

PUBLIC SCHOOLS OF PETOSKEY

TECHNOLOGY PLAN

7/1/2013 Through 6/30/2016

REVISION 1.0

5/2013

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Disclaimer – the contents of this plan are 100% subject to change based upon state, isd, and local funding, policy and staffing changes.

1. Introduction and Executive Summary

Petoskey Schools Summary

The Public Schools of Petoskey district encompasses an area of approximately 170 square miles. The district includes a four year high school, a middle school for grades 6 – 8, and five elementary schools (K-5), one of which is an accredited Montessori School. Petoskey High School, which is accredited by the North Central Association, also includes an area career and technical education center that accepts students from nearby school districts. We have approximately 3000 students, approximately 165 teaching staff, and 175 non-teaching staff. Approximately 43% of our students are economically disadvantaged.

The Mission Statement of the Public Schools of Petoskey is to advance the education and skills of all students in an equitable manner through the participation and involvement of staff, students, and the community.

In 1998 our residents overwhelmingly passed a \$38.5 million dollar bond referendum to expand and renovate all six of our school buildings. This included a \$6 million dollar investment in technology. In 2012, we again, overwhelmingly passed a \$5M technology bond.

Our district is highly regarded as one of Michigan's best school districts academically and one of the most effective financially. Our costs per student, average teacher salary, administrator to student, and other key ratio's are among the best in the state. We achieve this with the lowest allowable per student foundation grant. Our elementary schools include a Montessori option, feature low class sizes, and offer individualized instruction within a safe and caring environment. Most importantly, our teachers in all of our buildings care about each and every student; Petoskey Schools is a Special Place for Everyone.

We provide a well-rounded program with high academic standards. Our community expects quality performance, and our students come through by excelling on nationally recognized test and evaluation programs. Our high school is home to many National Merit Scholars and semi-finalists. We are proud to offer a full range of solid basic academics, Advanced Placement Programs, fine arts (including strings), gifted/talented, career/technical, foreign language classes, college dual enrollment, an alternative high school program and more!

Our buildings continue to be upgraded, are well maintained and are second to none. Each building has updated classrooms, Internet access (wired and wireless), art and music rooms, science labs, gymnasium(s), fully equipped media centers, and multiple spaces for small group instruction. Both the middle and high schools feature auditoriums. The high school has newer science labs and mathematics classrooms, and a 2400 seat gymnasium. In addition, our career/technical education facility houses eight programs ranging from auto mechanics to health occupations to business services technology and more. All of our buildings have recently been upgraded with energy savings technology such as motion detection lighting control, security improvements with a perimeter control card access system and a district-wide video surveillance system coming during this plan period.

Outstanding co-curricular offerings are a part of the Petoskey tradition. The high school marching band is one of the top ranked bands in Michigan. Middle and high school bands have earned the highest rating in every category in state level competitions for 20 consecutive years. The Madrigal vocal group consistently wins State and National awards. Fifty-eight athletic teams have produced many state championships. Forensic, debate, and quiz bowl teams are championship caliber. Our construction trades team recently won the National Championship. We are proud to offer well over 100 co-curricular opportunities for students of all ages and abilities.

A diverse range of community education offerings provides services to young and old. We are a GED testing site and proud to provide area adults with an opportunity to earn a GED and improve their lives. Seventy enrichment classes are offered and involve over 500 area residents. Last year our school facilities were

scheduled after hours to house over 2800 classes and events. Our K-12 students unselfishly volunteer to support Habitat for Humanity, Salvation Army, Cancer Society and many other local organizations.

Hundreds of parents and community residents of all ages volunteer in our schools. Parent/teacher conference attendance is high. Our drop out rate is low. Our schools are safe. Local businesses and service clubs are extremely supportive. The local Community Foundations award thousands of dollars to fund scholarships and special student opportunities. Most important, our love for children is 100%

Technology Plan Summary, Vision & Goals

This technology plan encompasses the entire school district described above for the time period of 7/1/2013-6/30/2016. The essential purpose of this plan is to align with the State of Michigan standards for using telecommunications and technology to improve teaching and learning by addressing the following:

- > Technology as a subject for students
- > Technology as a tool for students
- > Technology as a tool for teachers and staff

These objectives will equip students to excel in learning while improving their future marketability. Additionally, they will allow teachers to appropriately leverage technology for teaching enhancement and productivity improvements.

The basis of these objectives includes the following:

- > Technology will be used to improve the effectiveness and efficiency of learning.
- > Technology will be used to maximize each learner's potential.
- > Technology will be used to better address the diverse learning styles and needs of students.
- > Technology will be used to access and manipulate the most current information in the best format (data, video, and audio) to facilitate better learning, instruction, and problem solving.
- > Technology will be used to provide students and teacher's opportunities for the creation, communication, and dissemination of new information, ideas, or artistic creations.
- > Technology will be used to promote lifelong learning skills and attitudes.
- > Technology will be accessible to all students whenever needed without regard to gender, race, ethnicity, socioeconomic status, mental or physical limitations, geographical location, or national origin.
- > Our schools must prepare our students for real-life utilization of technology in their continued education and work life.
- > Technology will be used to engage students, teachers, and parents in the teaching and learning process via the internet.
- > We will enter into technology services contracts in order to support the above at the best possible value to the district.

2. Technology Standards

This section of the plan provides a description of the existing technologies and their current state. Additionally, this section describes the type of technologies to be acquired, including specific provisions for interoperability among components of such technologies and, to the extent practical, with existing technologies.

A. Current Environment

- > Each building is wired with fully labeled Category 5e wiring for "horizontal" interconnect between devices & the electronics which support them. This includes telephones, computers, & printers. The wiring is approximately 14 years old & in excellent condition. Additionally, it was originally

constructed in modular fashion to enable expansion without redesign. This modular design has delivered on that concept several times over during the past 14 years.

- > Buildings are interconnected with school owned fiber optics in a partnership with the City of Petoskey. The condition of this interconnectivity is good. There is however, constant exposure to physical damage by digging, trees, telephone pole problems, & animals. Natural events such as these have occurred in the past & could very likely happen in the future.
- > Every classroom has 1 telephone, 1 teacher computer with 2 monitors, & 1 printer. Elementary classrooms typically have 3 student computers. In the MS & HS, there are from 0 to 14 student computers in the classrooms depending upon the subject area. The phones & printers are still satisfactory after 14 years but will be replaced during this plan period. The computers will be replaced during this plan period.
- > We have 7 Nortel phone systems interconnected with school owned fiber. All long distance & local service touch the district at one point in order to keep costs low & security high. All 911 access is done at the building level in order to aide first responders from an address standpoint.
- > The Cisco network electronics are 100% operational and will be replaced during this plan period with power over Ethernet (POE) switches. POE will be used for wireless, voip, clocks, speakers, and surveillance cameras during this plan period.
- > The software on the computers is comprised primarily of Office 2010. This software works very well as the knowledgebase in the district is very high. In addition, we have only 2 ghost images for the district (XP & W7). This simplifies and improves the end user support experience. Our ghost image includes the entire Adobe suite, Autocad, Accelerated Reader/Math, ILS, Kidspiration, Inspiration, & Kidpix – all of which is controlled by license metering to ensure licensing compliance. Needs not addressed by our software image are first pursued with web based solutions.
- > The server environment is made up of 12 Dell servers (new in 2008). It is our goal to replace them during this planning period with Cisco UCS server stack and NetApp SAN using VM.
- > Finally, each classroom is equipped with a network and hdmi attached, short throw data projector and sound amplification. DVD's are played through the computer and VCR's can be checked out at our Media Centers.
- > Each elementary building has 1 computer lab. This equipment was replaced in 2013.
- > The Middle & High Schools have several full labs & several "mini-labs". These will all be upgraded with new desktop computers in this plan period.
- > Our video distribution system (via Vbrick) is working very well & we anticipate no changes during the plan period. We have 5 TV channels from Charter & we have 4 in-house channels for morning announcements & other video productions.

B. Standards & Future Purchases

All future purchases will be based upon established technology standards & establish methods used by our school system. The purpose of technology standards includes but are not limited to the following:

- > Reduced total cost of ownership
- > Creation of a broader knowledge base within the district for both student/staff support, & technology integration
- > Remain in sync with industry standards

The following identifies standards which will be adhered to for all purchases. The sequencing approximately follows the International Standards Organization, Open System Interconnect model. After each standard is a brief description and/or current status/need for the time period addressed in this plan in brackets [...].

- > For "horizontal wiring" Category 5e wire & connectors will be used between all phones/computers & their assigned closet. These closets are called IDF's. [We expect to add additional labs & technology saturated classrooms during this planning cycle, as such, we will expand our current infrastructure utilizing our current standard approach.]
- > Each IDF will be connected to the building's main technology closet (MDF). The connection method is orange multi-mode fiber, dual window certified, 62.5/125, terminated with SC connectors for voice & data

- communications. Category 3 will be used for voice traffic between the IDF's & the MDF's. [We expect to replace our digital phone system with a cisco voip solution so all Cat 3 wiring would be abandoned.]
- > All building MDF's will be interconnected via yellow single mode fiber with sc connectors. [No change recommended during this planning cycle.]
 - > All copper interconnects/cross connects will be via RJ45 patch panels. [No change recommended during this planning cycle.]
 - > All wiring will be Nordex approved & only be serviced by Nordex certified personnel. [No change recommended during this planning cycle.]
 - > All wiring jacks & patch panels will be labeled according to PPS naming standards. All cabling will be labeled at both ends as well. These naming standards are identified in the operations manual. [No change recommended during this planning cycle.]
 - > All network electronics will be Cisco & will deliver 1gb switched, full duplex to each computer. "Vertical" & inter-building runs, as well as server connections will be 10gb switched. [We will expand where necessary to accommodate additional labs & computer deployment utilizing current methodology.]
 - > All network electronics will be named according to PPS naming standards. The naming standards are explained in the operation manual. [Continued adherence to this will occur during this planning cycle.]
 - > PC's will be "whitebox" computers which adhere to our 1 ghost image district wide goal (per unique operating system). During the plan cycle, we will add new computers and we will eliminate all windows 2000 and all macintosh computers. A typical classroom will have 1 teacher computer & 3 student computers. Art & Music rooms will typically have only 2 student computers in K-5 buildings. Each building will have at least one computer lab with a minimum of 25 student computers & 1 teacher computer connected to a fixed mounted overhead projector. We support teachers consolidating student computers, as building administrators deems appropriate. [During this plan period we will displace approximately 500 computers with current technology. We will still operate with 1 ghost image per operating system district wide.]
 - > File servers are Dell & printers are HP. Each classroom has a laser printer with scanner attachment for small copying jobs. There are regionally located high speed, high capacity black & white as well as color printers in each building. [During this planning cycle, we will replace all file servers with Cisco UCS, a NetApp Storage Area Network, and new printers.]
 - > Computers & file servers will be named according to PPS standards in the operations manual. [No change recommended during this planning cycle.]
 - > We will utilize the most current Microsoft Operating System & Office version that the technology & budget will allow. [During this planning cycle we will deploy MS Version 7 & Office 2010 on all 1200+ computers.]
 - > Staff & student computers will have MS Office Professional, Adobe Suite, CD burning, ILS, Kidspiration, Inspiration, KidPix, Accelerated Reader & Math, Type To Learn, Athena library management, standardized testing for reading, student management, curriculum mapping & Autocad. All software will be used in accordance with software copyright laws. Technology will be utilized to ensure that PPS will remain compliant. [No change recommended during this planning cycle.]
 - > Other technology standards include: Nortel digital telephone (with voice mail) in each classroom [The phone system will be replace with a Cisco VOIP solution during this planning period.], Vbrick for mpeg2 digital video distribution, Epson data projectors (new 2012) in each classroom. [No change expected during this planning cycle.]
 - > All technology (purchased, via grants, PTO's, or gifts) must be pre-approved by the Technology Director prior to the school agreeing to commit to take possession. [This policy is in place to ensure licensing compliance, standards compliance, interoperability, supportability, & low total cost of ownership.]
 - > District-wide surveillance, clock, and public address systems will be deployed during this plan period
 - > During 13-14, 2 teams will research portable technologies for staff and student use. A plan will be developed and acted upon during this plan cycle.

