering technology and monitoring practices whether by technological or supervisory means during any use of computers by minors.**

1st reading – October 23, 1995
2nd reading – November 27, 1995
Final reading – December 18, 1995

Parchment School District
Bylaws & Policies

7540.03 - STUDENT NETWORK AND INTERNET ACCEPTABLE USE AND SAFETY

Advances in telecommunications and other related technologies have fundamentally altered the ways in which information is accessed, communicated, and transferred in our society. Such changes are driving the need for educators to adapt their means and methods of instruction, and the way they approach student learning, to harness and utilize the vast, diverse, and unique resources available on the Internet. The Board of Education is pleased to provide Internet services to its students. The Board encourages students to utilize the Internet in order to promote educational excellence in our schools by providing them with the opportunity to develop the resource sharing, innovation, and communication skills and tools which will be essential to life and work in the 21st century. The instructional use of the Internet will be guided by the Board's policy on Instructional Materials.

The District's Internet system has not been established as a public access service or a public forum. The Board has the right to place restrictions on its use to assure that use of the District's Internet system is in accord with its limited educational purpose. Student use of the District's computers, network, and Internet services (Network) will be governed by this policy and the related administrative guidelines, and the Student Code of Conduct. The due process rights of all users will be respected in the event there is a suspicion of inappropriate use of the Network. Users have no right or expectation to privacy when using the Network including, but not limited to, privacy in the content of their personal files, e-mails, and records of their online activity while on the Network.

The Internet is a global information and communication network that provides students and staff with access to up-to-date, highly relevant information that will enhance their learning and the education process. Further, the Internet provides students and staff with the opportunity to communicate with other people from throughout the world. Access to such an incredible quantity of information and resources brings with it, however, certain unique challenges and responsibilities.

First, and foremost, the Board may not be able to technologically limit access to services through the Board's Internet connection to only those services and resources that have been authorized for the purpose of instruction, study and research related to the curriculum. Unlike in the past when educators and community members had the opportunity to review and screen materials to assess their appropriateness for supporting and enriching the curriculum according to adopted guidelines and reasonable selection criteria (taking into account the varied instructional needs, learning styles, abilities, and developmental levels of the students who would be exposed to them), access to the Internet, because it serves as a gateway to any publicly available file server in the world, will open classrooms and students to electronic information resources which have not been screened by educators for use by students of various ages.

Pursuant to Federal law, the Board has implemented technology protection measures which block/filter Internet access to visual displays that are obscene, child pornography or harmful to minors. The Board utilizes software and/or hardware to monitor online activity of students to restrict access to child pornography and other material that is obscene, objectionable, inappropriate and/or harmful to minors. Nevertheless, parents/guardians are advised that a determined user may be able to gain access to services on the Internet that the Board has not authorized for educational purposes. In fact, it is impossible to guarantee students will not gain access through the Internet to information and communications that they and/or their parents/guardians may find inappropriate, offensive, objectionable or controversial. Parents/Guardians assume risks by consenting to allow their child to participate in the use of the Internet. Parents/Guardians of minors are responsible for setting and conveying the standards that their children should follow when using the Internet. The Board supports and respects each family's right to decide whether to apply for independent student access to the Internet.

The technology protection measures may not knowingly be disabled at any time that students may be using the Network, if such disabling will cease to protect against access to materials that are prohibited under the Children's Internet Protection Act. Any student who attempts to disable the technology protection measures will be subject to discipline.

Pursuant to Federal law, students shall receive education about the following:

A.   safety and security while using e-mail, chat rooms, social media, and other forms of electronic communications

B.   the dangers inherent with the online disclosure of personally identifiable information and,

C.   the consequences of unauthorized access (e.g., "hacking") cyberbullying and other unlawful or inappropriate activities by students online

Building principals are responsible for providing training so that Internet users under their supervision are knowledgeable about this policy and its accompanying guidelines. The Board expects that staff members will provide guidance and instruction to students in the appropriate use of the Internet. Such training shall include, but not be limited to, education concerning appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms, and cyberbullying awareness and response. All Internet users (and their parents if they are minors) are required to sign a written agreement to abide by the terms and conditions of this policy and its accompanying guidelines.

Students and staff members are responsible for good behavior on the Board's computers/network and the Internet just as they are in classrooms, school hallways, and other school premises and school sponsored events. Communications on the Internet are often public in nature. General school rules for behavior and communication apply. The Board does not sanction any use of the Internet that is not authorized by or conducted strictly in compliance with this policy and its accompanying guidelines.

Students shall not access social media for personal use from the District's network.

