

**St. Joseph Parish School
Trenton, Michigan**

St. Joseph



Trenton

**Technology Plan
June 2015 – June 2018
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***St. Joseph Parish School
2675 Third Street
Trenton, MI 48183***

***Plan Contact: Karen Johnson – Principal
Email: principal@stjosephschooltrenton.com
Phone 734.676.2565
Fax 734.676.9744***

Technology Plan can be found at:

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St. Joseph Parish Technology Committee

<i>St. Joseph Parish School Philosophy</i>	4
St. Joseph Parish School Mission Statement	4
Introduction	4
Technology Plan Background	5
Vision	5
Goals	5
Success Factors	6
<i>Curriculum Component</i>	7
<i>Defining Curriculum Standards</i>	8
NETS Technology Content Standards	9
Michigan Educational Technology Standards	12
METS Grades K-2	12
METS Grades 3-5	15
METS Grades 6-8	18
St. Joseph School Technology Goals	21
K-2 Technology Strategy	22
Overall Learning Objective	22
3-5 Technology Strategy	30
Overall Learning Objective	30
6-8 Technology Strategy	42
Overall Learning Objective	42
Integrated Curriculum	57
Technology in English/Language Arts	57
Technology in Mathematics	57
Technology in Social Studies	58
Technology in Music and Art	58
K-2 Technology Integration	60
K-2 Software Packages.....	61
3-5 Technology Integration	62
3-5 Software Packages.....	63
6-8 Technology Integration	64
6-8 Software Packages.....	65
<i>Parental Communication</i>	66
UAP/Letter	66
Open House	66
School Website	66
Edline/PowerSchool	66
Technology Plan	66
<i>Professional Development Component</i>	67
Staff Training	67
Consortium	Error! Bookmark not defined.
Professional Resources	68
Professional Development Timeline.....	69

<i>Technology Access</i>	70
<i>Student Access</i>	70
<i>Staff Access</i>	70
<i>Adult Education</i>	<i>Error! Bookmark not defined.</i>
<i>Infrastructure, Hardware, Technical Support and Software</i>	73
<i>Inventory Component</i>	73
<i>Budgeting/Funding Component</i>	74
<i>2015-2016 Technology Budget</i>	75
<i>2016-2017 Technology Budget</i>	76
<i>2017-2018 Technology Budget</i>	77
<i>Student Acceptable Use Policy</i>	78
<i>Technology Plan Monitoring and Evaluation</i>	80
<i>Measuring Technology Plan Effectiveness</i>	81
<i>Technology Plan Timeline</i>	<i>Error! Bookmark not defined.</i>
<i>Projected Curricula Integration Timeline</i>	<i>Error! Bookmark not defined.</i>
<i>References</i>	85



St. Joseph Parish School Philosophy

The primary purpose of the existence of St. Joseph Parish School is to help facilitate the parents in providing a Christian faith-community for their children. The school strives to maintain academic excellence in all areas while it upholds an atmosphere centered in the person of Christ and His teachings.

The administrator and faculty of St. Joseph Parish School believe that each child is a unique individual who learns most effectively through the integration of the intellectual, emotional, spiritual, social and physical aspects of development.

Through the combined efforts of the Church, the school and the home, each child will have the opportunity to be prepared for future challenges. This preparation will lead to personal success and fulfillment as a mature Christian, aware of basic principles and prepared to accept adult responsibility.

It is our conviction that true education focuses on the formation of the human person in pursuit of his ultimate purpose.

St. Joseph Parish School Mission Statement

Our mission is to implement our philosophy by:

- Promoting positive Christian attitudes and values that will enable the students to make ethical choices;
- Providing the student with a diversified curriculum that strives to enhance each child's innate potential;
- Developing a positive self-image in each student; and
- Instructing and motivating students to pursue peace and social justice in their community.

Introduction

St. Joseph Parish School offers Pre-K to 8 grade education to over 150 students. There are 14 staff members consisting of teaching, support and administrative positions. Trenton is a suburban community of 18,000 residents located within the Archdiocese of Detroit. The median income is \$53,076 with a minority population of just under 5%.

Tuition for St. Joseph school falls within the average rate for Catholic elementary schools within the Archdiocese. A tuition assistance program is available to qualifying families.

Technology Plan Background

This technology plan has been developed to ensure St. Joseph Parish School optimizes technology to enhance learning for each of our K-8 grade students. Each learning objective outlined in this plan is benchmarked against [Michigan Educational Technology Standards](#) (METS), [National Educational Technology Standards](#) (NETS), and the technology standards communicated by the Archdiocese of Detroit.

Vision

To continually enhance and maintain a school computer program that is current in technology and integrates into the daily curriculum. Use technology to enrich basic skill development, allow for the simulation of real-world concepts, provide the student a global learning environment, and expand problem resolution abilities.

Goals

The St. Joseph School Community defined goals that allows the school technology program to best service our students, teacher, and parish community in the following manner:

- Provide ease of use in classroom solutions in order to best assist teachers in implementing technology enhanced lessons in core subject areas.
- Provide a 1:1 student to multimedia computer ratio within the multimedia center for performing hands-on technology related activities and completing assignments.
- Define and maintain a computer curriculum that focuses on developing core technology skills in support of the Michigan Department of Education *Technology* the ISTE and the NETS.
- Define and maintain an integrated curriculum that enhances core curriculum topics and allows students to apply computer skills in a meaningful way.
- Define and maintain a curriculum that explores socio-ethical technological issues such as the impact of technology in our society, school, workplace and home life.
- Define and maintain a curriculum that allows students to express creativity through the use of various presentational tools, graphical packages, and multimedia devices.
- Provide technology that allows for a collaborative effort on projects within the classroom, school, community and virtual learning environment.
- Provide opportunities for students to evaluate data for accuracy and relevance, use technology to organize and present data, and apply technology to problem solving.

Staff Goals

- Teachers will continue to integrate current and emerging technology in the classroom to deliver and assess curriculum and instruction.
- Teachers will use technology for classroom management, i.e., grade reporting, attendance, updating web page.
- Teachers will continue to use technology to improve communication between colleagues, students and parents.

Success Factors

Realization of the following factors has been identified as being imperative to the successful implementation of the technology plan outlined in this document:

- Each staff member must participate in the assessment of their current technical skill set in order for the creation of an appropriate professional development plan.
- The administration must provide adequate time for staff members to spend in technical training and development. Adequate time definitions will vary due to the specific development needs of each staff member.
- The administration must provide adequate time for teachers to explore ideas for integrating technology into their lesson plans through peer to peer professional development.
- A budget must be designated for adequate technology funding. This will allow for license renewal, software purchases, equipment upgrades, and supplies, and ensure continuity of resources.
- The School Committee must annually review the technology plan for currency and relevance. Software and hardware upgrades should be outlined and executed routinely on a 3-5 year basis.

Curriculum Component



Michigan Curriculum Framework as Defined by the Michigan Department of Education

Defining Curriculum Standards

The *Michigan Curriculum Framework*, was developed by the Michigan Department of Education to serve as a model for public and private schools developing core content curriculum. This continuously updated framework offers defined standards, benchmarks, and resources for curriculum planning, implementation, and professional development.

Authentic teaching, according to the Michigan Department of Education should be based upon four standards:

Higher-Order Thinking: Instruction involves students in manipulating information and ideas by synthesizing, generalizing, explaining or arriving at conclusions that produce new meaning and understandings for them.

Deep Knowledge: Instruction addresses central ideas of a topic or discipline with enough thoroughness to explore connections and relationships and to produce relatively complex understanding.

Substantive Conversation: Students engage in extended conversational exchanges with the teacher and/or peers about subject matter in a way that builds an improved and shared understanding of ideas and topics.

Connections to the World Beyond the Classroom: Students make connections between substantive knowledge and either public problems or personal experiences.

The *St. Joseph Parish School Technology Plan* is developed from these standards and the ISTE National Educational Technology Standards (NETS) and Performance Indicators for Students. The learning objectives outlined in this technology plan will provide students at all grade levels learning opportunities that reinforce the use of technology as a tool for optimizing productivity, problem solving, communicating, understanding the impact of technology upon society, and enhancing the overall quality of education.

Aligning our school's technology objectives with state and national standards will ensure that we are providing our students with a current and competent technology program.

NETS Technology Content Standards

The *National Educational Technology Standards and Performance Indicators for Students (NETS)* details standards for the various core curriculum disciplines. The *St. Joseph School Technology Plan* was built using these standards as a foundation.

NETS for Students:

1. Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- a. apply existing knowledge to generate new ideas, products, or processes.
- b. create original works as a means of personal or group expression.
- c. use models and simulations to explore complex systems and issues.
- d. identify trends and forecast possibilities.

2. Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:

- a. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
- b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.
- c. develop cultural understanding and global awareness by engaging with learners of other cultures.
- d. contribute to project teams to produce original works or solve problems.

3. Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information. Students:

- a. plan strategies to guide inquiry.
- b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- d. process data and report results.

4. Critical Thinking, Problem Solving, and Decision Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. Students:

- a. identify and define authentic problems and significant questions for investigation.
- b. plan and manage activities to develop a solution or complete a project.
- c. collect and analyze data to identify solutions and/or make informed decisions.
- d. use multiple processes and diverse perspectives to explore alternative solutions.

5. Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- a. advocate and practice safe, legal, and responsible use of information and technology.
- b. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- c. demonstrate personal responsibility for lifelong learning.
- d. exhibit leadership for digital citizenship.

6. Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations.

Students:

- a. understand and use technology systems.
- b. select and use applications effectively and productively.
- c. troubleshoot systems and applications.
- d. transfer current knowledge to learning of new technologies.

NETS for Teachers:

Teachers utilize effective tools so they are able to engage their students, improve learning environments and their own professional practice as well as provide a positive model for St. Joseph School Community. Teachers should be able to effectively and productively follow and achieve the following five Performance Indicators. The Five Performance Indicators are as follows:

1. **Facilitate and Inspire Student Learning and Creativity:** Teachers model, support, promote and use their knowledge to provide and facilitate productive technological experiences that advance student learning, creativity, and innovation both face-to-face and virtually. They also promote student reflection and collaborative construction environments.
2. **Design and Develop Digital-Age Learning Experiences and Assessment:** Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context. They do this by adapting relevant learning experiences to incorporate digital tools, they customize and personalize learning activities to address different learning styles and they provide students with varied and multiple formative and summative assessments.
3. **Model Digital-Age Work and Learning:** Teachers model, communicate and collaborate with their students, colleagues and school community using current technologies and digital-age media to share and transfer knowledge. They do this by exhibiting their own knowledge, skills, and work processes representative of an innovative professional to a global and digital society.
4. **Promote and Model Digital Citizenship and Responsibility:** Teachers model and advocate safe teaching and understand the societal global issues of media literacy in an evolving digital world. They address diverse needs of the students, promote digital etiquette, and they exhibit legal and ethical responsibility and respect.

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5. **Engage in Professional Growth and Leadership:** Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources. They do this by reflective practices, participation in local and global learning opportunities, and exhibiting leadership within the technology infusion and incorporation process.

Michigan Educational Technology Standards

The Michigan Educational Technology Standards (METS) provide grade level expectations that are used in the St. Joseph School technology curriculum to develop, evaluate, and enhance lesson activities.

METS Grades K-2

BASIC OPERATIONS AND CONCEPTS

By the end of Grade 2 each student will:

1. understand that people use many types of technologies in their daily lives (e.g., computers, cameras, audio/video players, phones, televisions)
2. identify common uses of technology found in daily life
3. recognize, name, and will be able to label the major hardware components in a computer system (e.g., computer, monitor, keyboard, mouse, and printer)
4. identify the functions of the major hardware components in a computer system
5. discuss the basic care of computer hardware and various media types (e.g. CDs, DVDs, flash drives)
6. use various age-appropriate technologies for gathering information (e.g., dictionaries, encyclopedias, laptops, phones, web resources)
7. use a variety of age-appropriate technologies for sharing information (e.g., drawing a picture, writing a story)
8. recognize the functions of basic file menu commands (e.g., new, open, close, save, print)
9. proofread and edit their writing using appropriate resources including dictionaries and a class developed checklist both individually and as a group

SOCIAL, ETHICAL, AND HUMAN ISSUES

By the end of Grade 2 each student will:

1. identify common uses of information and communication technologies
2. discuss advantages and disadvantages of using technology
3. recognize that using a password helps protect the privacy of information
4. discuss scenarios describing acceptable and unacceptable uses of age-appropriate technology (e.g., computers, phones, 911, Internet, email) at home or at school
5. discuss the consequences of irresponsible uses of technology resources at home or at school
6. understand that technology is a tool to help complete a task

7. understand that technology is a source of information, learning, and entertainment
- 8 . identify places in the community where one can access technology

TECHNOLOGY PRODUCTIVITY TOOLS

By the end of Grade 2 each student will:

1. know how to use a variety of productivity software (e.g., word processors, drawing tools, presentation software) to convey ideas and illustrate concepts
- 2 . be able to recognize the best type of productivity software to use for certain age-appropriate tasks (e.g., word processing, drawing, web browsing)
3. be aware of how to work with others when using technology tools (e.g., word processors, drawing tools, presentation software) to convey ideas or illustrate simple concepts relating to a specified project

TECHNOLOGY COMMUNICATIONS TOOLS

By the end of Grade 2 each student will:

1. identify procedures for safely using basic telecommunication tools (e.g., e-mail, phones) with assistance from teachers, parents, or student partners
2. know how to use age-appropriate media (e.g., presentation software, newsletters, word processors) to communicate ideas to classmates, families, and others
3. know how to select media formats (e.g., text, graphics, photos, video), with assistance from teachers, parents, or student partners, to communicate and share ideas with classmates, families, and others

TECHNOLOGY RESEARCH TOOLS

By the end of Grade 2 each student will:

1. know how to recognize the web browser and associate it with accessing resources on the Internet
2. use a variety of technology resources (e.g., CD-ROMs, DVDs, search engines, websites) to locate or collect information relating to a specific curricular topic with assistance from teachers, parents, or student partners
3. interpret simple information from existing age-appropriate electronic databases (e.g., dictionaries, encyclopedias, spreadsheets) with assistance from teachers, parents, or student partners
4. provide a rationale for choosing one type of technology over another for completing a specific task

TECHNOLOGY PROBLEM-SOLVING AND DECISION-MAKING TOOLS

By the end of Grade 2 each student will:

1. discuss how to use technology resources (e.g., dictionaries, encyclopedias, search engines, websites) to solve age-appropriate problems
- 2 . identify ways that technology has been used to address real-world problems (personal or community)

METS Grades 3-5

BASIC OPERATIONS AND CONCEPTS

By the end of Grade 5 each student will:

1. discuss ways technology has changed life at school and at home
2. discuss ways technology has changed business and government over the years
3. recognize and discuss the need for security applications (e.g., virus detection, spam defense, popup blockers, firewalls) to help protect information and to keep the system functioning properly
4. know how to use basic input/output devices and other peripherals (e.g., scanners, digital cameras, video projectors)
5. know proper keyboarding positions and touch-typing techniques
6. manage and maintain files on a hard drive or the network
7. demonstrate proper care in the use of hardware, software, peripherals, and storage media
8. know how to exchange files with other students using technology (e.g., e-mail attachments, network file sharing, flash drives)
9. identify which types of software can be used most effectively for different types of data, for different information needs, or for conveying results to different audiences
10. identify search strategies for locating needed information on the Internet
11. proofread and edit writing using appropriate resources (e.g., dictionary, spell check, grammar check, grammar references, writing references) and grade level appropriate checklists both individually and in groups

SOCIAL, ETHICAL, AND HUMAN ISSUES

By the end of Grade 5 each student will:

1. identify cultural and societal issues relating to technology
2. discuss how information and communication technology supports collaboration, productivity, and lifelong learning
3. discuss how various assistive technologies can benefit individuals with disabilities
4. discuss the accuracy, relevance, appropriateness, and bias of electronic information sources
5. discuss scenarios describing acceptable and unacceptable uses of technology (e.g., computers, digital cameras, cell phones, IPADS, wireless connectivity) and describe consequences of inappropriate use
6. discuss basic issues regarding appropriate and inappropriate uses of technology (e.g., copyright, privacy, file sharing, spam, viruses, plagiarism) and related laws

7. use age-appropriate citing of sources for electronic reports
8. identify appropriate kinds of information that should be shared in public forums ie: Facebook
9. identify safety precautions that should be taken while on-line
10. explore various technology resources that could assist in pursuing personal goals
11. identify technology resources and describe how those resources improve the ability to communicate, increase productivity, or help achieve personal goals

TECHNOLOGY PRODUCTIVITY TOOLS

By the end of Grade 5 each student will:

1. know how to use menu options in applications to print, format, add multimedia features; open, save, manage files; and use various grammar tools (e.g., dictionary, thesaurus, spell-checker)
2. know how to insert various objects (e.g., photos, graphics, sound, video) into word processing documents, presentations, or web documents
3. use a variety of technology tools and applications to promote creativity
4. understand that existing (and future) technologies are the result of human creativity
5. collaborate with classmates using a variety of technology tools to plan, organize, and create a group project

TECHNOLOGY COMMUNICATIONS TOOLS

By the end of Grade 5 each student will:

1. use basic telecommunication tools (e.g., e-mail, WebQuests, blogs, chat, web conferencing) for collaborative projects with other students
2. 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
3. identify how different forms of media and formats may be used to share similar information, depending on the intended audience (e.g., presentations for classmates, newsletters for parents)

TECHNOLOGY RESEARCH TOOLS

By the end of Grade 5 each student will:

1. use Web search engines and built-in search functions of other various resources to locate information
2. describe basic guidelines for determining the validity of information accessed from various sources (e.g., website, dictionary, on-line newspaper)
3. know how to independently use existing databases (e.g., library catalogs, electronic dictionaries, encyclopedias) to locate, sort, and interpret information on an assigned topic

4. perform simple queries on existing databases and report results on an assigned topic
5. identify appropriate technology tools and resources by evaluating the accuracy, appropriateness, and bias of the resource
6. compare and contrast the functions and capabilities of the word processor, database, and spreadsheet for gathering data, processing data, performing calculations, and reporting results

TECHNOLOGY PROBLEM-SOLVING AND DECISION-MAKING TOOLS

By the end of Grade 5 each student will:

1. use technology resources to access information that can assist in making informed decisions about everyday matters (e.g., which movie to see, which product to purchase)
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 real-life problems (personal or community)

