St Louis Public Schools

Technology Plan

2011 – 2014

St. Louis Public Schools
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Introduction

St. Louis Public Schools, located in St. Louis Michigan, offers traditional values taught in state-of-the-art facilities using modern teaching methods. Under the guidelines of the St. Louis Public Schools District Technology Plan, the district's school board, administration, and staff have made a conscious commitment toward incorporating technology into the classroom curriculum.

It is widely accepted that when student learning is engaged through technology, the student transforms from being a passive learner to an active participant. As an active participant, the student is motivated to learn, retains what is learned, and is better prepared to become leaders and productive citizens in the 21st century. The use of technology in the classroom offers an experience to students similar to the environment many will encounter in their future careers. With technology integrated within the curriculum, the teacher no longer presents material in a static form to passive learners but instead acts as a facilitator who sets project goals for the students and provides them with the necessary resources and guidelines needed to reach those goals. As a result, the student actively participates in the learning process by making decisions ranging from the choice of the project design to the process of gathering information from noteworthy and reliable sources. How the information will be presented as well as the technical resources that will be used during the presentation can also be left to the decision of the student. As the student actively participates in the learning process, they may encounter additional information not yet discovered by the teacher, providing a constant exchange of information between the students and teachers. Such an environment motivates a student to learn and better prepares them to work in business organizations and technical careers in the future.

St. Louis Public Schools has taken important steps in the past few years that have created an environment conducive to technology driven collaboration. The district buildings have all been connected together via a fiber-optic WAN (Wide Area Network) and every classroom, office, lab, and library has been incorporated into the network. That initiative along with our membership in Middle Michigan's Education Network Consortium (MMNET) has enabled our rural district to connect to and collaborate with a variety of local and global resources that share valuable guidance, assistance and expertise. These partnerships include the Gratiot-Isabella Regional Service District and our MMNET consortium of wide area networked K-12 Public Schools, Community Colleges and Central Michigan University. Initiatives that SLPS has shared with these organizations have resulted in direct assistance, consulting ideas, cooperative programming, resource sharing and encouragement.

In the near future, the district plans to further expand its collaboration capabilities with the implementation of a major cloud-based service providing unified communication capabilities throughout the district.

St. Louis Public Schools is fortunate to be part of a greater community that fully supports and encourages our attempts to leverage educational technology for competitive advantage as we strive to become the premier school district in Central Michigan.

Vision Statement

Our vision is to assure that our students can succeed in a global society. In pursuit of this vision, we will:

- Develop an exemplary educational program
- Encourage each student to excel
- Emphasize the importance of lifelong learning
- Be leaders in developing innovative educational techniques and programing

Mission Statement

Our mission is to help all students strive for excellence. In pursuit of this mission, the St. Louis Public Schools will:

- Always place children first
- Provide a safe, caring educational environment
- Involve the community in the educational program
- Integrate technology into the learning process
- Keep the District financially sound

Beliefs Statement

Our district beliefs are:

- To help each student achieve by continuously enhancing the educational program
- To teach each student to value and respect others
- To engage the community in the continuing development of the educational program
- To design and implement a vision-driven staff development program
- To continually monitor and update the District's long-range planning

Technology Committee Members

Joann Spry, Superintendent, St. Louis Public Schools
Steve Taylor, Business Manager, St. Louis Public Schools
Kathy Wiles, Trustee, St. Louis Board of Education
Sandy Russell, Carrie Knause Elementary Principal, St. Louis Public Schools
Carl Sztuczko, Nikkari Elementary Principal, St. Louis Public Schools
Steve Brimmer, TSN Middle School Principal, St. Louis Public Schools
George Herrington, High School Principal, St. Louis Public Schools
Dave Andrews, Director of Technical Support, MMNET
Ben Goward, St. Louis High School Business teacher, St. Louis Public Schools
Cassie Thelen, Community & Parent Representative, St. Louis Public Schools
Carol Salladay, Administrative Assistant, St. Louis Public Schools

Infrastructure

St. Louis Public Schools currently operates almost all of its hardware and software on the Microsoft Windows platform and has standardized hardware to reduce supporting many different makes and models of equipment. No claim is made that the PC platform or standardized hardware is superior to any other available options. Our platform / operating systems and hardware choices emerged because of functionality, reliability, serviceability and affordability issues that were dealt with in the past when SLPS owned and operated nearly two dozen different PC hardware makes and models.

Annual piece-meal computer and hardware purchases injected unmanageable support requirements and forced us into longer equipment life-cycles than required software and desired applications allowed. These support and life-cycle issues, along with our view that technology is a means rather than an end, drove SLPS' decision to begin to purchase refurbished/off lease computers at a greatly reduced pricing structure. This position allowed us to upgrade and replace the equipment on an as needed basis, and provide the staff and students with up to date hardware and software resources, again standardizing the hardware and software to reduce the technology support needed for the entire school district.