3. Curriculum Integration

The below shows the Curriculum/Technology Integration for K-12. A noteworthy component of this is the overlap of the K-5 integration with the new 3-5 plan. The reason both are incorporated is that the 3-5 plan is our first alignment with the new state guidelines. The following explains the logic and steps associated with transitioning to the state guidelines:

- We picked grades 3-5 for strategic purposes. Going backwards in the educational experience of our students from their 8th grade technology literacy assessment combined with our Middle School technology education elective, led us to focus on 3-5. Within this plan window, we will fully implement the 3-5 guidelines below so that when our students arrive at our Middle School technology elective, they will be on the same, solid technology literacy footing.
- Translate the state technology literacy guidelines into actionable/teachable language for classroom teachers
- Identify what curricular connection would be most relevant.
- Identify the setting and delivery for each (lecture in a classroom, hands on in a computer lab, etc.)
- Identify specific technology skills are required by the 3-5 classroom teachers (e.g. understanding of PowerPoint, Excel, Skype, etc.)
- Perform a gap analysis on skills needed vs skills possessed and create customized PD for each 3-5 teacher.
- As a side note, we start 2014-2015 with the 5th grade teachers having completed the above steps.
- As this approach is adopted, refined, and extended to grades 3 & 4, we will continue to fall back on the below legacy K-5 guidelines when needed.

TIMELINE: 2013-2016 continue to deliver the content below K-8 towards 8th grade technology assessment and 9-12 per the below. Refine delivery of grade 5 during 2014. Roll out grade 4 2015. Roll out grade 3 2016. Roll out K-2 2016.

State Guidelines Based Technology Literacy Standards and Plan for Grades 3-5

Parent Standard	Description	Grade 3	Grade 4	Grade 5	Best Lesson(s) to Teach This Skill In	Best Setting (In Lab, In Classroom, or Teacher Lead Discussion/Demo	List of Teachers who would like PD for teaching this skill
Creativity & Innovation	Produce a media-rich digital project aligned to state curriculum standards (e.g., fable, folk tale, mystery, tall tale, historical fiction)	1-MS word with words, picture(s), word art, fonts (2 or more of: bold, italic, underline, size 10, size 12, courier, arial, etc.), colors, clips online. Learn Copy/Paste, Cut/Paste.	2-MS Excel introduced & basic functions taught (what is a cell, cell types, basic math functions, sorting, graphs)	3-3+ slide powerpoint with the following inserted: pictures, sound, clip art, excel graph	Feedback needed to "standardize" on the curricular concept best suited.		
Creativity & Innovation	Use a variety of technology tools & applications to demonstrate his/her creativity by creating or modifying works of art, music, movies, or presentations	4-Create "art" using MS Paint to represent a curriculum concept. Save it in the K:/shared Student drive & have another Student add to / modify.	5-Open jpeg image & modify (change colors, rotate, crop, texture, etc.). Student may use MS photo editor (default program) or Tux Paint.	6-Download powerpoint with curricular relevance & modify (words/ideas, slide layout/look, & pictures).	Feedback needed to "standardize" on the curricular concept best suited.		

<p>Creativity & Innovation</p>	<p>Participate in discussions about technologies (past, present, & future) to understand these technologies are the result of human creativity</p>	<p>7,8,9-Pick from curriculum concept transportation, logging industry, manufacturing, computers, healthcare, or (e.g. abacus, calculator, computer)?</p>	<p>United Streaming Video on Technology?</p>		
<p>Communication & Collaboration</p>	<p>Use digital communication tools (e.g., e-mail, wikis, blogs, IM, chat rooms, videoconferencing, Moodle, Blackboard) & online resources for group learning projects</p>	<p>10-Classroom Email (Gmail-1 email acct per class) - learn how to compose, send, read, delete, print...& how to be 'safe'. Teacher to demonstrate email attachments</p> <p>11-Classroom Email (using Gmail a "few" email accounts per classroom). Use it for inter or intra-classroom/schools communications (iditarod?). Student to demonstrate ability attach a "work in progress" file to an email & send to student working on same file.</p>	<p>12-Skype between labs to discuss a current event or curriculum concept.</p>		
<p>Communication & Collaboration</p>	<p>Identify how different software applications may be used to share similar information, based on the intended audience (e.g., presentations for classmates, newsletters for parents)</p>	<p>13-Introduce common applications & capabilities (MS Word, Excel, Powerpoint, Tuxpaint, Paint, Email).</p> <p>14,17-Use (or refer to previously accomplished tasks with) common applications (MS Word, Excel, Powerpoint, Email) to create & share a report, presentation, flyer, slide show, or other digital product to share with classmates, teacher, parents, and/or Principal. (Word-tables, Excel graphs, sorting, copy & paste)</p>	<p>15-Present students with 3 different tasks. Identify which application is best suited to accomplish task (e.g. "Write a report" = Word, "Do a presentation" = Powerpoint, "Add a list of numbers" =Excel.</p>		
<p>Communication & Collaboration</p>	<p>Use a variety of media & formats to create & edit products (e.g., presentations, newsletters, brochures, web pages) to communicate information & ideas to various audiences</p>	<p>16-Intentionally Left Blank</p>	<p>18-Go to tweentribune.com & read content & post ideas</p>		

Research & Information Literacy

Identify search strategies for locating information with support from teachers or school library media specialists

19,22-Students will be able to use Athena to find publications on a specific topic. Students will be able to utilize Google SAFE SEARCH to locate and review online resources for a specific topic ("find maps of the original 13 colonies")

20-Students will be able to use Athena to find publications on a specific topic. Students will be able to utilize Google SAFE SEARCH to locate and review online resources for a specific topic.

21-Students will be able to use Athena advanced search ("search publications on cats and dogs & cats or dogs"). Students will be able to use Google SAFE SEARCH to locate & review online resources for a specific topic ("find pictures of dogs and cats")

Research & Information Literacy

Use digital tools to find, organize, analyze, synthesize, & evaluate information

23-Use folders and sub-folders in their My Documents (with good folder naming) to organize their findings.

24-Analyze findings (make a graph in Excel - e.g. population trend of a country.). Use data findings to support an argument (e.g. "There are wolves in the L.P")

Research & Information Literacy

Understand & discuss that web sites & digital resources may contain inaccurate or biased information

25, 26, 27, 28, 29, 30-california tree octopus - <http://zapatopi.net/treeoctopus>
velcro fields - where velcro is grown - <http://home.inreach.com/kumbach/velcro.html>
www.snopes.com to look up questionable email stories (e.g. <http://www.snopes.com/politics/obama/birthers/carter.asp>)
Google "Population of China" and note the differences.

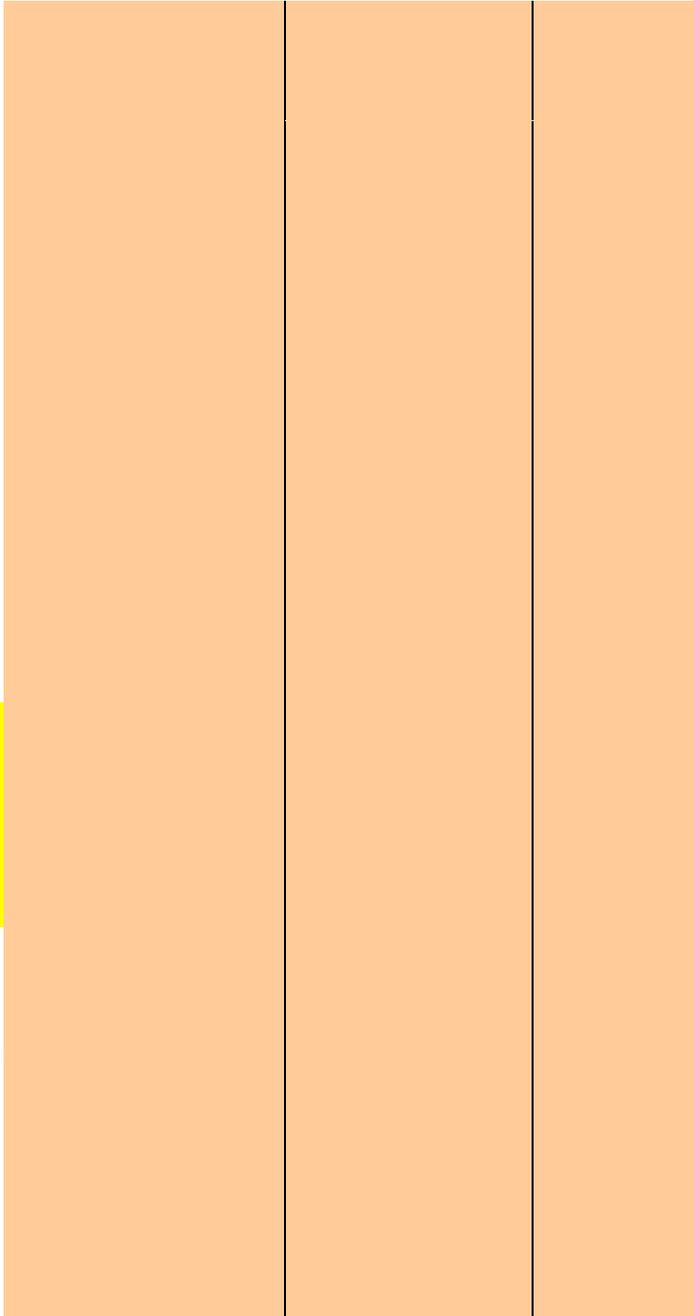
deliver via classroom teacher in classroom, deliver via teacher in lab time, delivered via canned video's to the classroom, auditorium/gym - wherever there is a projector/monivision

Research & Information Literacy

Understand that using information from a single Internet source might result in the reporting of erroneous facts & that multiple sources should always be researched

Critical Thinking, Problem Solving, & Decision Making	Use digital resources to access information that can assist in making informed decisions about everyday matters (e.g., which movie to see, which product to purchase)	31-Use mapquest.com to find how far it is from Petoskey to the Mackinac Bridge	32-Use Amazon.com to find the price of a hardback copy of <i>Maniac Magee</i> (or ?).	33-Weather.com - decide what to wear (recess today?)
Critical Thinking, Problem Solving, & Decision Making	Use information & communication technology tools (e.g., calculators, probes, videos, DVDs, educational software) to collect, organize, & evaluate information to assist with solving problems	34-Use a Calculator or thermometer	35-Build a table of measurements taken over time (temperature changes, plant growth, weight change, etc.) in Excel.	36-Build a table & graph of measurements taken over time (temp., growth, weight, etc.) in Excel.
Critical Thinking, Problem Solving, & Decision Making	Use digital resources to identify & investigate a state, national, or global issue (e.g., global warming, economy, environment)	37-Social Studies topic + Athena & Public Library search for publications	38-Social Studies topic + Google Safe Search & Athena search for publications	39-Social Studies topic + Google Safe Search & Athena search for publications
Digital Citizenship	Discuss scenarios involving acceptable & unacceptable uses of technology (e.g., file-sharing, social networking, text messaging, cyber bullying, plagiarism)	40-Discussion &/or play Video-Tied to Respect goals - students will understand & agree to the acceptable use policy	41-Review safe internet links on the school website (www/msearch/safe)	42-I can cite my sources for all written projects.
Digital Citizenship	Recognize issues involving ethical use of information (e.g., copyright adherence, source citation)	43-Intentionally Left Blank	44-Discuss what is involved with making a song, movie, ?. Explain how it is not right/legal to get something, that someone else worked hard to produce, for free. An analogy could be copying a student's test answers, homework, etc.	45-Explain that copying software & other digital products such as movies, MP3 Songs, (e.g. video games, movies, etc.) are against the law to copy.