METS Grades 6-8

BASIC OPERATIONS AND CONCEPTS:

By the end of Grade 8 each student will:

1. use proper keyboarding posture, finger positions, and touch-typing techniques to improve accuracy, speed, and general efficiency in operating a computer
2. use appropriate technology terminology
3. use a variety of technology tools (e.g., dictionary, thesaurus, grammar-checker, calculator) to maximize the accuracy of technology-produced products
4. understand that new technology tools can be developed to do what could not be done without the use of technology
5. describe strategies for identifying and preventing routine hardware and software problems that may occur during everyday technology use
6. identify changes in hardware and software systems over time and discuss how these changes affected various groups (e.g., individual users, education, government, and businesses)
7. discuss common hardware and software difficulties and identify strategies for trouble-shooting and problem solving
8. identify characteristics that suggest that the computer system hardware or software might need to be upgraded
9. identify a variety of information storage devices (e.g., CDs, DVDs, flash drives) and provide a rationale for using a certain device for a specific purpose
10. identify technology resources that assist with various consumer-related activities (e.g., budgets, purchases, banking transactions, product descriptions)
11. identify appropriate file formats for a variety of applications
12. use basic utility programs or built-in application functions to convert file formats
13. proofread and edit writing using appropriate resources (e.g., dictionary, spell check, grammar check, grammar references, writing references) and grade level appropriate checklists both individually and in groups

SOCIAL, ETHICAL, AND HUMAN ISSUES

By the end of Grade 8 each student will:

1. understand the potential risks and dangers associated with on-line communications
2. identify security issues related to e-commerce

3. discuss issues related to acceptable and responsible use of technology (e.g., privacy, security, copyright, plagiarism, spam, viruses, file-sharing)
4. describe possible consequences and costs related to unethical use of information and communication technologies
5. discuss the societal impact of technology in the future
6. provide accurate citations when referencing information from outside sources in electronic reports
7. use technology to identify and explore various occupations or careers
8. discuss possible uses of technology (present and future) to support personal pursuits and lifelong learning
9. identify uses of technology to support communication with peers, family, or school personnel

TECHNOLOGY PRODUCTIVITY TOOLS

By the end of Grade 8 each student will:

1. apply common software features (e.g., thesaurus, formulas, charts, graphics, sounds) to enhance communication and to support creativity
2. use a variety of technology resources, including the Internet, to increase learning and productivity
3. explore basic applications that promote creativity (e.g., graphics, presentation, photo-editing, programming, video-editing)
4. use available utilities for editing pictures, images, or charts
5. use collaborative tools to design, develop, and enhance materials, publications, or presentations

TECHNOLOGY COMMUNICATIONS TOOLS

By the end of Grade 8 each student will:

1. use a variety of telecommunication tools (e.g., e-mail, discussion groups, chats, blogs, web conferences) or other online resources to collaborate interactively with peers, experts, and other audiences
2. create a project (e.g., presentation, web page, newsletter, information brochure) using a variety of media and formats (e.g., graphs, charts, audio, graphics, video) to present content information to an audience

TECHNOLOGY RESEARCH TOOLS

By the end of Grade 8 each student will:

1. use a variety of Web search engines to locate information
2. evaluate information from various online resources for accuracy, bias, appropriateness, and comprehensiveness
3. identify types of Internet sites based on their domain names (e.g., edu, com, org, gov, au)
4. know how to create and populate a database

5. perform queries on existing databases
6. know how to create and modify a simple database report
7. evaluate new technology tools and resources and determine the most appropriate tool to use for accomplishing a specific task

TECHNOLOGY PROBLEM-SOLVING AND DECISION-MAKING TOOLS

By the end of Grade 8 each student will:

1. use database or spreadsheet information to make predictions, develop strategies, and evaluate decisions to assist with solving a basic problem
2. describe the information and communication technology tools to use for collecting information from different sources, analyze findings, and draw conclusions for addressing real-world problems

St. Joseph School Technology Goals

The overall technology goals for each grade level are as follows:

Grades K-2:

- Gain familiarity with computers and software in general
- Understand the role computers play in their lives
- Recognize the need to acquire and organize data
- Learn to use technology in a self-directed manner
- Explore emerging technologies
- Identify and exhibit safe and appropriate online behavior



Grades 3-5:

- Explore the possibilities technology offers
- Understand the role computers play in society
- Learn how to acquire and organize data
- Learn to use technology in a self-directed manner
- Explore emerging technologies
- Identify and exhibit safe and appropriate online behavior

Grades 6-8:

- Use technology as a tool to produce
- Understand the role computers play in today's global community
- Acquire, evaluate, analyze and integrate information into an end-product
- Learn to use technology in a self-directed manner
- Explore emerging technologies
- Identify and exhibit safe and appropriate online behavior

In order to reach these goals, technology learning objectives have been defined for of the St. Joseph School students. Each objective aligns to a *Michigan Curriculum Framework Technology Content Standard Benchmark*. This plan details the age appropriate technical training objectives for the following areas:

- Internet/Telecommunications Usage
- Foundations
- General Application Knowledge
- Specific Application Knowledge
- Graphic/Multimedia
- Keyboarding
- Operating System Basics
- Research/Problem Solving
- Socio-Ethical Issues
- Database Concepts
- Programming
- Troubleshooting

The expected proficiency of each objective per grade level is specified. Software used in the instruction of specific skills is inventoried for each grade level. This plan also outlines identified learning segments at each grade level that are candidates for integrating technology into the core curriculum.



K-2 Technology Strategy

Overall Learning Objective

The focus of technical instruction for grades K-2 is to gain familiarity with and recognize the computer as a life-style tool. Students will understand the various uses of computers for work, communication, data acquisition, education and play. They will demonstrate proper care of the hardware/software, and practice basic techniques that will allow them to develop into proficient users as they enter the middle grades.

D= Develop	P= Practice
M= Mastery	I = Introduction
E= Exploration	R= Review

Skill: Foundations

Goal: Students in grades K-2 will establish familiarity with the computer and develop comfort and ease in exploring applications. They will demonstrate respect and care for the computer equipment. Students will explain the purposes and benefits of using a computer.

Learning Objective	Teaching Method	Grades		
		K	1	2
Define computer room usage rules	Discussion and usage	I	R	R
Define the computer as a tool used to improve teaching, learning and working	Discussion, demonstration and usage	I	D	D
Identify technologies present in the classroom and home	Discussion and demonstration	I	D	D
Describe the key advantages of computer technology	Discussion, demonstration and usage	I	D	D
Identify the components of a computer system	Discussion, activities and usage	I	D	D
Describe the function of various computer parts	Discussion and activities	I	D	D
Identify and define uses for various input/output devices	Activities, usage and exercises	I	D	D
Demonstrate proper care and use of computer	Discussion and usage	I	R	R
Define and use basic computer terms	Discussion and usage	I	D	D
Understand why a computer needs a program	Discussion, activities and usage	-	I	D
Explain basics of how a computer works	Discussion and demonstration	-	I	D
Understand the need to save a file	Discussion	I	D	M
Describe the purpose of storage devices	Discussion and demonstration	I	D	R
Determine the best storage device to use for the task at hand	Discussion and usage	-	I	P
Explain basics of how a hard drive works	Discussion and demonstration	-	I	R
Appropriately load and unload a CD/flash drive	Demonstration and usage	-	I	M

Continued on next page

Learning Objective (Foundations continued)	Teaching Method	Grades		
		K	1	2
Explain difference between an audio CD and a flash drive	Discussion and usage	-	I	M
Understand varying size capacity of CD, hard drive	Discussion and usage	-	-	I
Turn on and shut down a computer system	Exercises	-	I	R
Differentiate between hardware and software	Discussion and usage	I	R	M

D= Develop	P= Practice
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Skill: Keyboarding

Goal: For grades K-2 focus will be on introducing basic keyboarding skills. The student will increase motor skills as recognition of letters and numbers strengthens. Differentiation of the right from the left side of the keyboard will be developed. Mastery of the mouse will be developed through drills, activities and tasks. Keyboarding efforts spent during these years will be realized as the student enters later elementary level (3-5).

Learning Objective	Teaching Method	Grades		
		K	1	2
Understand that the keyboard is used for data input	Discussion and usage	I	M	M
Demonstrate proper care of the keyboard	Demonstration and usage	I	R	R
Effectively use mouse (point, click, select, drag, highlight)	Activities and exercises	I	P	P
Use the scroll bar to move up and down a page	Activities and exercises	I	P	P
Locate letters and numbers on the keyboard	Activities and exercises	I	P	P
Locate Return, Delete, Spacebar, Backspace keys	Exercises	-	I	P
Appropriately use Caps Lock and Shift key	Exercises	-	I	P
Locate punctuation and cursor navigation keys	Exercises	-	I	P
Locate special symbol keys	Exercises	-	-	I
Define and demonstrate use of insertion point and cursor	Exercises	I	P	M
Differentiate between right and left side of keyboard	Exercises	-	I	P
Practice proper finger placement on the home row	Activities and exercises	-	I	P
Demonstrate proper posture at the keyboard	Demonstration and usage	-	I	P
Correctly type name using informal skills	Exercises	I	P	M
Type words using informal typing skills	Exercises and class projects	-	I	M
Separate words using spacebar	Exercises and class projects	-	I	P
Type phrases using informal typing skills	Exercises and class projects	-	I	M
Type sentences using informal typing skills	Exercises and class projects	-	I	P
Type paragraphs using informal typing skills	Exercises and class projects	-	-	I

D= Develop	P= Practice
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Skill: General Application Knowledge

Goal: For grades K-2 focus will be on understanding that users select appropriate software packages to complete a task at hand. Students will effectively launch, navigate, execute, and exit software applications.