Another critical piece of our district's infrastructure is the Wide Area Network (WAN) mentioned in our technology plan's introduction. This WAN encompasses every district school building, classroom, office, lab and library and extends our connectivity to local K-12, library, and higher education partners via our MMNET consortium. MMNET also provides our rural district with high speed fiber-optic Internet connectivity, network firewall and content filtering services. Since the 2002-2003 school years, SLPS receives services from MMNET that allow us to simply and cost-effectively expand our utilization of technology. These services include moving our district directory structure (currently Novell's eDirectory) and all data storage to a server on the MMNET network. This has provided SLPS with off-site, secure storage for data in a climate controlled environment where server back-ups are performed on a regular basis. Back-up Power generation ensures that the network will continue to be available from MMNET during power outages in the area. Future plans are to migrate to an Active Directory (single sign on) identity management system, which will allow St. Louis Schools to easily transition to a Microsoft Server based infrastructure.

Although “building wide” wireless connectivity is not currently available, all new network hub and switch replacements are being designed with the specifications for future “building wide” wireless capability. While no definite plan has yet been established for building wide wireless connectivity the district has deployed numerous individually managed wireless access points on an “as needed” basis in the K-12 buildings.

The acquisition of traditional hardware and software will be integrated with the curriculum in such a way that they provide a system of delivering currently available technology to our users in an effort to assist them in achieving state and district learning goals and objectives.

Hardware and software selection will involve the following criteria:

Hardware & software purchases will depend on resources available to the district including grants and gifts.

The commitment to standardized networked PC computers, labs/buildings will be followed unless some extremely unusual circumstances exist.

Gifts of hardware or software from companies, organizations or individuals shall comply with current district specifications in order to be accepted.

In order to operate the software necessary for the teaching/learning process district hardware will continue on a three-year replacement life cycle.

Staff training and in-service needs, as well as support requirements, must be taken into consideration by Building Improvement Team (BIT) and technology teams before any new purchases are approved.

Only software that is compatible with our existing equipment and systems and is related to curriculum goals, District outcomes, and/or MEAP, MME, ACT will be considered for purchase.

Only those hardware and software vendors who provide user technical support may be used.

Curriculum

Curriculum Integration

St. Louis Public Schools continues to address instructional technology integration into the core academic and vocational curriculum through the adoption of the Michigan Educational Technology Standards. Technology skills are demonstrated in curricular areas throughout the K-12 experience of all students. Technology integration is imperative for the success of students who will be competing for 21st Century education and employment. One of our main goals is to increase achievement for all students through the use and understanding of technology. In addition, our students will learn higher order thinking skills and problem solving strategies. Our Vocational programs, such as; Business, Management, Marketing and Technology and Digital Media prepare students with the skills they need to be successful as they move on to post-secondary academic instruction or entry-level employment.

Goals

1. Technology will be used as a student-tool to allow students to work at their own level, and individual speed. Software and web-based materials will provide material to differentiate the learning experience for all students and allow for credit recovery.
2. Teacher multimedia stations will be used as a content delivery medium to provide a creative approach to introducing and enforcing curriculum.

3. Teachers will assist students in becoming technologically literate, utilizing a full range of current technologies.
4. A K-5 and 6-8 Technology Curriculum will be integrated into the core academic curriculum.
5. The existing 9-12 Technology Curriculum will be updated, refined and included in the District Curriculum.
6. A budget for updating technology and technology support will be developed.
7. Promote and implement additional opportunities for online field trips and video conferencing.
8. Create schedule for ongoing technology training and professional development.

Strategies

1. Students will participate in technology-integrated lessons based on their developmental and cognitive skill levels.
2. Students will participate in collaborative, multi-disciplinary projects that require them to think, collaborate, communicate and create.
3. Grade level teachers will be provided with appropriate training and resources to incorporate technology into the curriculum.
4. New high school graduation requirements mandate one on-line class before high school graduation. This will be accomplished through the on-line high school Career Technology course.

Promotion

1. Provide updates to staff and community on the instructional use of technology and educational trends for incorporating technology at Technology Committee Meetings, Board Meetings and Staff Meetings.
2. Provide ongoing technology training to teachers through professional development sessions.

I. Curriculum

B. Student Achievement

Strategies

1. Computer technology skills will be demonstrated in curricula areas throughout the K-12 experience for all students.
2. Utilize our Student Information System, PowerSchool, in addition to Data Director to measure student achievement in order to make data-driven decisions.
3. Utilize PowerSchool to communicate with parents about ongoing student progress.
4. Provide technology to be used as a student-tool to allow students to work at their own level and individual speed. Software and web-based materials will provide material to differentiate the learning experience for all students and allow for credit recovery.
5. Provide additional online learning opportunities to students through Michigan Virtual High School, area colleges and additional resources as deemed necessary.
6. Provide additional assistance in Language Arts utilizing Renaissance Place software, Skills Tutor program, and Essential Skills software.
7. Provide remediation in math at the elementary level using CCC Math and Skills Tutor program.
8. Utilize Digital Textbooks to provide curriculum for History at the Middle School level.
9. Utilize Pandigital electronic novel reading devices to help with reading remediation at the Middle School level in our At-Risk Reading and Language Arts program. We have a set of 30 devices.
10. Provide vocational courses in Business, Finance and Digital Media.
11. Increased student achievement will be obtained with the integration of technology into the curriculum as noted in the Michigan Educational Technology Standards below.