Digital Citizenship	Describe precautions surrounding personal safety that should be taken when online			
Digital Citizenship	Identify the types of personal information that should not be given out on the Internet (name, address, phone number, picture, school name)	46, 47, 48, 49, 50, 51-On the topic of being safe on the internet, one of the following will occur each year: 1) District will host a student assembly, 2) School will broadcast a video, via vbrick, 3) Classroom teacher will show a video from K drive, or 4), Classroom teacher will point out Links on school website(s).		
Technology Operations & Concepts	Use basic input & output devices (e.g., printers, scanners, digital cameras, video recorders, projectors)	52-Learn Keyboarding Skills (home row, accurate typing with covered keyboard) with Type to Learn word document (report on curriculum topic)	53-Take a picture with a digital camera. Put that picture into a word document or Powerpoint presentation.	54-Students will present a multimedia presentation using the Data Projector in lab (see box 3)
Technology Operations & Concepts	Describe ways technology has changed life at school & at home	55-Social Studies topic (e.g. "back in the day, we did our reports/research with Encyclopedia Britannica" 56-Social Studies topic 57-Social Studies topic		
Technology Operations & Concepts	Understand & discuss how assistive technologies can benefit all individuals	58-Microsoft Magnifying glass & document zooming	59-Text to speech, books on tape/cd, multimedia web based lessons	60-Turn on close captioning on Monivision. Change text size on web pages, word docs (zoom), etc.
Technology Operations & Concepts	Demonstrate proper care in the use of computer hardware, software, peripherals, & storage media	61, 62, 63-Demonstrate patience as computer comes on, shut down when you are done, be respectful of school's technology property, read the acceptable use policy, know how to load paper in printer, how to use a jump drive, and how to use a CD and DVD.		

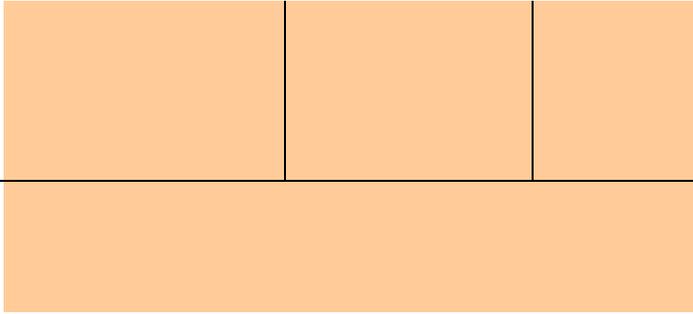


Technology Operations & Concepts

Know how to exchange files with other students using technology (e.g., network file sharing, flash drives)

64-K drive/homework to teachers (as referenced above - box above)
65-Gmail (as referenced above)

66-Jump Drives & email stuff from home to self at school



KEY		
Need curriculum ideas to put with this glce	Tech dept will have to spend some \$	Teachers to fill out

LEGACY Technology Literacy Goals for Grades K - 5

	K	1	2	3	4	5
Basic Technology Operation	-Log on with classroom id. Teacher directed <u>launch & operation</u> of educational applications (e.g. Sammy’s Stickers, Trudy’s Time & Place, Bailey’s Book House, Green Eggs & Ham, etc.). - Introduction to the Acceptable Use Policy (AUP) concepts	-Log on with classroom id. Teacher directed <u>launch & operation</u> of educational applications (e.g. Type to Learn, Kidspiration, Kidpix, etc.). -Printing to classroom printer -Beginning understanding of the AUP concepts	-Log on with classroom id. Teacher directed <u>launch & operation</u> of educational applications (e.g. Type to Learn, Kidspiration, Kidpix, etc.). -File saving & retrieving -Printing -Basic understanding of the AUP	-Log on with personal id. Self directed <u>launch & operation</u> of educational applications (e.g. Type to Learn, Kidspiration, Study Island, Kidpix, etc.) -File saving & retrieving -Printing -Basic understanding of the AUP	-Log on with personal id. Self directed <u>launch & operation</u> of educational applications (e.g. Type to Learn, Kidspiration, Study Island, Timeliner, etc.) -File saving, retrieving, copying & deleting. -Printing -Understanding of the AUP	-Log on with personal id. Self directed <u>launch & operation</u> of educational applications (e.g. Type to Learn, Kidspiration, Study Island, Timeliner, etc.) -File saving, deleting, renaming, moving, copying, & folder mgmt. -Printing to classroom & regional printers -Document scanning -Understanding of the AUP
Keyboarding	Keyboard familiarity	Home row familiarity	5 wpm at 80% accuracy	10 wpm at 80% accuracy	15 wpm with 80% accuracy	20 wpm with 90% accuracy
Writing, Publishing, & Presenting		-Launch & type into MS Word – produce at least 1 typed “report” or document.	-Launch & type into MS Word – produce at least 1 report on topic of teacher’s choice and 1 “friendly letter” per the Language Arts (LA) curriculum map. -Begin experimenting with cutting & pasting.	-Launch & type into MS Word – produce at least 1 report. Make report “look good via margins & fonts. -Launch & use Powerpoint (optional: make at least 1 oral presentation to class). -Continue learning cutting & pasting text (in Word & Powerpoint)	-Launch & type into MS Word – produce at least 1 research report sighting multiple sources. Make report “look good” via margins, fonts, & line spacing. -Launch & use Excel for simple math & spreadsheet examples. -Launch & use Powerpoint & make at least 1 oral presentation to class in accordance with language arts curriculum map -Cut & paste text & clipart in Word & Powerpoint.	-Word proficient: fonts, bold, spell & grammar checks, columns, tables, business letters, cut/paste, line spacing & margins. -Excel spreadsheets with multiple graph types to pictorially support word problem solutions (math &/or science). -Launch & use Powerpoint & make at least 1 oral presentation sighting sources properly & using various text formats, pictures, clipart, hyperlinks, & sound in accordance with the LA curriculum map (Movie clips & timed shows expected for technology-oriented students) -Cut/paste text & clipart in Word & Powerpoint.
Internet Use/ Research	Internet based educational applications &/or age appropriate games.	Internet based educational applications &/or age appropriate games.	-Internet based educational apps &/or age appropriate games. -Begin subject area guided use (hotlists, etc.)	-Internet based educational apps &/or age appropriate games. -Subject area guided use (hotlists, etc.)	-Subject area, guided/unguided use, overcome common problems (back, refresh, search engines, download clipart, pictures, etc.) -Understand plagiarism basics	-Subject area, unguided use, overcome common problems (back, refresh, search engines, download clipart, pictures, etc.) -Understand plagiarism & information source validation

LEGACY ELEMENTARY INTEGRATION INTO ALL CONTENT AREAS

Language Arts	Mathematics	Social Studies	Science	World Languages
Word processing, spell check, thesaurus & grammar checking software used in writing process. Organize, track, investigate & communicate progress in reading with printed or on screen files. Intervention, remediation, & reinforcement of language art skills. Multimedia reports with graphics, text & sound. Creation of timelines. Publishing reports.	Spreadsheet software. Intervention, remediation, & skills reinforcement with math software. Computer generated graphs. Use of Accelerated Math technologies (online test taking, printing, scanning) Individual cooperative learning involving computer-based resources	Software & web based resources for mapping. Web based resources for research. Multimedia software used in student reports. Video instructional resources from United Streaming. Publishing of student projects reports. Individual cooperative learning involving computer-based resources.	Database telecommunications for research. Multimedia software hardware use in student reports productions. Video instructional resources from United Streaming. Analyze data from internet based weather sites. Review of basic skills concepts using computer-based resources.	Vocabulary review via computer. Internet resources for research.
Arts	Music	Physical Education	Special Education	Media Centers
N/A	Internet based research in music appreciation history. Resources on audio cd's.	N/A	Assistive peripherals software for special needs. Word processing. Intervention, remediation, reinforcement of skills development. Video instructional resources.	Computerized inventory & check out system. Internet capable computers & computer labs for teachers, students, community members. Central location of loan able peripherals.

LEGACY MIDDLE SCHOOL OVERVIEW GRADES 6 – 8

The Middle School Curriculum will build on the skills learned at the elementary level. Students will enter the middle school having met the elementary outcome of being able to type 20 words per minute at 90% accuracy. The middle school will integrate typing throughout the curriculum to reinforce these skills. Students will further their knowledge by optionally completing elective courses in word processing, multimedia, database, spreadsheets throughout their middle school experience.

Across the curriculum in all content areas, middle school teachers will integrate the technological skills that students have learned in their elementary years. Teachers will integrate word processing skills into their courses at the sixth, seventh eighth grade levels. The seventh grade courses will integrate multimedia, across the curriculum, wherever possible, exposing students to the more advanced features of multimedia as a communication tool in optional elective classes by volunteering for Morning Announcements. The eighth grade courses, across the curriculum,

will integrate technology wherever necessary for the academic curriculum. Therefore, students will leave the middle school having improved their overall technology literacy. They will also have a greater understanding of the Internet as a research tool.

In addition, before they exit Middle School, students will be required to take an 8th Grade Technology Literacy Test. Our goal is to have 100% technology literate 8th graders. We currently have achieved about %64. The literacy test is available upon request.

LEGACY MIDDLE SCHOOL COMPUTER CURRICULUM				
GRADE	CONTENT KNOWLEDGE	APPLICATION OF KNOWLEDGE EXAMPLES	STUDENT EXPECTATIONS	EXAMPLES OF TEACHING/ LEARNING TIME
6 Advanced Word Processing Desktop Publishing Internet Use	Keyboarding-20 WPM (90% accuracy) Master such word processing skills as entering, storing, editing, formatting revising text. Master the use of tabs columns within a report. Master the use of Text Graphics Layout in a Newsletter or Report Master the use of Internet Resources to search evaluate information, practice electronic mail skills, learn model ethical, legal, responsible behavior in the online community.	Creative writing (i.e. fairy tales, poetry stories) Spelling vocabulary exercises Letter writing—correct format—business personal Essays—formatting (i.e. Page setup, headers, footers) School Newspaper Class Newsletter Career Research Interdisciplinary Unit Research E-Mail students in other schools other countries.	Self-directed learners Critical thinkers Creative producers	9 weeks every day via Elective course(s). Designed to learn word processing, spreadsheets, desktop publishing.
7 Multimedia Database Spread-sheet	Introduce technology media (CD, DVD, telecommunications, still live video, to effectively search, collect, process store, interpret, analyze, synthesize, evaluate express information in creative ways. Learn about features of database computer applications in hands-on problem solving. Introduce spreadsheet use-learning activities to answer “what if” questions by manipulating numeric data formulas. Use pre-existing databases to collect research.	Baseball card database Personal address book Personal planner setup F.B.I. Most Wanted Database Personal Business Unit: <ul style="list-style-type: none"> • spreadsheets on payroll • accounts receivable • accounts payable • database on inventory Mail merge documents	Self-directed learners Critical thinkers Creative producers	9 weeks every day via Elective course(s). Designed to learn word processing, spreadsheets, desktop publishing.