Learning Objective	Teaching Method	Grades		
		K	1	2
Launch and exit a software application	Exercises and usage	I	M	M
Access network files	Exercises and usage	-	-	I
Access network software	Exercises and usage	-	I	P
Save a file using appropriate name	Exercises and usage	-	I	M
Navigate application menus	Exercises and usage	I	P	P
Print a file	Exercises and usage	I	M	M
Navigate application menus	Activities and exercises	-	I	P
Utilize application toolbars	Activities and exercises	I	P	M
Use Undo feature	Exercises and usage	I	P	M
Use Cut/Copy/Paste feature	Exercises and usage	-	I	P
Minimize and maximize a window	Exercises and usage	-	I	P
Select appropriate software for task at hand	Discussion and usage	-	I	P
Resize Windows	Exercises and usage	-	I	P
Locate Title Bar, Menu Bar and Tool Bar on a Window	Exercises and usage	-	I	P

Skill: General Operating System

Goal: For grades K-2 focus will be on understanding fundamental purpose for data organization. Students will be able to open icons stored on the desktop in order to access documents, programs, and hyperlinks.

Learning Objective	Teaching Method	Grades		
		K	1	2
Identify desktop area and it's purpose	Exercises and usage	-	I	R
Identify desktop icons and their representation of software applications, files, and folders	Exercises and usage	I	R	M
Understand basic concept of data storage	Discussion and usage	I	D	D
Explain the purpose of a file	Discussion and usage	-	I	D
Recognize desktop folders and explain their purpose for data organization	Discussion and usage	-	I	D
Log on and off of a network server	Exercises and usage	-	I	P

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Skill: Word Processing

Goal: Grade K-2 students will create, retrieve, edit, and save word processing documents. Students will use word processing for authentic tasks, and as a means of self-expression. Activities will be done using word processing software. Exercises will be used to reinforce keyboarding and basic computer skills.

Learning Objective	Teaching Method	Grades		
		K	1	2
Navigate menus	Exercises and usage	-	I	P
Identify and utilize toolbars	Exercises and usage	I	P	P
Insert and delete text	Exercises and usage	I	P	P
Format text for font type, size, color, and alignment	Exercises and class projects	I	P	P
Understand WYSIWYG/Print Preview	Exercises	-	I	P
Use spell-checker	Exercises	-	I	P
Use word processing as a means of self-expression and communication	Exercises and class projects	I	D	D
Open an existing document	Exercises and usage	-	I	P
Use Save option to save documents	Exercises and usage	I	P	P
Use Save As option to save documents	Exercises and usage	-	I	P
Use word processing to enter word segments	Exercises and class projects	-	I	P
Use word processing to enter phrases	Exercises and class projects	-	I	P
Use word processing to enter sentences	Exercises and class projects	-	I	P

Skill: Troubleshooting

Goal: For grades K-2 emphasis will be on identifying that a problem is occurring, articulate the symptoms, and appropriately seek assistance. Problems will be talked through in order to develop awareness of troubleshooting and resolution steps.

Learning Objective	Teaching Method	Grades		
		K	1	2
Request assistance when problems occur	Discussion and usage	I	R	R
Demonstrate proper care of lab equipment	Discussion and usage	I	D	D
Respond to messages displayed on the monitor	Discussion and usage	I	D	D

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Skill: Socio-Ethical Issues

Goal: Students in grades K-2 will discuss and develop ethical computer usage behavior. Students will be taught to respect the work and property of others. The impact of technology on society, both today and in the future, will be introduced.

Learning Objective	Teaching Method	Grades		
		K	1	2
Cite and adhere to Internet safety rules	Discussion and usage	-	I	D
Work in teams with peers on technology projects	Exercises and class projects	I	D	D
Explore emerging technologies	Discussion and presentation	-	I	E
Recognize how computers are used in the home, business, industry, and in education	Discussion and presentation	-	I	E
Demonstrate respect for work of others	Discussion and usage	I	D	D
Describe what the impact on today's society would be without computer technology	Discussion and presentation	-	I	E
Describe appropriate and inappropriate uses of technology	Discussion and presentation	I	D	D
Identify personal information that should not be shared online	Exercises and class projects	I	D	D
Know how to inform a trusted adult when experiencing discomfort with an online situation	Discussion and presentation	I	R	R

Skill: Internet/Telecommunications Usage

Goal: Students in grades K-2 will be introduced to the Internet and explore it as a tool for communication, research, information, and entertainment.

Learning Objective	Teaching Method	Grades		
		K	1	2
Discuss, understand and adhere to the Acceptable User Policy	Discussion	I	R	R
Display appropriate online behavior	Discussion and usage	-	I	D
Cite and adhere to Internet safety rules	Discussion and usage	I	R	R
Use basic Internet terminology	Discussion and usage	-	I	D
Define the Internet as a tool for communication, information, research, entertainment	Discussion, exercises and class projects	I	E	E
Use age appropriate online search engines to explore a topic	Exercises and class projects	-	I	P
Recognize a hyperlink	Exercises and usage	-	I	M
Activate a hyperlink	Exercises and usage	-	I	M
Execute a keyword search	Exercises and usage	-	I	P
Evaluate relevance of search results	Exercises and class projects	-	-	I
Navigate a browser interface	Exercises and activities	-	I	P
Recognize a home page and navigate to it	Exercises and activities	-	-	I

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Skill: Graphics/Multimedia

Goal: Students in grades K-2 will use graphics and multimedia for self-expression. Students will explore drawing tools and the basics of assembling a presentation. Authoring packages will also be used in activities to reinforce concepts taught in the core curriculum. Students' ability to create will be emphasized over using existing images.

Learning Objective	Teaching Method	Grades		
		K	1	2
Understand use of paint tools	Demonstration and activities	I	D	D
Use pencil, eraser, paint brush, spray can functions of a drawing package	Activities and class projects	I	D	D
Use shapes, line and text tools of a drawing package	Activities and class projects	I	D	D
Use paint tools as a means of expression	Activities and exercises	I	D	D
Use graphic tool to create an abstract design	Activities and class projects	I	D	D
Use graphic tool to create a representational picture	Activities and class projects	I	D	D
Identify an object by selecting the frame or using a lasso technique	Activities and exercises	I	P	P
Move objects on the screen to pre-defined order	Exercises	I	P	P
Delete an object	Exercises	I	P	M
Define multimedia as a combination of visuals and audio	Discussion, demonstration and authentic learning	-	I	R
Identify various types of multimedia	Demonstration and activities	I	E	E
Use multimedia instructional software	Class lessons	I	E	E
Insert images into documents	Activities and exercises	-	-	I
Use authoring software to incorporate multimedia in support of a class theme	Activities and class projects	I	D	D
Create a slide	Exercises and class project	-	I	M
Insert and format text into a slide	Activities and class projects	-	I	P
Run a slide show	Exercises	-	I	M
Create a multimedia product containing at least two variations of media	Activities and class project	-	I	D
Create a presentation to tell a story in linear sequence	Activities and class project	-	I	D
Capture an audio file	Activities and class projects	-	I	D

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Skill: Research/Problem Solving

Goal: Students in grades K-2 will learn to use technology for research and problem solving. Technology will be used to enhance and support core curriculum lesson plans for supplemental learning.

Learning Objective	Teaching Method	Grades		
		K	1	2
Create and execute a single word search	Exercises and class projects	-	I	P
Use an electronic database (dictionary or encyclopedia) to perform keyword searches	Exercises and class projects	-	I	D
Work in teams to create a multimedia presentation	Exercises and class projects	-	-	I
Use a variety of software supporting related lesson plan (reference, reading, math)	Activities and exercises	I	E	E
Develop an electronic portfolio	Exercises and class projects	-	I	D
Use technologies to gather, organize and display data	Exercises and class projects	-	I	D
Evaluate relevance of search results	Exercises and class projects	-	-	I



3-5 Technology Strategy

Overall Learning Objective

As the foundation provided in the earlier grades is further developed, the focus of technical instruction for grades 3-5 is to strengthen the student's use of technology as a productivity and research tool. Students will choose the appropriate software for problem resolution, use various technologies to reinforce and complete core content assignments, and develop their ability to acquire and analyze the relevance of data.

D= Develop	P= Practice
M= Mastery	I = Introduction
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Skill: Foundations

Goal: Students in grades 3-5 will acquire mastery of the base skills learned in earlier grades. Students will be introduced to more advanced technical concepts related to how computers access and process information.