Users who disregard this policy and its accompanying guidelines may have their use privileges suspended or revoked, and disciplinary action taken against them. Users granted access to the Internet through the Board's computers assume personal responsibility and liability, both civil and criminal, for uses of the Internet not authorized by this Board policy and its accompanying guidelines.

The Board designates the Superintendent and the Technology Director as the administrators responsible for initiating, implementing, and enforcing this policy and its accompanying guidelines as they apply to the use of the Network and the Internet for instructional purposes.

P.L. 106-554, Children's Internet Protection Act of 2000
P.L. 110-385, Title II, Protecting Children in the 21st Century Act
18 U.S.C. 1460
18 U.S.C. 2246
18 U.S.C. 2256
20 U.S.C. 6777, 9134 (2003)
20 U.S.C. 6801 et seq., Part F, Elementary and Secondary Education Act of 1965,
as amended (2003)
47 U.S.C. 254(h), (1), Communications Act of 1934, as amended (2003)

Revised 5/24/10
Revised 6/20/11

Parchment School District
Bylaws & Policies

[7540.04](#) - STAFF NETWORK AND INTERNET ACCEPTABLE USE AND SAFETY

Advances in telecommunications and other related technologies have fundamentally altered the ways in which information is accessed, communicated, and transferred in our society. Such changes are driving the need for educators to adapt their means and methods of instruction, and the way they approach student learning, to harness and utilize the vast, diverse, and unique resources available on the Internet. The Board of Education is pleased to provide Internet service to its staff. The Board encourages staff to utilize the Internet in order to promote educational excellence in our schools by providing them with the opportunity to develop the resource sharing, innovation, and communication skills and tools which will be essential to life and work in the 21st century. The Board encourages the faculty to develop the appropriate skills necessary to effectively access, analyze, evaluate, and utilize these resources. The instructional use of the Internet will be guided by the Board's policy on Instructional Materials.

The District's Internet system has not been established as a public access service or a public forum. The Board has the right to place restrictions on its use to assure that use of the District's Internet system is in accord with its limited educational purpose. Staff use of the District's computers, network, and Internet services (Network) will be governed by this policy and the related administrative guidelines, and any applicable employment contracts and collective bargaining agreements. The due process rights of all users will be respected in the event there is a suspicion of inappropriate use of the Network. Users have no right or expectation to privacy when using the Network including, but not limited to, privacy in the content of their personal files, e-mails, and records of their online activity while on the Network.

The Internet is a global information and communication network that provides an incredible opportunity to bring previously unimaginable education and information resources to our students. The Internet connects computers and users in the District with computers and users worldwide. Through the Internet, students and staff can access up-to-date, highly relevant information that will enhance their learning and the education process. Further, the Internet provides students and staff with the opportunity to communicate with other people from throughout the world. Access to such an incredible quantity of information and resources brings with it, however, certain unique challenges and responsibilities.

First, and foremost, the Board may not be able to technologically limit access to services through the Board's Internet connection to only those services and resources that have been authorized for the purpose of instruction, study and research related to the curriculum. Unlike in the past when educators and community members had the opportunity to review and screen materials to assess their appropriateness for supporting and enriching the curriculum according to adopted guidelines and reasonable selection criteria (taking into account the varied instructional needs, learning styles, abilities, and developmental levels of the students who would be exposed to them), access to the Internet, because it serves as a gateway to any publicly available file server in the world, will open classrooms and students to electronic information resources which have not been screened by educators for use by students of various ages.

Pursuant to Federal law, the Board has implemented technology protection measures which block/filter Internet access to visual displays that are obscene, child pornography or harmful to minors. The Board utilizes software and/or hardware to monitor online activity of staff members to restrict access to child pornography and other material that is obscene, objectionable, inappropriate and/or harmful to minors.

The technology protection measures may not knowingly be disabled at any time that students may be using the Network, if such disabling will cease to protect against access to materials that are prohibited under the Children's Internet Protection Act. Any staff member who attempts to disable the technology protection measures will be subject to disciplinary action, up to and including termination.

The Superintendent or Technology Director may disable the technology protection measure to enable access for

bona fide research or other lawful purposes.

Staff members will participate in professional development programs in accordance with the provisions of law and this policy. Training shall include:

A. the safety and security of students while using e-mail, chat rooms, social media and other forms of electronic communications;

B. the inherent danger of students disclosing personally identifiable information online; and,

C. the consequences of unauthorized access (e.g., "hacking"), cyberbullying and other unlawful or inappropriate activities by students or staff online.