LEGACY MIDDLE SCHOOL ADVANCED COMPUTER SKILLS OBJECTIVE

GRADE	CONTENT KNOWLEDGE	APPLICATION OF KNOWLEDGE EXAMPLES	STUDENT EXPECTATIONS	EXAMPLES OF TEACHING/ LEARNING TIME
<p style="text-align: center;">8</p> <p>Advanced Multimedia</p> <p>Video Editing</p>	<p>PowerPoint projects: with effects, transitions, sound video.</p> <p>Evaluate existing web Pages on the Internet for design content.</p> <p>Learn video editing process including planning, taping, adding transitions, narration, sound effects, & music</p>	<p>Research Integration with interdisciplinary units.</p> <p>Use objects in interdisciplinary projects, web pages, multimedia,/or presentations.</p> <p>Create video for class projects. Create video for building & district tours. Create video for web pages.</p>	<p>Self-directed learners</p> <p>Critical thinkers</p> <p>Creative producers</p>	<p>One semester Every other day Or 9 weeks every day. Elective Course</p> <p>Designed to learn multimedia, Video Editing, the basics of video production in elective classes or as a volunteer/helper in the media center.</p>

LEGACY MIDDLE SCHOOL INTEGRATION INTO ALL CONTENT AREAS

Language Arts	Mathematics	Social Studies	Science
<p>Word processing, spellchecking, thesaurus, grammar checking software used in the writing process.</p> <p>Multimedia projects with graphics, text sound.</p> <p>Desktop publishing of documents, reports, other published materials.</p> <p>Vocabulary review via computer.</p>	<p>Spreadsheets to solve problems.</p> <p>Reinforce basic skills with computer software.</p> <p>Computer generated graphs.</p> <p>Instructional resources online.</p>	<p>Online resources.</p> <p>Multimedia projects with graphics, text sound.</p> <p>Databases on the web.</p> <p>Simulations.</p> <p>Spreadsheets to graph statistics.</p>	<p>Internet for research.</p> <p>Multimedia reports with graphics, text sound.</p> <p>Instructional multimedia resources online downloaded from web.</p>
Arts	Music	Physical Education	Life Skills
<p>Critique online artwork.</p> <p>Art history appreciation involving multimedia sources online.</p>	<p>Internet for research.</p> <p>Compact disks on musical classics with analysis history of writing.</p> <p>Create music.</p> <p>Performance Schedules Online</p>	<p>N/A</p>	<p>Internet for research.</p> <p>Spreadsheets to graph analyze nutrients in different food groups.</p>
Journalism	Special Education	Applied Technology	Media Centers
<p>Note taking reporting.</p> <p>E-mail for reporting.</p> <p>Desktop publishing of newspaper.</p> <p>Desktop publishing of documents, reports, other published</p>	<p>Computer software for remediation.</p> <p>Technology as tool to accomplish required objectives.</p> <p>Skill development reinforcement.</p>	<p>Principles of technology.</p> <p>Computer Aided Design (CAD).</p> <p>Computerized diagnostic devices.</p> <p>Multimedia reports with graphics, text sound.</p>	<p>Computerized card catalog.</p> <p>Multiple databases on the internet.</p> <p>Computer lab for research internet based instruction.</p> <p>Multiple computer stations for</p>

materials. Yearbook Creation		Spreadsheet to graph analyze data. Computer Aided Instruction (CAI) software for extension activities.	teacher/ student use. Multimedia workstations. Video Editing
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LEGACY HIGH SCHOOL OVERVIEW GRADES 9–12

The goal is to incorporate technology into all areas of curriculum. Word processing, database manipulation, spreadsheet applications internet research will be integrated into student required courses. The use of on-line resources will be integrated into curricular areas for the exchange of ideas. Student elective courses will provide additional technological skills, including CAD/CAM, computer technology, computer networking, computerized accounting multimedia information. All students will have ample opportunity to fulfill the state requirement for “online experience” while at the High School.

The High School integrated technology curriculum may involve the following components:

- I. Technology integration into all content areas.
- II. Advanced knowledge in word processing, research, multimedia through the study of language arts.
- III. Spreadsheet applications through the study of mathematics.
- IV. Spreadsheet database applications through the study of science.
- V. Internet through the study of social studies.

Students will:

1. Produce word-processed documents.
2. Manipulate databases.
3. Understand use on-line resources.
4. Publish documents on-line.
5. Learn, discuss model ethical, legal, responsible uses of technology.
6. Learn spreadsheet applications.
7. Create multimedia projects.
8. Learn computer inter-workings, networking, network operating systems.
9. Manipulate spreadsheets.
10. Use content-specific software.

LEGACY PART I. HIGH SCHOOL INTEGRATION INTO ALL CONTENT AREAS

Language Arts	Mathematics	Social Studies	Science
Word processing, spell check, thesaurus, grammar checking software used in the writing process. Internet for research. Multimedia projects with graphics, text sound. Creation of timelines of events.	Spreadsheets to solve problems. Graphing programs to discover concepts visually. Reinforce basic skills with computer software. Probability simulations. Graphing calculators.	Atlas/map making. Internet for online resources. Multimedia projects with graphics, text sound. Internet based research.	Database internet for research. Multimedia projects with graphics, text sound. Computer probes for measurements/ analysis Computer interface with lab instruments. Gravity, projectile motion other simulation. Download analyze data from

			weather satellite.
Arts	Music	Physical Education	Business Education
Critique artwork online. Scanning images enhancing on computer. Create multimedia portfolios.	Internet for research. Compact disks on musical classics with analysis history of writing.	N/A	Computerized record keeping accounting. Advanced word processing/publishing. Advanced database spreadsheet applications. Payroll, inventory management other business simulations.
Foreign Languages	Special Education	Industrial Technology	Media Centers
Foreign language Videos – use of professional student produced.	Computer software for remediation. Use technology as tool to accomplish required objectives.	Principles of technology. Certification in computer repair, computer networking, network operating systems, Computer Aided Drafting/Computer Aided Machining (CAD/CAM). Computerized diagnostic devices. Career exploration software. Multimedia reports with graphics, text sound.	Computerized card catalog. Multiple internet based databases. Telecommunications for research. Multiple computer stations for teacher/ student use. Multimedia workstations.

LEGACY PART II. HIGH SCHOOL LANGUAGE ARTS WORD PROCESSING OBJECTIVE

Reinforcement application of previously introduced skills.

GRADE	CONTENT KNOWLEDGE	APPLICATION OF KNOWLEDGE EXAMPLES	STUDENT EXPECTATIONS	EXAMPLES OF TEACHING/ LEARNING TIME
9-10	Well-written, visually pleasing documents using basic word processing skills. Reports created on a computer with title page, outline, text, works cited parenthetical referencing: <ul style="list-style-type: none"> • indenting • use variety of sizes & fonts • centering, setting margins • spell check • thesaurus • tabs, tab stops • pagination • spacing 	Essays Themes Research reports Letters Timelines	Self-directed learner Effective communicator Creative producer	Five hours in the first semester to outline expectations.
11-12	Well-written, visually pleasing documents using basic word processing skills. Reports created on a computer with	Theme writing Essays Peer editing		Five hours in the first semester to outline expectations.

	title page, outline, text, works cited parenthetical referencing. Plus moving blocks of text & deleting blocks of text	Research reports	
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LEGACY PART III. HIGH SCHOOL LANGUAGE ARTS MULTIMEDIA OBJECTIVE

GRADE	CONTENT KNOWLEDGE	APPLICATION OF KNOWLEDGE EXAMPLES	STUDENT EXPECTATIONS	EXAMPLES OF TEACHING/ LEARNING TIME
9-12 Required Presentations	To compose, communicate, illustrate illuminate their ideas. To research, interpret communicate concepts ideas. To compose meaningful images, video or sound. To demonstrate an understanding of various techniques used to create a presentation.	Possible integration (multimedia forms) Creative expression Multiple viewpoints	Self-directed learner Critical thinker Effective communicator Creative producer Cooperative contributor	Five hours each semester.

LEGACY PART IV. HIGH SCHOOL MATHEMATICS SPREADSHEET OBJECTIVE

Reinforcement application of previously introduced skills

COURSE	CONTENT KNOWLEDGE		APPLICATION OF KNOWLEDGE EXAMPLES	STUDENT EXPECTATIONS	EXAMPLES OF TEACHING/ LEARNING TIME
ALGEBRA	Master formatting of cells editing clearing of cells. Use formulas to perform calculations.	Enter correct data in a spreadsheet. Format cells.	Calculate the sum average of data. Evaluate multiplication addition of fractions. Explore variable equations for the length, width area of rectangular regions.	Self-directed learner Critical thinker Effective communicator Creative producer	One hour, five days each marking period.
GEOMETRY	Master formula writing with multiple cells. Display answers in a variety of ways. Master the CUT, COPY PASTE functions.	Write formulas using many cells. Copy formulas using FILL DOWN.	Evaluate the measure of the angles of triangles, trapezoids, parallelograms, kites rectangles. Given sides of angles, be able to calculate additional information about the polygon.	Cooperative contributor	One hour, five days each marking period.

ADVANCED ALGEBRA	Master the PMT function to calculate the periodic payments for an installment loan when given the interest rate, number of payments to be made the amount of the loan. Format cells for dollar amounts.	Produce an amortization table which displays how much interest principal is paid on each payment of an installment loan.	Study compound interest amortization techniques. Evaluate effects of time interest on total expenses of purchased items.	One hour, five days each marking period.
FUNCTIONS, STATISTICS And TRIG	Master graphing functions for the spreadsheet.	Create pie charts, line graphs bar charts to represent data.	Produce print charts while studying the mean standard deviation of data. Analyze data with the line of best fit. Use binomial probability distributions to create histograms of data.	One hour, five days each marking period.
PRECALCULUS, DISCRETE MATH	Master the VLOOKUP function.	Create spreadsheets to solve complicated mathematical situations.	Compute average rates of change in functions. Use derivatives to identify properties of functions. Use tables of values to look up comparison information on functions.	One hour, five days each marking period.

LEGACY PART V. HIGH SCHOOL SCIENCE SPREADSHEET OBJECTIVE

COURSE	CONTENT KNOWLEDGE	APPLICATION OF KNOWLEDGE EXAMPLES	STUDENT EXPECTATIONS	EXAMPLES OF TEACHING/ LEARNING TIME
PHYSICAL SCIENCE And CHEMISTRY	Learn to place actual lab data on a compatible spreadsheet, use charting presentation features to produce a presentation level document.	Laboratory assessments move from pencil paper graphs to presentation printouts.	Critical thinker Effective communicator Creative producer	One hour, ten days in the first marking period to learn skills. After introduction, use skills to produce lab presentations during the remainder of the year.

PHYSICS ANATOMY	Use of advanced graphing to produce graphical regressions.	Laboratory assessments advance to the higher level of statistical regression curve fitting.		One hour, ten days in the first marking period to learn higher level spreadsheet skills. After introduction, use advanced skills to produce lab presentations during the remainder of the year.
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LEGACY PART VI. HIGH SCHOOL SCIENCE DATABASE OBJECTIVE

COURSE	CONTENT KNOWLEDGE	APPLICATION OF KNOWLEDGE EXAMPLES	STUDENT EXPECTATIONS	EXAMPLES OF TEACHING/ LEARNING TIME
GENERAL SCIENCE	Learn to navigate a university websites to gain access to current data information. Contribute to high school level data gathering services extract compiled results.	Use of the Internet to obtain research paper information. Use of an on-line database to contribute to research compilation	Critical thinker Involved citizen Cooperative contributor	Nine hours in the first semester of the year to teach the use of the database search.
BIOLOGY	Learn to navigate a university websites to gain access to current data information. Contribute to high school level data gathering services extract compiled results.	Use of the Internet to obtain research paper information. Use of an on-line database to contribute to research compilation.		Nine hours in the first semester of the year to teach the use of the database search.

LEGACY PART VII. HIGH SCHOOL SOCIAL STUDIES RESEARCH & TELECOM OBJECTIVE

COURSE	CONTENT KNOWLEDGE	APPLICATION OF KNOWLEDGE EXAMPLES	STUDENT EXPECTATIONS	EXAMPLES OF TEACHING/ LEARNING TIME
9 – 10	Search for information online Publish documents online. Establish online conferences with remote sites. Demonstrate legal, ethical responsible behaviors online. Use electronic mail. Demonstrate the ability to access filter information resources.	Use of online resources to research Publish research documents. Submit homework through email.	Critical thinker Effective communicator Cooperative contributor Creative producer Self-directed learner Involved citizen	Five hours each semester

4. Community Access and Adult Literacy

Fundamentally, equipment in public schools belongs to the citizens who finance the building and operation of our educational facilities. To that end, we make our technology available to community members by three avenues:

Room and Resource Reservation process may be followed to utilize school facilities and assets. We provide access, userid's (if needed) and clean up service. Typical customers include our Colleges/Universities, ISD, staff, other schools, vendors of ours and other schools in the area, and community members at large.