Learning Objective	Teaching Method	Grades		
		3	4	5
Cite computer room usage rules	Discussion and usage	R	R	R
Describe a brief history of the evolution of computers	Discussion and activities	I	E	E
Describe the key advantages of computer technology	Discussion and usage	E	E	E
Describe the function of various system components	Discussion, usage and class projects	D	D	D
Identify the components of a networked computer system	Discussion, usage and class projects	I	D	D
Identify and define uses for various input/output devices	Discussion, usage and class projects	D	D	D
Demonstrate proper care and use of computer	Discussion and usage	R	R	R
Build on recognition and proper usage of computer terminology	Discussion and usage	D	D	D
Identify bits, bytes, kilobytes, megabytes, and gigabits terabits as ascending units of measure for transferring and storing electronic data	Discussion and usage	-	I	R
Understand varying size capacity of a flash drive, CD, hard drive. Explain the advantages and disadvantages of each.	Discussion and usage	D	M	M
Explain basics of how the computer uses internal memory, and how software requirements relate to memory capacity	Discussion and demonstration	-	-	I
Differentiate between data stored in the computer memory versus data being accessed via a storage medium, or the "cloud"	Discussion and demonstration	I	D	M

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Skill: Keyboarding

Goal: For grades 3-5 the curriculum will build on the keyboarding foundation presented during the K-2 years. Students will focus on proper finger placement and practice touch-typing skills. The importance of speed and accuracy will be discussed in order to provide relevance to exercises. The keyboarding goal is to achieve twice the speed of handwriting efficiency.

Learning Objective	Teaching Method	Grades		
		3	4	5
Demonstrate proper care of the keyboard	Discussion and usage	R	R	R
Effectively use mouse (point, click, select, double-click drag, drag and drop)	Activities and exercises	P	M	M
Practice proper finger placement on the home row	Activities and exercises	D	D	D
Practice proper finger placement on the QWERTY row	Activities and exercises	I	D	D
Practice proper finger placement on the bottom row	Activities and exercises	I	D	D
Identify and use special symbol keys	Activities and exercises	D	D	D
Demonstrate proper posture at the keyboard	Activities and exercises	P	P	P
Identify and use common special purpose keys	Activities and exercises	-	I	I
Develop touch typing skills	Activities and exercises	D	D	D
Develop speed and accuracy skills to 10 words per minute	Activities and exercises	-	D	M
Develop speed and accuracy skills to 15 words per minute	Activities and exercises	-	-	D
Use numeric keyboard	Activities and exercises	-	I	P
Articulate difference between insert and overstrike mode	Activities and exercises	I	P	P

Skill: General Application Knowledge

Goal: Students in grades 3-5 will explain the purpose of various software programs. They will choose the appropriate software to complete the task at hand. Students will recognize consistencies across applications and build on this knowledge to successfully navigate unfamiliar packages.

Learning Objective	Teaching Method	Grades		
		3	4	5
Navigate application menus	Exercises and usage	P	M	M
Identify and navigate sub-menus	Exercises and usage	I	D	M
Utilize application toolbars	Exercises and usage	P	M	M
Use Cut/Copy/Paste	Exercises and usage	P	P	P
Use short cut keys for common tasks	Exercises and usage	P	P	P
Select appropriate software for the task at hand	Discussion and class projects	E	E	E
Activate pop-up menus	Demonstration and usage	-	I	P
Access and use online help	Demonstration and usage	I	D	D

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Skill: Word Processing

Goal: Grade 3-5 students will use word processing as a productivity tool in support of core curriculum class assignments and projects. Various tools within the application will be explored and students will integrate creativity, problem solving and keyboarding skills to produce a quality product.

Learning Objective	Teaching Method	Grades		
		3	4	5
Locate and open an existing file	Exercises and usage	I	P	M
Locate appropriate menu option for task at hand	Exercises and usage	P	P	P
Locate appropriate tool option for task at hand	Exercises and usage	P	P	P
Format text for font type, size, color, and alignment	Exercises and usage	I	P	M
Use appropriate line spacing to achieve desired result	Exercises and class projects	I	P	P
Understand Print Preview	Exercises	P	M	M
Use proper spacing and punctuation for sentences	Exercises and class projects	I	P	M
Use proper spacing and indentation for paragraphs	Exercises and class projects	I	P	M
Understand text word wrap	Demonstration and exercises	I	M	M
Use the Undo and Redo command	Exercises and class projects	I	P	M
Use bullets and numbering tools	Exercises and usage	I	P	P
Insert a graphic into a document	Exercises and class projects	I	P	M
Use Find and Replace tools	Demonstration and exercises	I	P	P
Use Thesaurus as a productivity tool	Exercises and class projects	I	P	M
Use basic proofing tools to identify errors (spell check, grammar check)	Exercises and class projects	I	P	P
Use word processing as a means of self-expression and communication	Exercises and class projects	D	D	D
Insert page breaks and evaluate product pagination	Exercises and class projects	I	P	M
Edit an imbedded image for size, color, etc.	Exercises and class projects	I	P	P
Define and modify margin settings	Exercises and class projects	-	-	I
Navigate a large document	Exercises and class projects	-	I	P
Transcribe handwritten documents into word processing documents	Exercises and class projects	-	I	M

D= Develop	P= Practice
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Skill: General Operating System

Goal: Students in grades 3-5 will begin exploration of basic operating system concepts. They will learn to store, retrieve and organize data into relevant units. Various operating system utilities and tools will be introduced in order to demonstrate how a computer system is customized and ordered.

Learning Objective	Teaching Method	Grades		
		3	4	5
Access network files	Exercises and usage	P	M	M
Access network software	Exercises and usage	P	M	M
Understand concept of data storage and select appropriate storage means for task at hand	Discussion and usage	D	D	D
Understand the purpose of data organization structure	Discussion, usage and class projects	I	D	M
Organize data into logical structures for storage purposes	Discussion, usage and class projects	-	I	D
Identify and access various disc drives	Demonstration and exercises	I	P	M
View the contents of a disc drive	Demonstration and exercises	-	I	M
Create directory folders and explain their purpose for data organization	Demonstration, usage and class projects	-	I	P
Move items from one folder to another	Demonstration, usage and class projects	-	I	P
Delete a folder	Demonstration and usage	-	I	M
Expand and collapse a folder	Demonstration and usage	-	I	M
Identify, access and create sub-folders	Demonstration and usage	-	I	P
View file attributes	Demonstration and exercises	-	-	I
Copy and move a file from one disc to another	Demonstration and exercises	-	I	P
Copy and move multiple files from one medium to another	Demonstration and exercises	-	I	P
Rename an existing file	Demonstration and exercises	-	-	I
Explain Clipboard object, storage ability, and view contents	Demonstration and usage	I	P	P
Identify components of TaskBar	Demonstration and usage	-	I	M
Explain the purpose of a network	Discussion and usage	I	D	D
Explain purpose of a network server and a NAS	Discussion and usage	I	D	D
Route print jobs to specified printer device	Demonstration and usage	-	-	I
Log on to a network server and a NAS, know the difference	Demonstration and usage	P	M	M
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D= Develop	P= Practice
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Learning Objective (General Operating System continued)	Teaching Method	Grades		
		3	4	5
State differences between networked and non-networked computers	Discussion and usage	-	I	D
Navigate My Computer for various drive views	Demonstration and exercises	-	I	P
Access Control Panel and identify various utilities	Demonstration and exercises	-	I	P
Locate and navigate the Start menu. Define its purpose	Demonstration and exercises	-	I	P
Identify purpose and activate programs in the Accessories Menu (Calculator, Notepad, Character Map)	Demonstration and exercises	-	I	P
Use multiple applications simultaneously and navigate through them	Demonstration and exercises	I	P	P
Back-up a file	Demonstration and exercise	-	I	M
Use End Task function to exit a stalled program	Exercises	-	I	M

Skill: Troubleshooting

Goal: Students in grade 3-5 will learn to recognize system problems, articulate symptoms, discuss potential solutions, and assist in performing resolution steps.

Learning Objective	Teaching Method	Grades		
		3	4	5
Articulate source of error and problematic symptoms	Discussion and usage	I	D	D
Frequently save work	Discussion and usage	I	P	M
Identify probable error causes and potential solution	Discussion and usage	I	D	D
Perform a system "soft boot"	Exercise	P	M	M
Demonstrate proper care of lab equipment	Discussion and usage	D	M	M
Identify printer paper jam and assist with resolution	Discussion and usage	I	P	P
Load printer paper	Demonstration and usage	P	M	M
Respond to messages displayed on the monitor	Discussion and usage	D	D	D
Access and query online help to identify and correct system problems	Demonstration and usage	I	P	P
Understand the need to create back-ups	Discussion	I	D	M
Explain the purpose of performing virus-scans	Discussion	-	I	D
Perform a virus scan	Demonstration and exercises	-	I	P

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Skill: Socio-Ethical Issues

Goal: Students in grades 3-5 will continue to discover the impact of technology on our lives. Technology of the future will also be explored. Safety, security, ethical usage, and technology-based careers will be discussed.