Vocational Program

Business Management, Marketing, and Technology Program Offerings

Career Tech
This course provides an introduction to technology and provides hands-on experience using IBM compatible computers. Students will learn the introductory concepts of the Microsoft Office Suite, which includes Word, PowerPoint, Excel, Access and Publisher. In addition, students learn Business Communication concepts and composition skills through the use of E-mail, letters and memorandums and will develop their presentation skills with the use of presentation software. Students will also complete online research in careers and technology.

Introduction to Business
Students will learn about many aspects of owning and operating a business, and gain a deeper understanding of the business world as a whole. Students will gain knowledge about our economy in the United States and learn about economic decisions that businesses and governments face. Other topics will include social responsibility, international business, management, and marketing. In addition, students will get an introduction to personal finance and checking account recordkeeping. Students will develop their own business throughout the semester and present a business plan and promotional video to the class. This is a great project to begin exploring entrepreneurship while encouraging critical thinking and collaboration with others.

Business Technology I
This course provides students with extensive, hands-on experience in Microsoft Word, Excel, PowerPoint, and Access as well as continued improvement of keyboarding speed and accuracy. In Word, students will learn to create documents such as resumes, letters and reports and learn to use many of the advanced features of this program. In Excel, students will learn how to develop complex spreadsheets for various financial situations. In PowerPoint, students will learn advanced presentation management skills such as developing advanced slide shows and also learn professional presentation skills. In Access, students will complete database projects that teach students how to create, store, sort and retrieve data in a database.

Business Technology II
This course provides students with extensive, hands-on experience in Microsoft Publisher and Adobe Photoshop. In Publisher, students will learn to create and edit various documents while learning the advanced concepts of desktop publishing and graphic

design. Students will also complete a comprehensive desktop publishing and graphic design simulation project. In addition, students will have the opportunity to create and develop documents for their own magazine company.

Business Technology III
This course is designed to introduce students at St. Louis High School to the world of video production. This is a team oriented class, where students work together in groups, to write, shoot and edit video productions. Students will be required to demonstrate competency in camera operation, script writing, lighting, audio recording and video editing. Students will have the opportunity to create video projects such as Public Service Announcements, School Promotional Videos, Senior Picture Videos, and other projects as assigned. In addition, students will develop advanced skills in strategic planning utilizing hand-held computers.

Digital Media Program Course Offerings

Digital Media I
This course provides an introduction to web design and digital media including video production. Topics include an introduction to the environment and the tools, web publishing fundamentals, planning a successful website, typography and graphics, multimedia and interactivity on the web, and testing, publishing, marketing, and maintaining a website. Students will apply the principles of design and learn how to incorporate appropriate color schemes into websites based on the target audience. In addition, students will learn basic skills in graphic design and editing and apply web image techniques to enhance the appearance of websites.

In this course students will have the opportunity to simulate the design of a website for a fictional company called Ultimate Fitness. In addition, students will work on projects related to our school website to gain real world experience while working in collaborative groups.

Digital Media II
This course presents advanced concepts, issues and techniques related to designing, developing and deploying websites. During the course, students will learn about web design standards, HTML, XHTML, and cascading style sheets (CSS). Students will learn how to create sites both manually and through the use of website development software.

Students will follow a project-based curriculum designed to introduce them to web design and development, digital design, video, and animation. The skills attained can be utilized to produce graphics, multimedia, and animation for the web and various industries. Students will develop teamwork and communication, time management and problem-solving skills. In addition, students will develop

digital media projects to support real world applications. Real world projects will include the school website, as well as websites for BPA and the Technology Team.

Michigan Educational Technology Standards (METS) 2009 - PK-8 Checklist by Grade Levels										
O = Teacher Observation	**P = Portfolio Evidence**	**A = Formal Assessment**	**C = Technology Literacy Class**							
Grades PK through 2 –Technology Standards and Expectations – (prior to completing Grade 2)										
PK_2.CI Creativity and Innovation - By the end of Grade 2 each student will:			**PK**	**K**	**1**	**2**				
1. use a variety of digital tools (e.g., word processors, drawing tools, simulations, presentation software, graphical organizers) to learn, create, and convey original ideas or illustrate concepts										
PK_2.CC. Communication and Collaboration - By the end of Grade 2 each student will:			**PK**	**K**	**1**	**2**				
1. work together when using digital tools (e.g., word processor, drawing, presentation software) to convey ideas or illustrate simple concepts relating to a specified project										
2. use a variety of developmentally appropriate digital tools (e.g., word processors, paint programs) to communicate ideas to classmates, families, and others										
PK_2.RI. Research and Information Fluency - By the end of Grade 2 each student will:			**PK**	**K**	**1**	**2**				
1. interact with internet based resources										
2. use digital resources (e.g., dictionaries, encyclopedias, graphs, graphical organizers) to locate and interpret information relating to a specific curricular topic, with assistance from teachers, school library media specialists, parents, or student partners										
PK_2.CT. Critical Thinking, Problem Solving, and Decision Making - By the end of Grade 2 each student			**PK**	**K**	**1**	**2**				