Community Education – We have a Community Education Staff who coordinates building usage for community educational services. We work with the city and other entities to establish, communicate, and administer community education classes. These classes include various technology offerings.

Obsolete Equipment Distribution is addressed in a fair and equitable way. Seeing as how the community owns all school assets, we involve them in equipment end of life when possible. As new technology arrives, we offer the older technology, which is not consistent with our standards, to the community. We do this via “first come, first served” garage sales. This process has been successful and complaint free. In the event that the equipment has no value, we recycle.

All of these approaches are communicated and widely understood. Without them, our community would have significantly reduced access to current technology. Consequently, our plan is to continue to offer these access methodologies. Should new requirements arise, we will address them at that time.

5. Professional Development

Staff professional development in technology will be driven by the new state technology literacy guidelines for students by grade level. Achieving these grade level objectives will result in excellent results on the 8th Grade & All Staff technology literacy assessments. The specific approach we are taking by grade level is:

- > Convert each grade level technology literacy objective into actionable language for teaching staff
- > Identify what the most appropriate technology is for each objective (e.g. Excel for graphing water absorption rate into different soil types, Skype for distance learning/collaborating, etc.)
- > Identify what the most appropriate academic lesson is to accomplish the technology literacy objective
- > Identify the most appropriate setting (hands on lab environment, classroom discussion, classroom to classroom collaboration, etc.) for each objective
- > Perform a gap analysis of skills needed vs skills possessed by the classroom teacher necessary to achieve the literacy objective as the classroom teacher will be responsible to teach the objections associated with their grade level!
- > Depending upon several factors, deliver the PD to the staff in group settings, one on one, virtually, etc. as needed

The specific delivery mechanism utilized to accomplish the above includes (not in order of priority):

- > Technology Thursdays – Every Thursday after school, “reservation required” technology education is delivered by a professional technology educator. These courses are voluntary. The course content and sequencing is developed by the Technology and Media Center Staff.
- > New staff orientation – All new staff must attend a new employee orientation. Time during this orientation is designated for technology education.
- > New Technology Purchases – Essentially all significant technology purchases (and grants) are required to have a training or train the trainer service component. With any purchases made during this planning period which require additional skills or re-training, we will attempt to provide online, video training.
- > With 8th grade technology literacy testing, staff technology literacy assessment, and the State's new technology literacy guidelines by grade level, we are identifying where our legacy approaches to technology PD have not been 100% successful. During this plan period, we will continue with our “just in time education” by answering questions about technology/technology use with youtube links when appropriate.

Initiative	Objective	Success Indicator	Activities	2013- 2014	2014 – 2016
Basic training for all staff	Generic training in all key operational technologies including new document cameras	Amount of training and level of competency achieved	Trainers provide instruction during school hours and after school sessions	<ul style="list-style-type: none"> All new staff Voluntary refresher all buildings - open lab times 	<ul style="list-style-type: none"> All new staff Voluntary refresher all buildings - open lab times
Content specific training for teachers	Designated teachers by grade level receive training in content specific technology to achieve technology literacy objective in conjunction with academic lesson delivery..	<ul style="list-style-type: none"> Amount of training & level of competency achieved. Students and staff demonstrate technology literacy 	Qualified staff teach & guide from one to small groups of teachers focusing on teaching state tech literacy goals & associated academic lesson plan	Teachers in grades 3-5	Teachers in gades K-2 & 6-8.
Advanced training for staff who are tech coaches	1-3 teachers per building will receive advanced training to be coaches, tech support & communications paths for problem resolutions in conjunction with Media Center Staff	<ul style="list-style-type: none"> Amount of training & level of competency achieved. Evidence of sharing, support, and informal training Number of calls that go beyond building coaches 	Qualified staff provide training & building support as needed	All buildings beginning starting with Elementary working towards HS in order to embrace the new tech literacy guidelines	Ongoing as more and more technology is assimilated
Specialized training for key building support staff	Technology Director, Technology Staff, Media Specialists, & Media Aides are trained in all equipment & software.	<ul style="list-style-type: none"> Skilled specialists working with teachers in buildings Document efficiency in meeting building needs. 	Qualified staff provide focused PD.	All buildings	Additional education for all buildings as new technology is adopted.

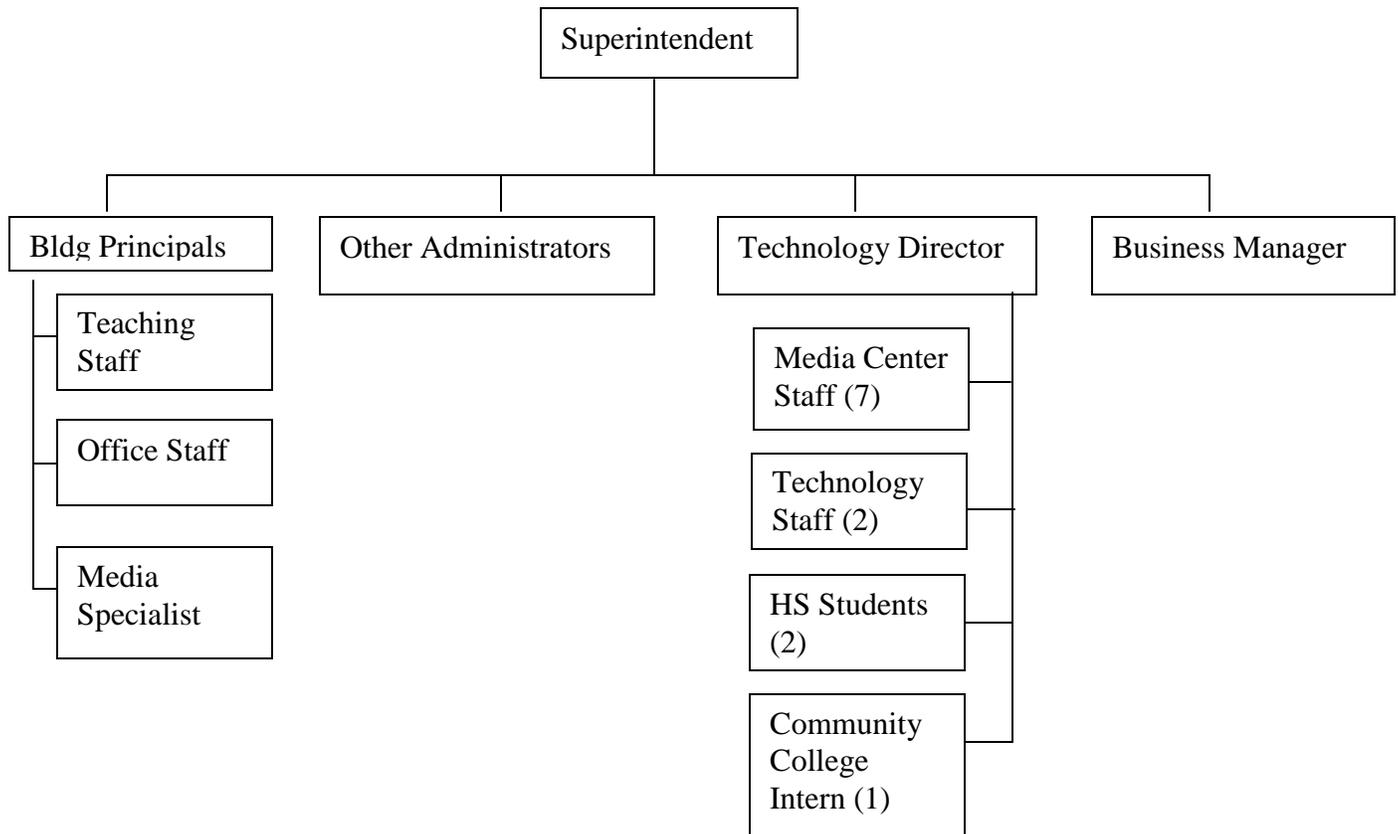
Additional Professional Development Resources include:

- District Policies concerning technology include Acceptable Use Policies for students, staff, and temporary employees; Asset Disposal; CIPA compliance. A more comprehensive policy for email and electronic documents will be developed during this plan period.
- Manuals, stored videos, & printed material to document, show how to use various hardware and software tools are available to staff via the Technology Department web pages or upon request. Some examples include how to use scanners, Student Information System (Pearson PowerSchool, Safe Internet Guides for students, staff & parents, etc.)
- Video lending is done via each building Media Center with access to a broader collection via CharEm ISD.
- REMC contracts are utilized for a variety of purchased products and services and have saved our district substantial amounts.
- District & building websites contain pertinent information for technology, policies, PD, & events scheduled throughout the year
- Instructional Software is available for students and staff including but not limited to Accelerated Math, Accelerated Reader, Type to Learn, various assistive technologies for students in need, Timeliner, Kidspiration, Inspiration, and many more.
- Online subscriptions are maintained for education tools such as Athena/publication Zmarc'ing, United Streaming video via Traverse Bay Area ISD, Pearson Inform,
- Our Higher Education relationship with North Central Michigan College is long and mutually successful. Our school system is a pipeline of students for them. We have staff on their Computer Information Sciences Department Advisory Committee. We have NCMC staff on our CTE Technology Advisory Committee. We are utilized on interview teams for technology educators. We have CTE technology course articulation agreements. With the help of CharEm ISD we will further enhance this mature and productive relationship by offering our students dual enrollment on our High School campus for technology courses. We have leveraged PD opportunities by sharing access between the two organizations as well.

6. Technical Support & Technical Support Staff Professional Development

PPS recognizes that technical support is the critical path to technology adoption. All users (staff & students) must be supported to the degree that they have confidence in the technology. To that end, we will continue to place emphasis on the technical support processes and the technical support staff.

The first component of technical support is the organizational question of “who” supports the end user. As shown below, we have developed a matrix organization to address strategic and operational support issues. The media center aides’ job description includes library services and varying degrees of end user technology support.