Learning Objective	Teaching Method	Grades		
		3	4	5
Cite and adhere to Internet safety rules	Discussion and usage	D	P	P
Understand basic copyright violations, plagiarism, and the consequences of committing them	Discussion	I	D	D
Explore emerging technologies	Discussion and presentation	E	E	E
Recognize how computers are used in the home, business, industry, and in education	Discussion and presentation	E	E	E
Demonstrate respect for work of others	Discussion and usage	D	D	D
Produce collaborative effort with peers on technology project	Class projects	I	D	D
Explain purpose of anti-virus software and recognize need to practice safe computing	Discussion and usage	-	I	D
Compare and contrast the impact of technology in the home today and in the past	Discussion and class project	-	I	E
Compare and contrast the impact of messages from different technological sources	Discussion and class project	-	I	E
Compare and contrast the technological means for financial transfer	Discussion	-	I	E
Compare and contrast technological resources of two different communities	Discussion and class project	-	-	I
Identify job opportunities and the ways technology is related to these opportunities	Discussion and class projects	-	-	I
Forecast the possible effects technology could have on our society	Discussion	-	I	E
Properly cite electronic references	Exercises and class projects	-	I	P
Describe appropriate and inappropriate uses of technology	Discussion and presentation	D	D	D
Identify personal information that should not be shared online	Exercises and class projects	D	D	D
Know how to inform a trusted adult when experiencing discomfort with an online situation	Discussion and presentation	R	R	R

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Skill: Internet/Telecommunications Usage

Goal: Students in grades 3-5 will use the Internet as a tool for research, learning and collaborative projects. Students will learn to evaluate the relevance and appropriateness of information collected. The Internet offerings of video clips, virtual tours and interactive activities will be instrumental in supporting core curriculum integration

Learning Objective	Teaching Method	Grades		
		3	4	5
Discuss, understand and sign the Acceptable User Policy	Discussion	R	R	R
Identify purpose of a web-browser and cite various ISPs	Discussion	I	R	R
Save and copy an image from an online source	Demonstration, exercises and class projects	I	P	P
Display appropriate online behavior	Discussion and usage	D	D	D
Cite and adhere to Internet safety rules	Discussion and usage	P	P	P
Further develop recognition and proper use of Internet terminology	Discussion and usage	D	D	D
Define the Internet as a tool for communication, information, research, entertainment	Discussion, exercises and class projects	D	D	D
Use age appropriate online search engines to explore a topic	Exercises and class projects	P	P	P
Interpret information from the status bar when connecting to an online site	Exercises	I	P	M
Design and execute a keyword search	Exercises and class projects	R	M	M
Design and execute a title search	Exercises and class projects	I	D	D
Evaluate relevance of search results	Exercises and class projects	P	P	P
Navigate a browser interface and identify its components	Exercises	P	P	P
Create an electronic bookmark	Exercises	I	P	M
Recognize a home page and navigate to it	Exercises and activities	P	P	M
Explain use of email as a communication tool	Discussion and exercises	-	I	M
Open an email application	Exercises	-	I	M
Open, reply and delete an email message	Exercises and class projects	-	I	M
Compose, address and send an email message	Exercises and class projects	-	I	P
Explain 3 main components of an email address	Discussion	-	I	M
Identify and use netiquette standards	Discussion and exercises	-	I	E
Copy and paste information from a document into an email	Exercises and class projects	-	I	P
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D= Develop	P= Practice
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Learning Objective (Internet/Telecommunications continued)	Teaching Method	Grades		
		3	4	5
Recognize and use an embedded hyperlink in a mail message	Exercises	-	I	P
Insert a hyperlink into an email correspondence	Exercises	-	I	M
Identify and navigate using a URL	Exercises	-	I	P
Attach a document to an email correspondence	Exercises and class projects	-	-	I
Recognize address error and appropriately respond	Demonstration and usage	I	M	M
Identify common domain extensions	Discussion and exercises	I	P	P
Select and print information	Exercises and class projects	I	P	P
Properly cite electronic references	Exercises and class projects	-	I	P
Use online tutorial to develop a skill or area of knowledge	Exercises and class projects	I	E	E
Participate in an electronic community as a learner	Class projects	-	I	E
Discuss implications of using electronic references and communication techniques over traditional techniques	Discussion	-	-	I

Skill: Graphics/Multimedia

Goal: Students in grades 3-5 will use graphics and multimedia as a tool for various forms of expression. Students will create projects in support of classroom assignments while practicing the use of authoring software, drawing tools, and modern media devices.

Learning Objective	Teaching Method	Grades		
		3	4	5
Identify various graphical file extensions	Discussion and exercises	I	P	P
Copy an image from one document and insert into another	Exercises and class projects	I	P	M
Move objects on the screen to pre-defined order	Activities and exercises	P	P	M
Fill shapes with colors	Activities	I	P	P
Duplicate an object	Exercises and class projects	I	M	M
Use graphic tool to create an abstract design	Exercises and class projects	D	D	D
Use graphic tool to create a representational picture	Exercises and class projects	D	D	D
Identify an object by selecting the frame or using a lasso technique	Activities and exercises	P	M	M
Select multiple objects for synchronous modifications	Activities and exercises	P	M	M
Rotate and stretch objects to achieve desired effect	Exercises and class projects	P	M	M
Use frame handles to modify object size and shape	Exercises and class projects	P	M	M

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D= Develop	P= Practice
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Learning Objective (Graphics/Multimedia continued)	Teaching Method	Grades		
		3	4	5
Group and ungroup an object	Exercises and class projects	I	P	M
Change stacking order of an object	Exercises and class projects	-	I	P
Identify various types of multimedia	Discussion and activities	P	P	P
Identify various components of a multimedia presentation	Discussion and exercises	I	P	P
Incorporate images into a document	Activities and exercises	P	P	P
Explain the concept of a slide	Exercises and class projects	I	M	M
Use authoring software to incorporate multimedia in support of a class theme	Exercises and class projects	P	P	P
Use multimedia instructional (tutorial) software	Activities	P	M	M
Create a multimedia product containing at least two variations of media	Exercises and class project	D	D	D
Create a presentation to tell a story in linear sequence	Activities and class project	D	D	D
Navigate a multimedia presentation using various options	Exercises and class projects	I	P	M
Add transitions to projects	Exercises and class projects	-	I	P
Control timing or pace of presentation	Exercises and class projects	I	P	M
Delete a slide from a project	Exercises and class projects	I	M	M
Copy/Paste a slide within a project	Exercises and class projects	I	M	M
Add a digital image into a project	Exercises and class projects	I	P	P
Rearrange slide order in an existing project	Exercises and class projects	I	P	M
Modify presentation background, pattern, etc.	Exercises and class projects	I	D	D
Add animation to a presentation	Exercises and class projects	-	-	I
Add bullets to list items	Exercises and class projects	-	-	I
Modify bullet types used	Exercises and class projects	-	-	I
Capture voice recording to an audio file	Exercises and class projects	P	P	M
Use templates or Wizard tool to create a slide	Exercises	-	I	P
Logically order presentation	Exercises and class projects	I	D	D
Demonstrate understanding of basic design elements (spacing, color, font size, content)	Discussion and class projects	I	D	D
Adhere to fair use and copyright laws for inclusion of text, graphics, and sound	Discussion and usage	-	D	D

Skill: Database

Goal: Students of grades 4-5 will be introduced to the basic concept of database usage for storage and retrieval of information. Ways in which data is used within our community and society will be discussed. Students will view a database and navigate to a specific record.

Learning Objective	Teaching Method	Grades		
		3	4	5
Describe basic concept and purpose of a database	Discussion and demonstration	-	I	D
Describe ways in which databases are used in the community	Discussion and demonstration	-	I	E
Recognize differences between electronic and print databases	Discussion and demonstration	-	I	D
Describe how data was stored prior to the development of computers	Discussion	-	D	M
Define basic database terminology	Discussion and usage	-	I	D
Examine an existing database	Demonstration and class project	-	I	D
Navigate through records in a table	Demonstration and exercise	-	I	P
Locate a specific record using a single criteria	Demonstration and exercise	-	-	I
Sort data using a single criteria	Demonstration and exercise	-	I	P
Describe how data gathering procedures are used in commerce	Discussion and demonstration	-	I	E

D= Develop	P= Practice
M= Mastery	I = Introduction
E= Exploration	R= Review

Skill: Spreadsheets

Goal: Students in grades 3-5 will be introduced to basic spreadsheet skills. Students will explain uses of spreadsheets, navigate cells, and enter and format data. Students will create graphs and charts in support of core curriculum assignments.

Learning Objective	Teaching Method	Grades		
		3	4	5
Define purpose of spreadsheet software	Discussion and demonstration	-	I	D
Recognize a spreadsheet product	Discussion and demonstration	-	I	D
Define spreadsheet terms (cells, rows, columns, grids)	Exercises and usage	-	I	D
Differentiate between rows and columns	Exercises	-	I	D
Navigate cells	Exercises and activities	-	I	P
Enter and format text	Exercises and class projects	-	I	P
Format numbers and dates	Exercises and class projects	-	I	P
Select a cell or a block of cells	Exercises	-	I	P
Cut/Copy information between cells	Exercises	-	I	P
Clear cell contents	Exercises and class projects	-	I	P
Locate and open an existing workbook	Exercises and class projects	-	-	I
Insert, resize, and delete rows and columns	Exercises and class projects	-	-	I
View entered data in chart and graph format	Exercises and class projects	-	I	P
Set the print area	Exercises	-	I	P
Order and analyze information presented in spreadsheet format	Discussion and class projects	-	I	D
Appropriately label cell contents	Exercises	-	I	M

D= Develop	P= Practice
M= Mastery	I = Introduction
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Skill: Research/Problem Solving

Goal: Students in grades 3-5 will be introduced to the various research and learning tools available. Students will practice selecting the appropriate tool to complete a task at hand and expand on defining search criteria.