will:									
1. explain ways that technology can be used to solve problems (e.g., cell phones, traffic lights, GPS units)									
2. use digital resources (e.g., dictionaries, encyclopedias, search engines, web sites) to solve developmentally appropriate problems, with assistance from teachers, parents, school media specialists, or student partners									
PK_2.DC. Digital Citizenship - By the end of Grade 2 each student will:	**PK**	**K**	**1**	**2**					
1. describe appropriate and inappropriate uses of technology (e.g., computers, internet, e-mail, cell phones) and describe consequences of inappropriate uses									
2. know the Michigan Cyber Safety Initiative's three rules (Keep Safe, Keep Away, Keep Telling)									
3. identify personal information that should not be shared on the Internet (e.g. name, address, phone number)									
4. know to inform a trusted adult if they receive or view an online communication which makes them feel uncomfortable, or if someone whom they don't know is trying to communicate with them or asking for personal information									
PK_2.TC. Technology Operations and Concepts - By the end of Grade 2 each student will:	**PK**	**K**	**1**	**2**					
1. discuss advantages and disadvantages of using technology									
2. be able to use basic menu commands to perform common operations (e.g., open, close, save, print)									
3. recognize, name, and label the major hardware components in a computer system (e.g., computer, monitor, keyboard, mouse, printer)									

4.	discuss the basic care for computer hardware and various media types (e.g., CDs, DVDs, videotapes)																				
5.	use developmentally appropriate and accurate terminology when talking about technology																				
6.	understand that technology is a tool to help him/her complete a task, and is a source of information, learning, and entertainment																				
7.	demonstrate the ability to navigate in virtual environments (e.g., electronic books, games, simulation software, web sites)																				

Michigan Educational Technology Standards (METS) 2009 - 3rd to 5th Checklist			
O = Teacher Observation	**P = Portfolio Evidence**	**A = Formal Assessment**	**C = Technology Literacy Class**

Grades Three through Five – Technology Standards and Expectations – (prior to completing Grade 5)																					
3_5.CI. Creativity and Innovation - By the end of Grade 5 each student will:										**3**	**4**	**5**									
1. produce a media-rich digital project aligned to state curriculum standards (e.g., fable, folk tale, mystery, tall tale, historical fiction)										a	a	a									
2. use a variety of technology tools and applications to demonstrate their creativity by creating or modifying works of art, music, movies, or presentations																					
3. participate in discussions about technologies (past, present, and future) to understand these developments are the result of human creativity										o	o	o									
3_5.CC. Communication and Collaboration - By the end of Grade 5 each student will:										**3**	**4**	**5**									
1. use digital communication tools (e.g., e-mail, wikis, blogs, IM, chat rooms, videoconferencing, Moodle, Blackboard) and online resources for group learning projects																					
2. 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)						**o**			
3. use a variety of media and formats to create and edit products (e.g., presentations, newsletters, brochures, web pages) to communicate information and ideas to various audiences				a	a	a			
3_5.RI. Research and Information Fluency - By the end of Grade 5 each student will:				**3**	**4**	**5**			
1. identify search strategies for locating information with support, from teachers and school library media specialists				**o**	**o**	**o**			
2. use digital tools to find, organize, analyze, synthesize, and evaluate information									
3. understand and discuss that web sites and digital resources may contain inaccurate or biased information					o	o			
4. understand that using information from a single internet source might result in the reporting of erroneous facts and that multiple sources should always be researched						o			
3_5.CT. Critical Thinking, Problem Solving, and Decision Making - By the end of Grade 5 each student will:				**3**	**4**	**5**			
1. use digital resources to access information that can assist them in making informed decisions about everyday matters (e.g., which movie to see, which product to purchase)						**o**			
2. use information and communication technology tools (e.g., calculators, probes, videos, DVDs, educational software) to collect, organize, and evaluate information to assist with solving problems				o	o	o			
3. use digital resources to identify and investigate a state, national, or global issue (e.g., global warming, economy, environment)						o			
3_5.DC. Digital Citizenship - By the end of Grade 5 each student will:				**3**	**4**	**5**			

	1. discuss scenarios involving acceptable and unacceptable uses of technology (e.g., file-sharing, social networking, text messaging, cyber bullying, plagiarism)					**o**	**o**			
	2. recognize issues involving ethical use of information (e.g., copyright adherence, source citation)						o			
	3. describe precautions surrounding personal safety that should be taken when online									
	4. identify the types of personal information that should not be given out on the Internet (name, address, phone number, picture, school name)						0			
3_5.TC.	**Technology Operations and Concepts** - By the end of Grade 5 each student will:				**3**	**4**	**5**			
	1. use basic input and output devices (e.g., printers, scanners, digital cameras, video recorders, projectors)				a	a	a			
	2. describe ways technology has changed life at school and at home				**a**	**a**	**a**			
	3. understand and discuss how assistive technologies can benefit all individuals									
	4. demonstrate proper care in the use of computer hardware, software, peripherals, and storage media				a	a	a			
	5. know how to exchange files with other students using technology (e.g., network file sharing, flash drives)				a	a	a			