The second component of technical support is “how” will the support be delivered. PPS support processes continue to evolve but at a much slower pace. We expect minimal changes to the process below for the time period covered by this Plan. The specifics of the following are contain in the Operations Manual

- User has a problem
- Email or phone call to their building media aide
- Media aide diagnoses the problem (locally or remotely)
- Aide determines whether or not to fix based upon the following criteria
 - Seriousness of problem
 - Current activity in the Media Center
 - Comfort level with problem
- They will then fix the problem or
 - Enter into the work order database which generates a service call within 4 hours, or
 - Call/page technology support staff for problem hand off
 - Call/email building teacher coach/mentor for problem hand off
- If the problem is handed off to the technology support staff, they will either
 - Respond and resolve
 - Contact vendor and own until closure

The final component of our technology support model seeks to address our efficacy. Professional Development of the technology support personnel is a critical ongoing process. During the coverage period of this plan we will accomplish the following Professional Development:

Professional Development for Technology Support Staff	
What	Who
Continued application education – in house and outsourced – focus will be Document camera usage, PowerPoint, Excel, Word, Outlook, Type2Learn, and new phone system	Media Center Staff (Specialists and Aides) Technology Staff
PC Hardware Certifications (A+, printers, etc.)	High School Students and possibly Media Technology Aides
Cisco initial and ongoing certifications (and recertification as necessary)	Technology Staff
Nortel initial and ongoing certifications	Technology Staff
Microsoft initial and ongoing certifications (and recertification as necessary)	Technology Staff, Media Technology Aides, and High School Students
Michigan Virtual University	All involved with technology support as well as other staff who respond to our internal marketing of this program
In-service opportunities (vendor specific and ISD offered education),	All staff who are required to participate based upon their job function, specific software purchases, and those who respond to internal marketing efforts
Conferences (MACUL, MIEM, Classroom Connect)	PPS Technology Council, Media Specialists, Media Technology Aides, other de facto technology leaders within each building as funding permits

7. Technical Support Resources

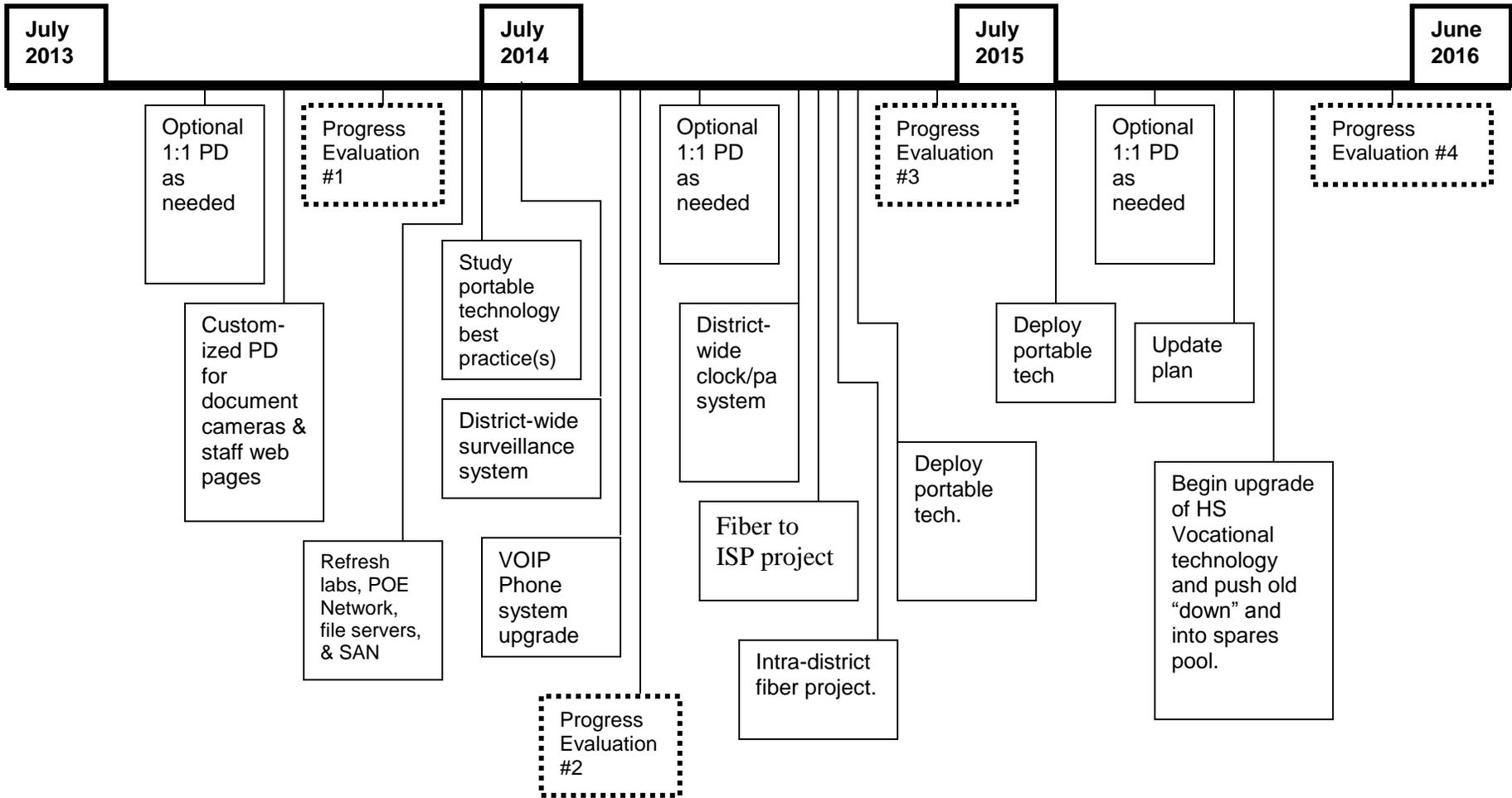
In order to support the technology infrastructure and its use as outlined above, we will need resources in addition to staffing and professional development. The following clarifies the philosophy as well as specific resources which we will use during the next 3 years:

Technical Support Resources		
What the District has done/will do	How has/will it succeed	Who will benefit
Time allocated for technology	Staff PD days/hours allocated New hire training On call support for real time/ teaching moment opportunities Independent study classes offered for upper classmen for technology education. These classes frequently result in students achieving a very marketable technology certification.	Teaching Staff Students Support Staff
Human resources	Sufficient headcount for quality & timely support will be in place for the duration of this planning period as budgets permit	All Staff and Students
Internet	Online access to technology support via informational pages, lsubscription based support services, and list servs (e.g. Michigan Technology Coordinators)	Teaching Staff Students Support Staff Technology Staff

Warranty and Support contracts	Virtually all technology (hardware and software) is a candidate for extended warranty and support services. A cost benefit analysis is conducted on each significant/ strategic purchase.	Teaching Staff Students Support Staff Technology Staff
Education contracts	Virtually all technology (hardware and software) is a candidate for education credits. A cost benefit analysis is conducted on each significant/ strategic purchase. For example, the following products were purchased with training included: > Cisco > Athena Library Management > Nortel > Nordx structured wiring	Teaching Staff Students Support Staff Technology Staff
Professional Development Budget	No funds are allocated to this for the plan period due to budget cut backs. All PD for tech staff will be self paced, web based freeware / free content.	Teaching Staff Students Support Staff Technology Staff
Support & Repair Expertise in house	During the time of this plan we will continue to enhance our in house staff skill sets. The details are outlined above.	Technology Staff
Support & Repair Expertise from Outside Entities	During the period covered by this plan, we will utilize external entities for support. These include vendors, our ISD, other school districts, REMC, and other ISD's. Specific support includes but is not limited to: Student Information System support from our ISD. Data warehouse support from our ISD and Oakland ISD. Student accounting help from our ISD and Macomb ISD. Purchase of technology supplies and software via the REMC bid process. Purchase and maintain Internet Filtering Software, with daily updates, from external vendor in order to protect our users from inappropriate Internet content and to comply with CIPA. We help defer costs of a video tape lending library by sharing our ISD's library with other districts in the region.	Teaching Staff Students Support Staff Technology Staff
Policies, Guidelines, Publications, & Online Resources	We will develop new, and refine existing policies, guidelines, and publications to assist staff and students with technology usage (e.g. hardware and software acquisition procedures, Acceptable Use Policies, Safe Internet Guidelines, several "how to" documents for currently installed hardware & software. Additionally, we will adopt board level policies in accordance with CIPA. www.petoskeyschools.org/tech_help provides our users with online resources for trouble reporting, trouble status, building maps with technology inventory, online access to both	All Staff and Students

	<p>vendor publications and those developed in house.</p> <p>www.powerschool1.petoskeyschools.org is available to all for using our online student information system.</p> <p>www.petoskeyschools.org is a multi-function utility which serves internal & external users with general information at the district & building levels, specific contact information, access to pertinent forms & publications, & links to classroom web pages.</p> <p>At each level of Elementary, Middle School, and High School, we have set student default home page as our Media Center home page associated with that grade level. This is a jump off point to our online library management system, student information system, safe internet for students (http://www.petoskeyschools.org/msearch/safe) & our purchased online information subscription services. Additional links are included for ACT prep, MVHS, & others.</p>	
Higher Education Relations	<p>We will continue to work NCMC to develop technology “trade” education. We have reciprocity agreements for credit transfer from the technology vocational classes, we jointly develop curriculum for HS and College taught technology classes, and we help them develop their University Center partnerships as it pertains to technology oriented students.</p>	
Computer Labs and loanable technology	<p>Each building has at least one computer lab. During this planning period, each will allow online reservations to maximize use and availability.</p> <p>Each building has loanable equipment for use at the point of time and location where learning occurs (cameras, scanners, ipads, etc.)</p>	All Staff and Students

8. Timeline



9. Technology Costs

The following will be modified during the life of this plan as necessary.

Technology Costs					
Budget Category	Capital or Operating?	Amount	When & What <i>(pls refer to pages 6&7 for tech stds)</i>	Source	Expected Impact on Instruction
Professional Development	Operating	\$5,000	No cost for teaching staff, voluntary PD offered during prep, before or after school given by existing staff. Online, free, self paced, just in time independent study will be promoted. Tech staff will typically attend one offsite class per year.	Vocational Millage	Understanding of student info system so less time spent on attendance, gradebook, & web based parent communications. More confidence integrating web based into instruction & use of tools to improve efficiency & efficacy.
Supplies	Operating	\$15,000	Per year spares estimate. Specifically,	Vocational Millage	Keeps all technology spares and parts on hand for reduced down time which in turn keeps all technology operational so curriculum delivery and student learning is not compromised.
Repair	Operating	\$5,000.	Per Year estimate for external repairs of printers (25 @ \$200 each), projector bulbs 5 @ \$400 each, phone system time & materials – 12 x \$100/hour, & peripherals for library mgmt system, etc.	Vocational Millage	Provides level 2 (external) support for advanced technology problems so curriculum dependence can be regained after outage.
Distance Learning	Operating	\$10,000	Various online subscriptions for credit recovery, remediation, and acceleration.	Title 1 and other earmarked funding sources.	This will allow expanded curriculum, more flexible “student friendly” scheduling, & prepare students for a principal learning approach of the future.
Software acquisition & support	Operating	\$50,000	Year 3 only - MS W8 & office 2013 for vocational dept.	Vocational Millage	Current O/S & MS Office to remain compatible with the world and the web.
Equipment (PC's, printers, network electronics, telephony, & video equipment)	Capital	\$5M	100% upgrade: infrastructure, computers, wireless, projectors, phone system, surveillance, clock/PS, portable tech, and fiber.	Bond	Technology will work well for operating the district efficiently and effectively and it will enhance teaching and learning.
Staffing-Technology & Media Svcs: 1-Director, 1-Media Spec., 2-Tech staff, & 6 Media Aids	Operating	\$322,000	Annual base pay & all adds for Tech Dept. & Media Tech Aids. Annual increase addressed below.	General Fund	Having highly experienced & service oriented staff will facilitate proper use of technology & reliability sufficient to ensure confident utilization in efficient curriculum delivery
Hardware & Software maint time & materials	Operating	\$4,000	Estimated annual costs primary for fiber optics repair & wiring expansion. Rate of consumption will be event driven.	General Fund	Printed materials for students & staff (work sheets, assignments, reports, etc.)
Internet Access with	Operating	\$15,000	Per year during the life of plan. Includes ISP access	General Fund with USF	High speed internet access necessary for today's

CIPA compliance.			& charges, filtering, spam & virus blocking, & 3 rd party filter software for CIPA compliance..	support for ISP fees.	students (research, distance learning, etc.). This includes spam filtering to protect bandwidth & user time as well as filtering to block access to sites not appropriate for education.
Voice / Telephony	Operating	\$39,000	Per year during plan period for dial tone via T1's and Centrex/911 lines.	General Fund with USF .	Telephony services do not directly impact instruction, only indirectly as a tool to contact & engage parents in the educational process.
Assistive Technologies	Operating	\$4,000	Per year depending upon student population	Special Ed., Title & At Risk Funds	This levels the educational playing field for students with differing mental & physical abilities.
Total		5,469,000	Except in the area of Federally mandated expenditures (CIPA, Assistive Technologies, etc.), adjustments may occur as a result of state funding changes, annual increases in wages, vendor cost changes, sinking fund legislation, program additions/eliminations, & bond issues as applicable.		