Learning Objective	Teaching Method	Grades		
		3	4	5
Create and execute a title word search	Demonstration, exercises and class projects	I	P	P
Use an electronic database (dictionary or encyclopedia) to perform keyword searches	Exercises and class projects	P	P	M
Use a variety of software supporting related lesson plan (reference, reading, math)	Activities and exercises	E	E	E
Develop an electronic portfolio	Exercises and class projects	D	D	D
Use a graphing package to gather, organize and display data	Exercises and class projects	D	D	D
Participate in a curriculum-based telecommunications project as a class activity	Class project	-	-	I
Evaluate information found for content accuracy and usefulness	Demonstration, exercises and class projects	I	D	D
Utilize tutorial software to learn a specific content or skill	Activities and exercises	E	E	E
Skim online articles for major ideas	Exercises and class projects	I	D	D
Skim online article for major ideas and capture notes to a word processing package	Exercises and class projects	I	D	D
Logically order information	Exercises and class project	I	D	D
Access online help as a reference to complete an unfamiliar task	Exercises	I	P	P
Use electronic simulations to make, revise and test decisions	Activities and class projects	-	-	I



6-8 Technology Strategy

Overall Learning Objective

Students in grades 6-8 will use the technology skills they have developed to enhance their learning experience, better understand their world, and produce more sophisticated products. Students will identify ways in which their knowledge can be used to benefit the school and their community.

D= Develop	P= Practice
M= Mastery	I = Introduction
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Skill: Foundations

Goal: Students in grades 6-8 will continue to demonstrate proper usage of lab equipment, develop technical vocabulary and explore aspects of the computer in support of classroom exercises.

Learning Objective	Teaching Method	Grades		
		6	7	8
Cite and adhere to computer room usage rules	Discussion and usage	R	R	R
Provide examples of how computers have impacted society	Discussion and activities	I	E	E
Describe the key advantages of computer technology	Discussion and usage	E	E	E
Describe the function of various system components	Discussion, usage and class projects	D	D	D
Explore the usage of networked computer systems	Discussion, usage and class projects	I	D	D
Demonstrate proper care and use of computer	Discussion and usage	R	R	R
Build on recognition and proper usage of computer terminology	Discussion and usage	D	D	D
Identify people who have made historical contributions to the development of computing	Discussion	-	I	E
Recognize characteristics that distinguish artificial intelligence from human intelligence	Discussion	-	I	E
Explain basics of how the computer uses internal memory, and how software requirements relate to memory capacity	Discussion and demonstration	D	D	M

D= Develop	P= Practice
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Skill: Keyboarding

Goal: Students in grades 6-8 will focus on speed and accuracy. Navigating without the use of a mouse will also be introduced. The keyboarding goal is to achieve twice the speed of handwriting efficiency.

Learning Objective	Teaching Method	Grades		
		6	7	8
Demonstrate proper care of the keyboard	Discussion and usage	R	R	R
Practice proper finger placement on the homerow	Drills and exercises	D	D	D
Practice proper finger placement on the QWERTY row	Drills and exercises	I	D	D
Practice proper finger placement on the bottom row	Drills and exercises	I	D	D
Demonstrate proper posture at the keyboard	Drills and exercises	P	P	P
Use numeric keyboard	Drills and exercises	P	P	P
Develop touch typing skills	Drills and exercises	D	D	D
Develop speed and accuracy to 30 word per minute	Drills and exercises	D	M	M
Develop speed and accuracy to 40 word per minute	Drills and exercises	-	D	M
Develop speed and accuracy to 45 word per minute	Drills and exercises	-	-	D

Skill: General Application Knowledge

Goal: Students in grades 6-8 will use previously acquired skills to successfully navigate and evaluate unfamiliar software programs.

Learning Objective	Teaching Method	Grades		
		6	7	8
Navigate application menus	Exercises and usage	P	M	M
Identify and navigate sub-menus	Exercises and usage	I	D	M
Utilize application toolbars	Exercises and usage	P	M	M
Use Cut/Copy/Paste	Exercises and usage	P	P	P
Use shortcut keys for common tasks	Exercises and usage	P	P	P
Select appropriate software for task at hand	Discussion authentic learning	D	D	D
Activate pop-up menus	Demonstration and usage	-	I	P
Explain benefits of consistent software environments	Discussion	I	D	M
Print only desired section of a document	Exercises	I	M	M
Access and use online help	Demonstration and usage	D	D	D
Cite design and user advantages of cross-application consistency	Discussion and demonstration	I	R	M

D= Develop	P= Practice
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Skill: Word Processing

Goal: Grade 6-8 students will use word processing as a productivity tool in support of core curriculum class assignments and projects. Students will evaluate finished products for quality and adherence to requirements. Students will explore how word processing is used in the business and educational communities.

Learning Objective	Teaching Method	Grades		
		6	7	8
Locate appropriate menu option for task at hand	Exercises and usage	P	P	P
Locate appropriate tool option for task at hand	Exercises and usage	P	P	P
Use appropriate line spacing to achieve desired result	Exercises and class projects	P	M	M
Customize bullets and numbering tools	Exercises	I	M	M
Use basic proofing tools to identify errors (spell check, grammar check)	Exercises and class projects	P	M	M
Use Thesaurus as a productivity tool	Exercises and class projects	R	R	R
Use word processing as a means of self-expression and communication	Exercises and class projects	D	D	D
Edit an imbedded image for size, color, etc.	Exercises and class projects	P	M	M
Define and modify margin settings	Exercises and class projects	P	P	M
Navigate a large document	Exercises and class projects	P	P	P
Insert, position, and remove tabs	Exercises	I	P	M
Create footers and headers	Exercises and class projects	I	P	M
Insert and modify page numbers	Exercises and class projects	I	P	M
Insert a Table of Contents into a document	Exercises and class projects	-	I	P
Embed a spreadsheet into a document	Exercises	-	-	I
Add a footnote to a document	Exercises and class projects	-	I	P
Add an endnote to a document	Exercises and class projects	-	I	P
Insert symbols into a document	Exercises	I	P	M
Explain the purpose of various views	Discussion and usage	I	D	D
Use the Format option to change letter case	Exercises and usage	I	P	M
Move text from one page to another	Exercises and usage	I	P	M
Create a table	Exercises	-	I	P
Insert and delete rows and columns	Exercises	-	I	P
Modify column widths	Exercises	-	I	P
Use borders and shading	Exercises	-	I	P
Create address labels	Exercises	-	I	P
Copy text from one document to another	Exercises	-	I	P
Work with multiple documents simultaneously	Exercises	-	I	P

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D= Develop	P= Practice
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Learning Objective (Word Processing continued)	Teaching Method	Grades		
		6	7	8
Record and run a macro	Exercises	-	-	I
Open an existing file using the document history list	Activities and usage	-	I	M
Use an existing template	Activities	-	I	M
Customize documents with page borders	Activities	-	I	M
Create and use columns	Activities	-	I	P
Create sections with formatting that differ from other sections	Activities	-	-	I
Incorporate hyperlinking narrative technique into a document	Activities	-	I	P

Skill: General Operating System

Goal: Students in grades 6-8 will continue to explore operating system concepts and utilities. Students will develop an understanding of networking and the importance of the sharing of data on an expanded access level.

Learning Objective	Teaching Method	Grades		
		6	7	8
Understand concept of data storage and select appropriate storage means for task at hand	Discussion and usage	D	D	D
Organize data into logical structures for storage purposes	Discussion, usage and class projects	P	P	P
View the contents of a disc drive	Demonstration and exercises	P	M	M
Create directory folders and explain their purpose for data organization	Demonstration, usage and class projects	P	M	M
Move items from one folder to another	Demonstration, usage and class projects	P	M	M
Create sub-folders as appropriate	Exercises	P	M	M
View file attributes	Demonstration and exercises	P	M	M
Copy and move a file from one disc to another	Demonstration and exercises	P	M	M
Copy and move multiple files from one disc to another	Demonstration and exercises	P	M	M
Select adjacent files for simultaneous processing	Exercises	-	-	I
Select non-adjacent files for simultaneous processing	Exercises	-	-	I
Rename an existing file	Demonstration and exercises	P	M	M
Explain Clipboard object, storage ability, and view contents	Demonstration and usage	P	M	M
Explore the usage of networked computer systems	Discussion and usage	I	D	D
Route print jobs to specified printer device	Demonstration and usage	P	M	M
Cancel a print job	Exercises	I	M	M

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D= Develop	P= Practice
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Learning Objective (General Operating Systems continued)	Teaching Method	Grades		
		6	7	8
Use file compression utilities	Exercises	P	P	M
Navigate Computer functionality for various drive views	Demonstration and exercises	P	M	M
Access Control Panel and identify various utilities	Demonstration and exercises	P	P	M
Identify purpose and activate programs in the Accessories Menu (Calculator, Notepad, Character Map)	Demonstration and exercises	P	P	M
Use multiple applications simultaneously and navigate through them	Demonstration and exercises	P	M	M
Back-up a hard drive	Demonstration and exercise	I	P	M
Explain the difference of local vs virtual storage and reasons each is chosen for implementation	Discussion	-	I	D
Search for a file using the Find option	Demonstration and exercises	-	I	M
Access files using the Documents utility on the Start menu	Demonstration and usage	-	I	M
Create a shortcut for a file or program	Exercises	-	I	M
Use print screen function and capture into a graphic package	Exercises	I	M	M
Use proper pathname to access a file	Exercises	I	P	M
Use accelerator keys	Exercises	I	P	P
Use shortcut keys	Exercises and usage	-	I	P
Restore a file from the Recycle Bin	Exercises	I	M	M
Empty the Recycle Bin	Exercises	I	M	M
View and understand Desktop Icon properties	Discussion and exercises	-	I	M

Skill: Troubleshooting

Goal: Students in grade 6-8 will enhance problem recognition abilities, articulate symptoms, discuss potential solutions, and assist others in performing resolution steps.