Michigan Educational Technology Standards (METS) 2009 - 6th to 8th Checklist											
O = Teacher Observation	**P = Portfolio Evidence**	**A = Formal Assessment**	**C = Technology Literacy Class**								
Grades Six through Eight – Technology Standards and Expectations – (prior to completing Grade 8)											
6_8.CI. Creativity and Innovation – By the end of Grade 8 each student will:									**6**	**7**	**8**
4. apply common software features (e.g., spellchecker, thesaurus, formulas, charts, graphics, sounds) to enhance communication with an audience and to support creativity											
5. create an original project (e.g., presentation, web page, newsletter, information brochure) using a variety of media (e.g., animations, graphs, charts, audio, graphics, video) to present content information to an audience											
6. illustrate a content-related concept using a model, simulation, or concept-mapping software											
6_8.CC. Communication and Collaboration – By the end of Grade 8 each student will:									**6**	**7**	**8**
4. use digital resources (e.g., discussion groups, blogs, podcasts, videoconferences, Moodle, Blackboard) to collaborate with peers, experts, and other audiences											
5. use collaborative digital tools to explore common curriculum content with learners from other cultures											
6. identify effective uses of technology to support communication with peers, family, or school personnel											
6_8.RI. Research and Information Fluency – By the end of Grade 8 each student will:									**6**	**7**	**8**
6. use a variety of digital resources to locate information											

7. evaluate information from online resources for accuracy and bias										
8. understand that using information from a single internet source might result in the reporting of erroneous facts and that multiple sources should always be researched										
9. identify types of web sites based on their domain names (e.g., edu, com, org, gov, net)										
10. employ data-collection technologies (e.g., probes, handheld devices, GPS units, geographic mapping systems) to gather, view, and analyze the results for a content-related problem										
6_8.CT. Critical Thinking, Problem Solving, and Decision Making - By the end of Grade 8 each student will:							**6**	**7**	**8**
1. use databases or spreadsheets to make predictions, develop strategies, and evaluate decisions to assist with solving a problem										
2. evaluate available digital resources and select the most appropriate application to accomplish a specific task (e, g., word processor, table, outline, spreadsheet, presentation program)										
3. gather data, examine patterns, and apply information for decision making using available digital resources										
4. describe strategies for solving routine hardware and software problems										
6_8.DC. Digital Citizenship – By the end of Grade 8 each student will:							**6**	**7**	**8**
5. provide accurate citations when referencing information sources										
6. discuss issues related to acceptable and responsible use of technology (e.g., privacy, security, copyright, plagiarism, viruses, file-sharing)										
7. discuss the consequences related to unethical use of information and communication										

technologies										
8. discuss possible societal impact of technology in the future and reflect on the importance of technology in the past										
9. create media-rich presentations for other students on the appropriate and ethical use of digital tools and resources										
10. discuss the long term ramifications (digital footprint) of participating in questionable online activities (e.g., posting photos of risqué poses or underage drinking, making threats to others)										
11. describe the potential risks and dangers associated with online communications										
6_8.TC. Technology Operations and Concepts - By the end of Grade 8 each student will:							**6**	**7**	**8**
1. identify file formats for a variety of applications (e.g., doc, xls, pdf, txt, jpg, mp3)										
2. use a variety of technology tools (e.g., dictionary, thesaurus, grammar-checker, calculator) to maximize the accuracy of technology-produced materials										
3. perform queries on existing databases										
4. know how to create and use various functions available in a database (e.g., filtering, sorting, charts)										
5. identify a variety of information storage devices (e.g., CDs, DVDs, flash drives, SD cards) and provide rationales for using a certain device for a specific purpose										
6. use accurate technology terminology										
7. use technology to identify and explore various occupations or careers, especially those related to science, technology, engineering, and mathematics										

8. discuss possible uses of technology to support personal pursuits and lifelong learning									
9. understand and discuss how assistive technologies can benefit all individuals									
10. discuss security issues related to e-commerce									

Michigan Educational Technology Standards (METS) 2009 - 9th to 12th Checklist					
O = Teacher Observation	**P = Portfolio Evidence**	**A = Formal Assessment**	**C = Technology Literacy Class**		
Grades Nine through Twelve – Technology Standards and Expectations – (prior to the completion of grade 12)					
9_12.CI. Creativity and Innovation – By the end of Grade 12 each student will:			**9**	**10**	**11**	**12**	
1. apply advanced software features (e.g. built-in thesaurus, templates, styles) to redesign the appearance of word processing documents, spreadsheets, and presentations			A	A	A	A	
2. create a web page (e.g., Dreamweaver, iGoogle, Kompozer)				A	A	A	
3. use a variety of media and formats to design, develop, publish, and present projects (e.g., newsletters, web sites, presentations, photo galleries)			A	A	A	A	
9_12.CC. Communication and Collaboration - By the end of Grade 12 each student will:			**9**	**10**	**11**	**12**	
1. identify various collaboration technologies and describe their use (e.g., desktop conferencing, listserv, blog, wiki)			A	A	A	A	
2. use available technologies (e.g., desktop conferencing, e-mail, videoconferencing, instant messaging) to communicate with others on a class assignment or project			O	O	O	O	
3. collaborate in content-related projects that integrate a variety of media (e.g., print, audio, video,			A	A	A	A	