Public Schools of Petoskey Technology Budget for 2013 – 2015

Budget Category	12/13	13/14	14/15	Total
Professional Development	5000	5000	5000	\$15,000
Supplies & Internal Wiring	\$15,000	\$15,000	\$15,000	\$45,000
Repair	\$5,000	\$5,000	\$5,000	\$15,000
Distance Learning	\$10,000	\$10,000	\$10,000	\$30,000
Software acquisition & support	0	0	\$50,000	\$50,000
Equipment (PC's, printers, network electronics, client access licenses, telephony, & video equipment)	\$5,000,000	\$0	\$0	\$5,000,000
Staffing-Tech & Media Ctr Svcs Director, 2 Technology Engineers, & 6 Media Aids	\$322,000	\$322,000	\$322,000	\$966,000
Hardware & Software maint time & materials	\$4,000	\$4,000	\$4,000	\$12,000
Internet Access with CIPA compliance.	\$15,000	\$15,000	\$15,000	\$45,000
Voice / Telephony	\$39,000	\$39,000	\$39,000	\$117,000
Assistive Technologies as needed	\$4,000	\$4,000	\$4,000	\$12,000
Total	\$5,419,000	\$419,000	\$469,000	\$6,307,000

10. Use of Grant Resources

Historically, we have successfully pursued grants primarily in curriculum areas. We have been successful with USF which for the sake of this plan will be considered a grant resource. During this plan period, we will seek local, out of state, federal, and private grant opportunities to offset the operating costs associated with millions of dollars in bond funded assets approaching end of life. We will accomplish this by pursuing proven, historically successful grant channels as well as by seeking out new sources. This will be accomplished by the following staff members independently and jointly where logical:

- > Director of Teaching and Learning
- > Director of Technology
- > Building Principals
- > Other Administrators
- > Classroom teachers

In addition to the state, federal and private opportunities, we will expend the resources to derive maximum benefit from USF. This effort started shortly before this planning period and will continue through the planning period. While USF utilizes a reimbursement model, most grant resources utilize an acquisition model. All grant funded acquisitions, which contain or affect (directly or indirectly) technology or the contents in this plan, must be pre-approved prior to application submission. Further, unless specifically called out in the grant submission requirements, each acquisition will be burdened with costs

of professional development (staff and technology support staff) and extended warranty services. This will improve the likelihood of success with the new technology and it will temporarily protect the General Fund budget from the operating costs inherent with all technology acquisitions

11. Progress Evaluation

The progress evaluation is instrumental to confirming the strategic direction or for making mid course corrections. The following high level summary of the progress evaluation is based on International Society for Technology in Education and the Michigan Department of Education. The intent is to include both qualitative and quantitative measures of progress and to check those measures on a regular basis

Evaluation Category	Evaluation One	Evaluation Two	Evaluation Three	Evaluation Four	Reviewer	Strategy if Unmet
<i>Equipment and Basic Skills Inventory</i>	Count computers, printers, waps, connections, projectors, etc. in each room (all buildings)	Track the type & level of training received by each staff member.	Assess each grade & dept. to determine the degree of integration into curriculum areas.	Assess the degree to which building technology plans are implemented	Technology & Media Services Director & Staff	Assess personnel & implement corrective action plan. Attend staff mtgs to promote & solicit feedback.
<i>Integration of technology into the curriculum</i>	Document type & number of curriculum specific software programs installed.	Track the type & level of training received by each staff member.	Qualitative assessment by grade & depart to determine impact on student outcomes.	Assess the degree to which building technology plans are implemented.	Tech & Media Services Director with District Teaching & Learning Council (TLC)	Work with TLC's (buildings & district) to address specific needs including assistive technologies.
<i>Improve student learning</i>	Document impact of tech on learning by collecting data from teachers by use of a survey as time permits.	Compare student results on MEAP and other tests after the infusion of technology with those from before the infusion.	Collect student self-evaluations with their perceptions on the effects of technology on their learning.	Assess benchmarks of the Integrated Technology Curriculum in each grade and department.	Technology & Media Services Director in conjunction with District & Building TLC's.	Utilize time during TLC meetings, professional development days & common prep times as needed to adjust plan.
<i>Technology Service</i>	Document Service Level expectations	Measure & refine expectations & service delivery if necessary	Measure & refine expectations & service delivery if necessary	Measure & refine expectations & service delivery if necessary	Technology & Media Services Director & Staff	Analyze survey results, anecdotes, & work orders to id trends/patterns. Fix with PD &/or process redesign.
<i>Technology Reliability</i>	Collect baseline info by component (uptime, failure rate, MTTR, vendor response, & qualitative measures)	Compare event data to base line. Corrective action with tech staff & user education, vendor/contract mgmt, & future products	Compare event data to base line. Corrective action with tech staff & user education, vendor/contract mgmt, & future products	Compare event data to base line. Corrective action with tech staff & user education, vendor/contract mgmt, & future products	Technology & Media Services Director & Staff	Redesign support process to buffer users from problems. Phase out troublesome technologies & replace with more reliable solutions.
<i>Financial</i>	Compare actual vs budget	Compare actual vs budget	Compare actual vs budget	Compare actual vs budget	Technology & Media Services Director	Scale back, re-allocate equipment, seek alternative funding sources, & review priorities / sequencing.

12. Acceptable Use Policies

The following are our Acceptable Use Policies which are adhered to by students, staff, & temporary employees. These policies will survive this plan period. As part of our CIPA compliance, we provide real time filtering (OpenDNS) & logging (ISA Server) for all student & staff Internet usage.

Public Schools of Petoskey **STUDENT ACCEPTABLE USE POLICY AND AGREEMENT**

1.0 introduction

Computers are used to support learning and to enhance instruction. Computer networks allow people to interact, to share resources, and to communicate with others. The Internet carries these capabilities to people and resources around the world. With this freedom and flexibility come responsibility. To that end, the Public Schools of Petoskey (PSP) has developed this *Acceptable Use Policy* (AUP).

We are excited about offering access to technologies such as the Internet. We feel that these tools will be a critical component of life long learning. Additionally, we look forward to working with parents and students to direct technology usage in a positive and productive manner. We request your help in the management of technology usage in our program.

2.0 Parental information

In order for a student to gain access to our technology equipment, he/she must have parental permission. Parents will be given the option of denying *Internet* access and requesting alternative assignments not requiring direct *Internet* access

While the school district cannot guarantee that students will be denied access to all undesirable Internet sites, it is our intent to reduce the likelihood of such access when feasible. This will be attempted via technology, student oversight, and teaming with parents/guardians.

3.0 Conditions defining acceptable use

Students are expected to use PSP's technology resources for learning. Other uses are prohibited. All students must adhere to the following conditions:

- ◆ Parents/guardians requesting that a student not participate in accessing the *Internet*, must advise the PSP in writing.
- ◆ Students shall not erase, rename, or make unusable anyone else's computer files, programs, or disks.
- ◆ Accessing another person's materials, information, or files must be done with the permission of that person.
- ◆ Students will receive a user identification (userid) and a password from the designated teacher(s) and/or staff. The userid and password are to be treated as personal and confidential information.
- ◆ Attempts to discover or use another student or staff member's password are strictly prohibited.
- ◆ Students shall not modify or attempt to modify any settings, appearance, or configuration of any PSP computer equipment.
- ◆ Students shall use school technology equipment for school related work only.
- ◆ Students shall not use a computer for unlawful purposes, such as illegally copying or installing software, or violating any software copyright laws.
- ◆ Students shall not copy, change, or transfer any software or documentation provided by the school district, teachers, or another student without permission from the superintendent or his/her designee.
- ◆ Students shall not write, produce, generate, copy, propagate, or attempt to introduce any computer code designed to self-replicate, damage, or otherwise hinder the performance of any computer's memory, file system, or software (e.g. a computer virus or worm).
- ◆ Students shall not deliberately use the computer to annoy or harass others with inappropriate language, images, or threats. Users shall not deliberately access or create any obscene or objectionable information, language, or images.
- ◆ Students shall remove PSP technology equipment from school premises only with written permission of the superintendent or his/her designee.
- ◆ Students shall not download or post any material considered being objectionable. (e.g. including but not limited to pornography, The Anarchist's Cookbook or similar materials designed to give instruction on violating the law and the rights of others).
- ◆ Students shall use technology equipment in a fashion consistent with the directions from teachers and staff.
- ◆ Students shall subscribe to or use fee based on-line services only with the prior written approval of the superintendent or his/her designee.

Students shall report illegal or unauthorized use of the technology resources to the supervising teacher or the most immediately available staff member.

4.0 Discipline

Violation of any of the above conditions will be cause for immediate disciplinary action. Disciplinary action may include denial of further technology resource access, suspension, expulsion, and/or involvement of external law enforcement agencies.

PUBLIC SCHOOLS OF PETOSKEY
Staff Acceptable Use Policy

NETWORK & ACCESS AGREEMENT FOR STAFF MEMBERS

This agreement is entered into this ____ day of _____, 20____ between _____, hereafter referred to as Staff Member, and the Petoskey School District, hereinafter referred to as District. The purpose of this agreement is to provide electronic mail, Electronic Bulletin Board and Internet access for educational and administrative purposes to the Staff Member. As such, this access will (1) assist in the collaboration and exchange of information, (2) facilitate personal growth in the use of technology, and (3) enhance information gathering and communication skills.

The intent of this contract is to ensure that Staff Members will comply with all Network and Internet acceptable use policies approved by the school district.

In exchange for the use of the District Internet resources either at school or away from school, I understand and agree to the following:

- A. The use of the District Network is a privilege which may be revoked by the district at any time and for any reason. Appropriate reasons for revoking privileges include, but are not limited to, the altering of system software, the intentional placement of unauthorized information, computer viruses or harmful programs on or through the computer system in either public or private files or messages. The District reserves the right to remove files, limit or deny access, and refer the Staff Member for other disciplinary actions.
- B. The District reserves all rights to any electronically stored files and may remove any material which the district, at its sole discretion, believes may be unlawful, obscene, pornographic, or abusive, or otherwise objectionable. Staff members will not use their District-approved computer account/access to create, obtain, view, download or otherwise gain access to such materials.
- C. All information services and features contained on District or Network resources are intended for the private use of its registered users and any use of these resources for commercial-for-profit or other unauthorized purposes (i.e. advertisements, political lobbying), in any form is expressly forbidden.
- D. The District and/or Network resources are intended for the exclusive use by their registered users. The Staff Member is responsible for the use of his/her account/password and/or access privilege. Any problems which arise from the use of a Staff Member's account are the responsibility of the account holder. Use of an account by someone other than the registered account holder is forbidden and may be grounds for loss of access privileges. Staff Members shall log off the computer whenever they are not using it, or lock it whenever they leave the area where the computer is running.
- E. Any misuse of the account will result in suspension of the account privileges and/or disciplinary action determined by the District. Misuse shall include, but not be limited to:
 1. Intentionally seeking information on, obtaining copies of, or modifying files, other data or passwords belonging to other users without expressed consent.
 2. Misrepresenting other users on the Network.
 3. Disrupting the operation of the Network through abuse of the hardware or software.
 4. Malicious use of the Network through hate mail, harassment, profanity, vulgar statements or discriminating remarks.
 5. Interfering with others' use of the Network.
 6. Extensive use for nonwork-related communication.
 7. Illegal installation of copyrighted software.
 8. Unauthorized downloading, copying or use of licensed or copyrighted software.
 9. Accessing, downloading or creating any obscene or objectionable information, language, images or files.
- F. The use of district and/or Network resources are for the purpose of (in order of priority):
 1. Support of the academic/administrative program.
 2. Telecommunications.
 3. General Information.
- G. The District and/or Network does not warrant that the functions of the system will meet all specific requirements the user may have, or that it will be error free or uninterrupted; nor shall it be liable for any direct, indirect, incidental or consequential damages (including lost data, information, or time) sustained or incurred in connection with the use, operation or inability to use the system.
- H. The Staff Member will delete old mail messages from the personal mail directory to avoid excessive use of the electronic mail disk space.