Furthermore, staff members shall provide instruction for their students regarding the appropriate use of technology and online safety and security as specified above.

The disclosure of personally identifiable information about students online is prohibited.

Building principals are responsible for providing training so that Internet users under their supervision are knowledgeable about this policy and its accompanying guidelines. The Board expects that staff members will provide guidance and instruction to students in the appropriate use of the Internet. Such training shall include, but not be limited to, education concerning appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms, and cyberbullying awareness and response. All Internet users are required to sign a written agreement to abide by the terms and conditions of this policy and its accompanying guidelines.

Staff members are responsible for good behavior on Board's computers/network and the Internet just as they are in classrooms, school hallways, and other school premises and school sponsored events. Communications on the Internet are often public in nature.

Staff members shall not access social media for personal use on the District's network, and shall access social media for educational use.

General school rules for behavior and communication apply. The Board does not sanction any use of the Internet that is not authorized by or conducted strictly in compliance with this policy and its accompanying guidelines. Users who disregard this policy and its accompanying guidelines may have their use privileges suspended or revoked, and disciplinary action taken against them. Users granted access to the Internet through the Board's computers assume personal responsibility and liability, both civil and criminal, for uses of the Internet not authorized by this policy and its accompanying guidelines.

The Board designates the Superintendent and the Technology Director as the administrators responsible for initiating, implementing, and enforcing this policy and its accompanying guidelines as they apply to the use of the Network and the Internet for instructional purposes.

P.L. 106-554, Children's Internet Protection Act of 2000
P.L. 110-385, Title II, Protecting Children in the 21st Century Act
18 U.S.C. 1460
18 U.S.C. 2246
18 U.S.C. 2256
20 U.S.C. 6777, 9134 (2003)
20 U.S.C. 6801 et seq., Part F, Elementary and Secondary Education Act of 1965,
as amended (2003)
47 U.S.C. 254(h), (1), Communications Act of 1934, as amended (2003)

Revised 5/24/10
Revised 6/20/11

PARCHMENT SCHOOL DISTRICT
Student Network/Internet Use Form
2011-2012 School Year

The district reserves the right to monitor any and all activities on its hardware and networks, and also reserves the right to terminate a student's privilege to access the Internet. The district follows all guidelines as defined by the Children's Internet Protection Act. Students will not be permitted to access the Internet independently until this agreement is executed and returned to the school of attendance. This does not preclude an instructor in the District from accessing and/or employing the Internet as an educational resource within the classroom under his or her direct supervision. It is intended, rather, to establish guidelines for independent student research.

Acceptable Use Protocol

The purpose of the Internet is to support research and education in and among academic institutions by providing access to unique resources and offering the opportunity for collaborative interactions of an academic nature. As such, it is recognized that students may work independently on the Internet for such purpose. It is further recognized and understood that some access points may contain material, information or software which can be considered defamatory, inaccurate, abusive, obscene, profane, sexually oriented, threatening, racially offensive or illegal. The District does not condone the use of such materials, and prohibits their usage in the school environment. Filtering software is used to block access to these types of information. Additionally, District personnel will monitor and supervise the use of the Internet but cannot guarantee total control of the content residing in other systems.

Students and parents understand that the following infractions will result in disciplinary measures, as determined by individual school protocol.

- Damaging computers, computer systems or computer networks.

- Using another person's password or trespassing in another person's folders, work or files.

- Violating student Internet Protocols (as listed in the student handbook).

- Accessing e-mail, chat groups or news groups unless under the direct supervision of a classroom teacher

- Accessing, publishing, submitting, displaying or sharing prohibited materials as outlined above.

- Publishing any advertising or solicitations to use goods or services.

- Conducting any business or activity or soliciting the performance of any activity which is contrary to law.

- Restricting or inhibiting others from using and enjoying the Internet and data network.

- Maliciously attempting to harm or destroy data of another student, the Internet or any of the agencies or other networks connected to the system.

- Introducing software and/or data on school technology equipment and systems from outside sources.

- Using, copying or distributing copyrighted material without the expressed consent of the author.

Printed Name of Student_____ Home Phone_____

School_____ Grade_____

I understand that violation of the above prohibitions will result in disciplinary measures, as determined by individual building policies. I hereby certify that I will abide by the conditions set forth in this document.

AS MY CHILD'S PARENT/GUARDIAN MY SIGNATURE INDICATES THAT I GRANT PERMISSION FOR MY CHILD TO INDEPENDENTLY ACCESS THE INTERNET.

_____ _____
Signature of User or Student 18 or o   Date   Signature of Parent/Guardian   Date

06/15/2011