	graphic, simulations, and models)					
4.	plan and implement a collaborative project using telecommunications tools (e.g., ePals, discussion boards, online groups, groupware, interactive web sites, videoconferencing)	A	A	A	A	
5.	describe the potential risks and dangers associated with online communications	O				
6.	use technology tools for managing and communicating personal information (e.g., finances, contact information, schedules, purchases, correspondence)	O	O	O	O	
9_12.RI. Research and Information Fluency – By the end of Grade 12 each student will:		**9**	**10**	**11**	**12**	
1.	develop a plan to gather information using various research strategies (e.g., interviews, questionnaires, experiments, online surveys)	A	A	A	A	
2.	identify, evaluate, and select appropriate online sources to answer content related questions	A	A	A	A	
3.	demonstrate the ability to use library and online databases for accessing information (e. g. MEL, Proquest, Infosource, United Streaming)	A	A	A	A	
4.	distinguish between fact, opinion, point of view, and inference	A	A	A	A	
5.	evaluate information found in selected online sources on the basis of accuracy and validity	A	A	A	A	
6.	evaluate resources for stereotyping, prejudice, and misrepresentation	A	A	A	A	
7.	understand that using information from a single internet source might result in the reporting of erroneous facts and that multiple sources must always be researched	A	A	A	A	
8.	research examples of inappropriate use of technologies and participate in related classroom activities (e.g., debates, reports, mock trials, presentations)	O	O	O	O	
9_12.CT. Critical Thinking, Problem Solving, and Decision Making - By the end of Grade 12 each student		**9**	**10**	**11**	**12**	

will:					
1. use digital resources (e.g., educational software, simulations, models) for problem solving and independent learning	O	O	O	O	
2. analyze the capabilities and limitations of digital resources and evaluate their potential to address personal, social, lifelong learning, and career needs	A	A	A	A	
3. devise a research question or hypothesis using information and communication technology resources, analyze the findings to make a decision based on the findings, and report the results	A	A	A	A	
9_12.DC. Digital Citizenship – By the end of Grade 12 each student will:	**9**	**10**	**11**	**12**	
4. identify legal and ethical issues related to the use of information and communication technologies (e.g., properly selecting, acquiring, and citing resources)	A	A	A	A	
5. discuss possible long-range effects of unethical uses of technology (e.g., virus spreading, file pirating, hacking) on cultures and society	O	O	O	O	
6. discuss and demonstrate proper netiquette in online communications	O	O	O	O	
7. identify ways that individuals can protect their technology systems from unethical or unscrupulous users	O	O	O	O	
8. create appropriate citations for resources when presenting research findings	A	A	A	A	
9. discuss and adhere to fair use policies and copyright guidelines	A	A	A	A	
9_12.TC. Technology Operations and Concepts - By the end of Grade 12 each student will:	**9**	**10**	**11**	**12**	
1. complete at least one online credit, or non-credit, course or online learning experience	A	A	A	A	
2. use an online tutorial and discuss the benefits and disadvantages of this method of learning	A	A	A	A	

3.	explore career opportunities, especially those related to science, technology, engineering, and mathematics and identify their related technology skill requirements	A				
4.	describe uses of various existing or emerging technology resources (e.g., podcasting, webcasting, videoconferencing, online file sharing, global positioning software)		A	A	A	
5.	identify an example of an assistive technology and describe its purpose and use		A	A	A	
6.	participate in a virtual environment as a strategy to build 21st century learning skills	A	A	A	A	
7.	assess and solve hardware and software problems by using online help or other user documentation	O	O	O	O	
8.	explain the differences between freeware, shareware, open source, and commercial software					
9.	participate in experiences associated with technology-related careers	O				
10.	identify common graphic, audio, and video file formats (e.g., jpeg, gif, bmp, mpeg, wav, wmv, mp3, flv, avi, pdf)	O	O	O	O	
11.	understand and discuss how assistive technologies can benefit all individuals		O	O	O	
12.	demonstrate how to import/export text, graphics, or audio files	A	A	A	A	
13.	proofread and edit a document using an application’s spelling and grammar checking functions	A	A	A	A	

I. Curriculum

C. Technology Delivery

St. Louis Public Schools routinely seeks out innovative technology based delivery systems with which to provide a broader range of learning opportunities for students. Our teachers have access to Moodle, our online class management system, allowing them to create online experiences that support the classes that they teach. Online web tools and video allow for posting of multimedia content to support instruction, and providing for a wide range of opportunities to reach students with a variety of learning styles. This year we will be implementing a new online student management system that allows staff, student and parent access into a uniform interface, oriented at communication with parents and increasing student achievement. In addition, our school will be implementing a Google based education system to house our email, calendaring and collaboration tools used with both students and staff. Computers will continually be upgraded and new software packages implemented to prepare students for the future. We have just implemented MS Office 2010 in our High School. Students have access to online courses as a way to foster independent learning styles and offer students a variety of options. Some teachers utilize document cameras in the classroom to help students visualize instruction. In addition, teachers provide virtual field trips, United Streaming and video conferencing allowing students to collaborate and learn from others across the country.