The District and/or Network reserves the right to log Internet use and to monitor electronic mail space utilization by users and will periodically make determinations on whether specific users of the network are consistent with the Acceptable-Use Policy.

- I. The Staff Member may not transfer files, shareware, or software that would incur a financial obligation on the part of the District from information services and electronic Bulletin Boards without the permission of the District. The Staff Member will be liable to pay the cost or fee of any file, shareware or software transferred, whether intentional or accidental, without such permission.
- J. The District reserves the right to log computer use and to monitor fileserver space utilization by users. The District reserves the right to remove a user account on the Network to prevent further unauthorized activity. Personal information should not be stored on network resources.
- K. Software registry will be maintained. Registration of all District software/equipment will be maintained by the District.
- L. Staff shall make a good faith effort to monitor student Internet use. It is recognized that such monitoring is difficult and staff shall not be held responsible for inappropriate student Internet use.
- M. The use of electronic means, including e-mail and internet usage, shall not be referenced in employee evaluations unless usage is in non-compliance with this Network and Access Agreement.
- N. The Staff Member shall not remove District owned technology equipment and/or software from school premises without written permission of the Technology Director or the Building Principal or her/his designee.
- O. Staff shall not obligate the District financially or legally by subscribing to or using fee based on-line services without the prior written approval of the Superintendent or her/his designee.

In consideration for the privileges of using the District resources, and in consideration for having access to the information contained on the Network, or by the Network, I hereby release the District, Network and their operators and administration from any and all claims of any nature arising from my use, or inability to use the District and/or Network resources.

Signature of Staff Member: _____

Date: _____

13. Distance Learning

To quote a portion of the Michigan Virtual High School web site: "Every Michigan child should prepare for a globally competitive future that is integrated with technology and focused on the knowledge economy. The Michigan Virtual High School (*distance learning*) lets all schools offer students equal access to diverse courses, a way to build technology skills and tools that help them succeed on high-stakes, standardized tests." More specifically, distance learning:

- "Presents choices schools can't offer due to tight budgets that force them to limit their course offerings
- Is a great tool for credit recovery, interventions, summer school, and blended instruction.
- Gives students with barriers to being physically present in a classroom equal access to education
- Fits into non-traditional schedules
- Saves commuting time/money for students that live a substantial distance from their school or institution of higher education
- Fits some students' learning styles better than traditional classroom study (shy students feel comfortable participating; "energetic" students participate without being disruptive to the rest of the class; high-achievers stay challenged and avoid boredom).
- Instructs at a pace, faster or slower, that is better suited to some students' learning needs (in some cases).
- Often results in increased student-to-student communication.
- Often allows instructors to get to know students even better than in a traditional classroom setting.
- Teaches technology skills by the very nature of how instruction/ interaction takes place."

PPS agrees with the above quote. In order for PPS to intelligently go deeper into the distance learning arena we are becoming experienced in "buying content". This content is used for 6-12 summer school, 6-12 academic interventions, and for traditional school calendar curriculum delivery via blended instruction. This will continue during this plan period. In addition to "buying content", PPS will go from infancy in online courseware development (html, moodle, etc.) to robust class sections and blended instruction for at least 2 courses at the HS level.

These experiences will establish the framework for our continuous refinement and expansion of our distance learning story.....both as buyers and developers of online content The overarching approach will be to continually answer the following essential questions:

From a curriculum perspective, what do we lack – internally, locally, regionally, and nationally?
Should we "make" or "buy" to correct what we lack?

What do we have that others may want/need – internally, locally, regionally, and nationally?
Should we offer it to others? How? When? How much?

More specifically, the distance learning plan will first segment the markets we are interested in and then answer the “what, why, how, and when questions. For example:

Examples of Distance Learning Opportunities			
What	Why	How	When (conceptually)
6 th graders taking HS Spanish I from an existing HS Spanish Teacher in order to get a jump on High School Reform/Graduation Requirements	Foreign language at an earlier age is more effective. Maximize educational return for the same costs. Educate students on receiving distance learning. Develop teaching staff in the subtleties of delivering distance education.	Real time, intra-district, interactive video communications	Could be as early as second semester 2014-2015 school year depending on state & school budget issues.
A nearby school district within the same ISD needing access to a calculus teacher but does not have the student base to justify the FTE	Help our neighbors be efficient and effective Generate additional return for the same costs Develop teaching staff in the subtleties of delivering distance education	Real time, interactive, compressed video Real time web based delivery On demand, self paced (stored & forward), web based delivery	Could be as early as second semester 2014-2015 school year depending on state & school budget issues.
A school in western Wisconsin needs a Mythology, or Plastics, or? Course	Generate additional return for the same costs Develop teaching staff in the subtleties of delivering distance education	Real time web based delivery On demand, self paced (stored & forward), web based delivery	Could be as early as second semester 2015-2016 school year depending on state & school budget issues.
PPS would like to add a class for Japanese language in the Middle School	Quickly address the changing interests of our customer base without making a long term commitment Develop teaching staff in the subtleties of receiving and proctoring delivering distance education	Real time web based delivery On demand, self paced (stored & forward), web based delivery	Could be as early as second semester 2015-2016 school year depending on state & school budget issues.
Enrich a HS marketing course with intermittent participation in a college level marketing class	Bring “state of the industry” relevance to specific courses in manageable, “bit size” pieces. Develop teaching staff in subtleties of receiving/proctoring distance education	Real time web based delivery On demand, self paced (stored & forward), web based delivery	Could be as early as second semester 2014-2015 school year depending on state & school budget issues.

14. Parental & Community Involvement

Petoskey Schools is fortunate to have a community of very interested and involved parents. In addition to the countless volunteering opportunities, parent teacher conferences, and informal mechanisms, we will further utilize technology to involve parents. During the period addressed by this plan, we will continue on our quest to leverage technology to keep parents connected and keep them informed. Specifically we will continue to target the following areas (not necessary in order of priority):

- > Teacher Web Sites – All teaching staff will have and maintain an up to date web presence during this plan period. These web sites are developed and supported by the teachers themselves. The

- preferred template includes but is not limited to: introduction, teacher contact information, projects, field trips, release forms, collateral materials (books to be read, videos, web resources, etc.), curriculum by week or day, homework by day, test dates, secure links to progress, etc.
- > District Web Site – Maintaining district web sites with useful information is a daunting task. During the prior plan period, we passed ownership to the content experts within the district. This has worked well and will continue to occur. Our district philosophy is email or web when you can and print when you must.
 - > Newsletters – With access to digital cameras, color printers, publishing software, and email, we anticipate a resurgence of informative, written communications to families. These newsletters will be emailed and posted on the web in lieu of printing and mailing when/where possible.
 - > Email – Families with email now have electronic access to their child’s teachers – 24/7. This is very helpful for fitting into the diverse work schedules of parents. During this plan period, we anticipate that buildings will build parent email distribution lists – to speed communications, improve confidence of information delivery, and to reduce printing and postage costs.
 - > Telephone – Each classroom telephone allows teachers to make calls to, and receive calls from parents throughout the day so long as instruction time is not compromised (which is a district mandate). During this plan period, we expect more parents and teachers to utilize this tool.
 - > Voicemail – Like email above, much communications can be completed via electronic means. Voicemail does not require coordinating schedules between parents and teachers. It supports “communications when you can”. This technology has become so commonplace that it should assist parental involvement for 100% of our parents.
 - > Grades Online – Grades 6-12 are required to have up to date (at least weekly) grades, homework, and attendance online.
 - > This plan will be available via the administration tab on the district web site.
 - > All district plans are overseen by our school improvement committee that has parent and board involvement.

With respect to Adult Literacy, Petoskey schools have a community education department that offers many academic and non-academic courses. In addition, we are in collaboration with Traverse Bay ISD on an after school ESL program funding by Title 1 funds via TBAISD. We defer all GED functions to the local Michigan Works organization.

15. Technology Access

Two issues which are important to accessing technology are physical and logical. We define physical access as the ability to find a computer without exorbitant travel, sit in a position in front of a computer monitor with ready access to the keyboard and mouse – for both General & Special Education students. We define logical access as the ability to logon, access information, access applications software, produce work, save work for later retrieval, output work, and log off – for both General & Special Education students.

Physical

Each building has at least one computer lab with 25+ computers, flat bed scanner, high performance printers (black and white as well as color), ceiling mounted data projector, head phones, wi/fi, wireless slide advancer with laser pointer, sound, etc. During the plan period we will maintain wheel chair accessibility to computers.

Each building’s media center has at least 8 computers & a high performance printer.

Each building has/will have loanable video recorders, webcams, lpads, portable sound systems, VHS player, and other technologies.

Each “regular” classroom has 1 teacher computer, 3 student computers, 1 data projector (attached via the network and HDMI), 1 document camera, 1 telephone with voicemail, and a laser printer with scanner. Similar to the above, all student computers have wheel chair accessibility.

Each art & music room is typically identical to a regular classroom less one student computer.

Assistive Technology - In addition to wheelchair accessibility mentioned above, on a case by case basis, during the IEP process, in conjunction with the Char-EM ISD Assistive Technology Consultant, other necessary tools and techniques will be made available to students with special needs including, but not limited to, track balls, larger membrane style keyboards, use of styluses, & special monitors. During this planning period, we will continue this approach and will explore introduction of other physical devices for improved access (see below).

Logical

Students down to 3rd grade will have their own log on during the plan period. Each will also have their own allocation of file server space to store their work. Media Center staff can assist with userid/password issues as they arise. During the plan period we will address students and staff who have special needs to allow them to log on. Typically, students with motor skills challenges will be assisted by an adult (teacher or aide). Late in the plan period we will investigate voice recognition product maturity and cost.

Currently all computers only have information access and applications access via mouse or keyboard. As mentioned above, late in the plan period we will investigate voice recognition product maturity and cost as an interface for those with motor skills challenges.

We have begun to experiment with applications which will “talk” or read to the student. During the plan period, we will continue to investigate options which walk students through. This will help both lower elementary students and older students who have special needs.

Students and teachers may transport their work to and from home via jump drive or email.

Teachers may access their grade book software, email, email folders, and their calendar from home. During the planning period, we do not anticipate any changes.

Assistive Technology

As mentioned above, we will continue to acquire software tools to assist students who will benefit. This will occur on a case by case basis and specifically includes: text to voice, voice recognition (voice to text & application commands via voice), & software overlays for traditional software suites such as MS Office.

16. CIPA & Internet Filtering

The Children’s Internet Protection Act (CIPA via federal law: H.R. 4577) essentially states that we are to protect our students from the harms of internet. Compliance with this act is currently required to qualify for USF (e-rate) funds.

Public Schools of Petoskey has adopted the following language from MSBO: “The Superintendent shall be responsible for directing appropriate District technology staff, or technology consultant staff, to bring all computers used by children into full compliance with all federal requirements regarding Internet filtering software so as to assure that District discounts under the federal e-rate program are not jeopardized.”

Specific actions taken to date include:

- Required public hearing summary on CIPA - 3/7/01
- Individual web site address (url) blocking via *OpenDNS*.
- Implementation of internet content filtering software by topics & key words via *OpenDNS*.
- Presentations on how to keep the internet safe for students and staff given at each building

- Distribution of the *Safe Internet Guide for the Public Schools of Petoskey*. This is available upon requests and it includes:
 - Student Acceptable Use Policy
 - Staff Acceptable Use Policy
 - How to perform safe searches on the Internet
 - The importance of web site previewing
 - How to manage classroom internet access through hot lists
 - Techniques and tools for supervision of students (VNC)
- Periodic review of system log files to identify intentional violations
- Policy enforcement to encourage good decision making by students

While we are not able to issue a guarantee that the above will eliminate 100% of the risk, we feel that the Public Schools of Petoskey is in compliance with CIPA requirements and that we have taken the steps necessary to make the Internet work for us in a positive and safe fashion.