I. Curriculum

D. Parental Communications and Community Relations

St Louis Public Schools is in the process of upgrading to the PowerSchool Student Information System. This system will allow teachers to communicate much more effectively with parents and students valuable information relating to student progress, attendance, grades, homework, tests, upcoming events and much more. We continue to support and maintain our district website including our school calendars, menus, contact information, teacher pages, and other building information. Our website is located at http://stlouisschools.net/. Our Technology Committee will be instrumental in facilitating and communicating our technology vision and goals to each of our schools. Parents and community members have the ability to provide input to all aspects of our school district processes by completing online surveys and participating on the technology committee. A representative district technology committee comprised of teachers, administrators, students, parents, and community members meets monthly to discuss technology issues. This data is instrumental in helping administration make informed decisions. Teachers utilize email to communicate with

staff, parents, and students. The school has setup a voicemail system for staff to utilize in assisting with parent communications as well.

This year a group of parent and community volunteers including business leaders developed a Technology Foundation to support technology integration and future technology purchases for teachers. In addition, they are providing training and support materials as well.

I. Curriculum

E. Collaboration

We have a credit recovery program in the high school that provides services to students who need additional credits for graduation through an online learning management program in multiple disciplines. The program utilized currently is NovaNet.

Middle Michigan Network for Educational Telecommunications (MMNET) - The mission of MMNET is to provide cost effective implementation of and support for member technology objectives.

Our network is connected to MMNET's network with T3 connections to the Internet. MMNET provides Internet account management, e-mail, and web hosting along with computer support for our district.

Gratiot Isabella Regional Educational Service District, educational authority for nine school districts in the county, provides such services as special education, grants, career technical services, instructional support and professional development.

Regional Educational Media Center (REMC) – promotes equity and supports student achievement and quality teaching through leadership, collaboration, future thinking, and visionary use of technology. The Save Bid Project provides excellent pricing for school equipment, computers, software, and other technology.

Michigan Virtual High School - MVHS is an online resource that enables Michigan high schools to provide courses (all taught by certified teachers) and other learning tools that students wouldn't otherwise have access to. Through MVHS, Michigan high school, students can prepare for high-stakes tests like MEAP and AP* Exams, take a variety of courses and learn any place there is a computer and an Internet connection.

Evaluation

Each year there will be an evaluation of the progress that the district has made in implementing its technology plan. This evaluation will include online surveys, classroom observations, and focus group meetings. The data gathered from these efforts will be reviewed by the technology committee. The committee will then decide what steps need to be taken to increase technology awareness among staff and students. The rubrics obtained from Sun Associates will be used to help interpret the data collected. Revision of the rubrics when necessary will also be done by the technology committee. A part of this evaluation is discussed by the St. Louis Board of Education. They evaluate the previous year's goals and help set goals for the next year.

Parental Involvement

We are presently converting to Power School as a form of on-line parent and student communication. Power School allows students and parents to check their grades, missing assignments, attendance, lesson plans, and teacher notes on-line.

Teachers are using Blackboard and Moodle to allow students and parents to access class assignments, grading policies, and to have direct communication with the teacher.

We have a school webpage devoted to up- to- the- minute school information. Parents can check sports scores, faculty e-mail, educational links, and even the lunch menu. Teachers also have individual web pages they update with class information.

The technology committee is working on a technology pamphlet. The pamphlet will describe technology available to students and parents as well as future goals for technology use.

Coordination of Resources

St. Louis Public Schools has invested approximately $2,500 per teacher in technology over the last three years. St. Louis Public Schools continues to provide nearly $170,000 per year from general funds to develop and maintain educational technology. USF, TLCF, and TTI funding have also been instrumental in advancing the application and integration of technology within our district's curriculum.

As technology options continue to expand and become affordable St. Louis Public Schools will examine options that will move us from classroom based (shared) technology to student based (individual) technology. The Technology Committee will watch

developments such as: e-books, palm technology, virtual classrooms. These trends will be used to determine when it is practical, cost effective and educationally advantageous to make such changes.

St. Louis Public Schools continues to work with the Gratiot-Isabella RESD to establish and create partnerships that will enable the sharing of expertise with other districts.

St. Louis Public Schools and its community are committed to providing the best possible technology resources for its staff and students.

Professional Development

The new workplace is incompatible with instruction that assumes the teacher is the information giver and the student a passive recipient. St. Louis Public Schools encourages all students to become actively engaged learners who take ownership of their education. Our intentions are to have them collaborate locally in classroom learning and then globally using Internet technologies. These outcomes require a teaching staff that is proficient and capable with technology. On-going, intensive, and pervasive professional development is the key to modern teaching strategies.

St. Louis Public Schools staff is committed to developing a broad foundation of technical literacy that is focused on its curricular needs and objectives. One method of achieving these curricular needs is perpetuated by providing more advanced users with opportunities to learn necessary competencies from experts which are then shared with peers. The process of sharing technology skills reinforces both user comfort levels and the application of newly acquired functionality. As early adopters share their expertise with their peers they become experts themselves and as they collaborate with colleagues both fears and obstacles are overcome as new possibilities are realized.

To determine our technology strengths and needs, all staff have participated in district educational technology skill self-assessments. Information received from district staff skill and technology assessments allow us to track our progress and develop and prioritize technology training. SLPS pursues multiple resources to enhance staff technology professional development including grants from both public and private organizations, state and federal government agencies, local business and professional organizations, colleges and universities and through collaboration with other local area schools.

Our tech literacy grant allowed our staff to work with a technology integration specialist who helped create a district-wide technology rubric. All staff will use this rubric to measure the effective use of technology in their instructional practices. This rubric will be aligned with the Michigan state standards and benchmarks, Michigan Educational Assessment Program requirements, and the district's School Improvement Plan.

The Administrative Professional Development sub-committee of the District Technology Committee meets every other month during the school year to evaluate current professional development opportunities for teachers and to make recommendations to the full committee about needed professional development.

St. Louis Public Schools Board of Education and Administrators also encourage and support staff participation in opportunities for staff in-service and technology training that is regularly offered through our Regional Education Service District programs or at regional and national Educational Technology conferences. Media center directors, lab assistants, district technical and teaching staff is focused on enhancing their knowledge of technology and on sharing it with our staff, students, and community.

Technical Support

To support technology implementation and integration St. Louis Public Schools has entered into an agreement with MMNET to district-wide technology support services. All district employees may call MMNET from 7:00 am to 4:00 pm to receive instant technical support. All calls will be resolved within forty-eight hours unless extenuating circumstances exist.
MMNET will adopt Site Based Building Liaisons who will perform the following functions:

-Meet weekly with district technology staff.
-Attend in-district technology professional development.
-Assist building users with login, connectivity, and printing concerns.
-Order necessary consumable items from building supply budgets.
-Run system diagnostics and troubleshoot building hardware.
-Process all building hardware/software requests and install approved curricular software.
-Assist users in finding and backing up their data.
-Assist building users in the configuration of their browser and email clients.

-Help users update their email address books and bookmarks.
-Administer EdZone accounts for building users.
-Help building users locate lesson plans and curricular information using Internet resources.
-Instruct building users in simple cleaning and preventative maintenance procedures.
-Extend district security efforts and communications to their buildings.
-Demonstrate new tech skills to building staff.
-Work with tech staff to update building webpage(s).
-Work through Power School and other district software concerns with building staff.
-Assist building staff with periodic assessments requested by our Board or Administrators.
-Maintain asset management information and track building technology budget.
-See that all building PCs are properly shut down at the end of each day.
-Assist building administrators with building press releases.

Online tutorials are periodically added to our district's technology web pages. St. Louis Public Schools additionally supports technology conference attendance by its teaching, administrative and support staff at such offerings as the Meads, MACUL, and Connected Classroom Conferences.

During the course of the school year, professional development is provided to staff through staff meetings, pull-out programs, and conferences. In August of each summer the district offers a twelve hour Summer Technology Academy opportunity for staff to improve their technology integration skills by providing the technical support for teachers to develop classroom projects of their choosing.
The St. Louis Public Schools CIPA policy is available on the District website at www.stlouisschools.net

Access to Technology

All district staff (teachers, administrators, support personnel) have high-speed internet access. All teachers and students have access to secure, individual folders on the school network server. We have created a district technology rubric that will provide not only an annual evaluation of technology skills and integration, but also a process for improvement. A process has been instituted for helping teachers integrate technology into their classroom instruction including in-district technology in-services throughout the school year as

well as a summer technology academy. The district technology committee recommends to MMNET hardware and software for innovative uses of technology in the curriculum. The district technology committee meets monthly during the school year to monitor technology use and integration, evaluate district technology policies, recommend professional development and curriculum adjustments, and have input into the technology budget.

The district is using Dragon Naturally Speaking software in the High School Business lab as well as at TSN Middle School to aid the deaf/hard of hearing in the art of language recognition software. By using the software the student learns to speak into a microphone while the program types the spoken word into a word processing program.

The district has increased access by installing Sorenson Video phones in three of the district school buildings (http://www.sorensonvrs.com). Staff have the ability to call each other over the 100mb network connection and communicate between the other deaf/hard of hearing classrooms as well as outside the classrooms to any IP based video camera (pc internet connected camera, static IP web camera, etc.).

Technology Budget
St. Louis Public Schools Technology Budget

	11-12	**12-13**	**13-14**
Professional Services	85,000	85,000	85,000
Internet	11,000	11,000	11,000
Repairs	3,000	4,000	5,000
Software & Supplies	31,500	32,000	32,500
Equipment	35,000	36,000	37,000
Membership Fees	15,000	15,000	15,000
Professional Development	35,000	35,500	36,000
Telephone Services	17,000	17,500	18,000
Web Services	3,500	3,500	3,500
Total	**236,000**	**239,500**	**243,000**

Phone Service

While local phone systems are typically over looked as a way of doing business, it is none the less a necessity for doing business within the schools. We currently have 28 lines available for outgoing calls and incoming calls. This includes both local and long distance service. We also have unlimited direct inward dialing. All 28 lines are connected to the PBX, while 8 others are used for faxes. Our phone service is digital, including voice mail, intraschool voice and fax. Cell phones are another way in which we conduct business. We currently have 4 cell phones used by the administration. We keep all phones under one cell phone provider for many reasons, one being continuity of service, sharing of minutes and free service between the users. We pick carriers for all phone service based on cost, coverage area, customer service, options of service plans and battery life/type of digital protocol of cell phones. We maintain an inventory listing of all of our land line phones and their locations as well as our cell phones and who the cell phones are assigned to.