Learning Objective	Teaching Method	Grades		
		6	7	8
Recognize the required preciseness of computer commands	Discussion and exercises	D	D	D
Articulate source of error and problematic symptoms	Discussion and usage	D	D	D
Identify probable error causes and potential solution	Discussion and usage	D	D	D
Demonstrate proper care of lab equipment	Discussion and usage	D	M	M
Identify printer paper jam and assist with resolution	Discussion and usage	P	M	M
Respond to messages displayed on the monitor	Discussion and usage	D	D	D
Access and query online help to identify and correct system problems	Demonstration and usage	D	D	D
Describe common current viruses	Discussion	I	E	E
Perform a virus scan	Demonstration and exercises	P	P	M
Identify and perform routine system maintenance procedures	Discussion and exercises	I	D	D
Assist others in identifying and resolving system problems	Discussion and usage	D	D	D
Restart a frozen computer	Exercises and usage	I	M	M
Check cables for proper attachment	Demonstration and activities	I	M	M
Apply strategies for identifying and solving routine hardware and software problems that commonly occur with usage	Discussion and usage	I	D	D

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Skill: Socio-Ethical Issues

Goal: Students in grades 6-8 will continue to discover the impact of technology on our lives. Technology of the future will also be explored. Safety, security, ethical usage, and technology-based careers will be discussed. Students will discuss ways and implement technology to improve their school and community.

Learning Objective	Teaching Method	Grades		
		6	7	8
Cite and adhere to Internet safety rules	Discussion and usage	D	P	P
Understand basic copyright violations, plagiarism, and the consequences of committing them	Discussion	D	D	D
Explore emerging technologies	Discussion and presentation	E	E	E
Recognize how computers are used in the home, business, industry, and in education	Discussion and presentation	E	E	E
Demonstrate respect for work of others	Discussion and usage	D	D	D
Produce collaborative effort with peers on technology project	Class projects	D	D	D
Explain purpose of anti-virus software and recognize need to practice safe computing	Discussion and usage	D	R	R
Compare and contrast the impact of technology in the home today and in the past	Discussion and class project	E	E	E
Compare and contrast the impact of messages from different technological sources	Discussion and class project	E	E	E
Compare and contrast the technological means for financial transfer	Discussion	E	E	E
Compare and contrast technological resources of two different communities	Discussion and class project	E	E	E
Identify job opportunities and the ways technology is related to these opportunities	Discussion and class projects	E	E	E
Forecast the possible effects technology could have on our society	Discussion	E	E	E
Properly cite electronic references	Exercises and class projects	P	P	P
Describe types of cyber-crime in society	Discussion	-	I	E
Describe appropriate and inappropriate uses of technology	Discussion and presentation	D	D	D
Identify personal information that should not be shared online	Exercises and class projects	D	D	D
Know how to inform a trusted adult when experiencing discomfort with an online situation	Discussion and presentation	R	R	R
Describe the potential risks and dangers associated with online communications	Discussion and presentation	I	D	D
Describe the long term consequences of participating in questionable online activities	Discussion and presentation	I	D	D

D= Develop	P= Practice
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Skill: Internet/Telecommunications Usage

Goal: Students in grades 6-8 will use the Internet as a tool for research, learning and collaborative projects. Students will expand their ability to evaluate the relevance and appropriateness of information collected. Virtual simulation will be used to support core curriculum lessons in order to enhance the learning experience.

Learning Objective	Teaching Method	Grades		
		6	7	8
Discuss, understand and sign the Acceptable User Policy	Discussion	R	R	R
Navigate a browser interface	Exercises	P	M	M
Identify purpose of a web-browser and cite various ISPs	Discussion	R	R	R
Save and copy an image from an online source	Demonstration, exercises and class projects	P	M	M
Display appropriate online behavior	Discussion and usage	D	M	M
Cite and adhere to Internet safety rules	Discussion and usage	P	M	M
Discuss privacy implications involved with electronic communities	Discussion	I	E	E
Further develop recognition and proper use of Internet terminology	Discussion and usage	D	D	D
Cite ways in which the Internet is being used in professional and educational fields	Discussion, exercises and class projects	I	D	D
Identify and use age appropriate online search engines to explore a topic	Exercises and class projects	P	M	M
Design a query using advanced search techniques	Exercises and authentic learning	I	D	D
Evaluate relevance of search results	Exercises and class projects	P	P	P
Compose, address and send an email message	Exercises and class projects	P	M	M
Identify and use netiquette standards	Discussion and exercises	E	E	E
Copy and paste information from a document into an email	Exercises and class projects	P	M	M
Insert a hyperlink into an email correspondence	Exercises	P	M	M
Attach a document to an email correspondence	Exercises and class projects	P	M	M
Manage email folders	Exercises	-	I	M
Identify and navigate websites using a URL	Exercises	P	M	M
Identify common domain extensions	Discussion and exercises	P	P	M
Select and print information	Exercises and class projects	P	M	M
Properly cite electronic references	Exercises and class projects	P	P	M
(Continued on next page)				

D= Develop	P= Practice
M= Mastery	I = Introduction
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Learning Objective (Internet/Telecommunications continued)	Teaching Method	Grades		
		6	7	8
Use online tutorial to develop a skill or area of knowledge	Exercises and class projects	E	E	E
Participate in an electronic community as a learner	Class projects	E	E	E
Critique websites for adherence to basic design rules	Activities	I	D	D
Download a file	Activities	I	P	M
Stop a page from loading	Exercises	I	M	M
View history log	Exercises	I	M	M
Discuss ethics of creating a website	Discussion	I	E	E
Compare and contrast Internet versus Intranet	Discussion	-	I	M
Discuss implications of using electronic references and communication techniques over traditional techniques	Discussion	E	E	E

D= Develop	P= Practice
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Skill: Graphics/Multimedia

Goal: Students in grades 6-8 will use graphics and multimedia as a tool for various forms of expression. Students will create projects in support of classroom assignments while continuing to practice the use of authoring software, drawing tools, and modern media devices. Students will learn to critique projects and create presentations for a specific audience.

Learning Objective	Teaching Method	Grades		
		6	7	8
Identify various graphical file extensions	Discussion and exercises	P	M	M
Use graphic tool to create an abstract design	Exercises and class projects	D	D	D
Use graphic tool to create a representational picture	Exercises and class projects	D	D	D
Save an image to file and import it into another software package	Exercises and class projects	I	P	M
Change stacking order of an object	Exercises and class projects	P	M	M
Identify various types of multimedia	Discussion and activities	E	E	E
Identify various components of a multimedia presentation	Discussion and exercises	E	E	E
Incorporate clipart into documents	Activities and exercises	P	M	M
Use presentation software to incorporate multimedia in support of a class theme	Exercises and class projects	E	E	E
Create a multimedia product containing at least two variations of media	Exercises and class project	E	E	E
Create a presentation to tell a story in linear sequence	Activities and class project	E	E	E
Add transitions to projects	Exercises	D	D	D
Add a digital image into a project	Exercises and class projects	P	M	M
Modify presentation background, pattern, etc.	Exercises and class projects	P	P	P
Add animation to a presentation	Exercises and class projects	P	D	D
Add an existing video clip to a presentation	Exercises and class projects	P	D	D
Capture a video clip using a camcorder and insert it into a presentation	Exercises and class projects	P	D	D
Use a scanner to include an image into a presentation	Exercises and class projects	I	P	M
Add bullets to list items	Exercises and class projects	P	M	M
Modify bullet types used	Exercises and class projects	P	M	M
Design, create and use a template	Exercises and activities	I	P	P
Add audio enhancements to a presentation	Exercises and class projects	I	D	D

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D= Develop	P= Practice
M= Mastery	I = Introduction
E= Exploration	R= Review

Learning Objective (Graphics/Multimedia continued)	Teaching Method	Grades		
		6	7	8
Demonstrate understanding of basic design elements (spacing, color, font size, content)	Discussion and class projects	D	M	M
Critique presentations for adherence to basic design rules	Discussion and activities	I	D	D
Adhere to fair use and copyright laws for inclusion of text, graphics, and sound	Discussion and usage	-	D	D
Wrap text around a graphic	Activities	-	I	P
Incorporate hyperlinking narrative technique into a presentation	Activities	-	I	P
Create storyboards for electronic presentation design	Discussion and activities	I	D	D

D= Develop	P= Practice
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Skill: Database

Goal: Students of grades 6-8 will expand their ability to access databases for retrieval of information. Ways in which data is used within our community and society will be further explored. Students will design and create an elementary database.

Learning Objective	Teaching Method	Grades		
		6	7	8
Describe basic concept and purpose of a database	Discussion and demonstration	D	M	M
Describe ways in which databases are used in the community	Discussion and demonstration	E	E	E
Recognize differences between electronic and print databases	Discussion and demonstration	D	M	M
Define basic database terminology	Discussion and usage	D	D	D
Examine an existing database	Demonstration and class project	D	D	D
Differentiate between numeric and text fields	Discussion and exercises	-	I	M
Navigate through records in a table	Demonstration and exercise	P	P	M
Locate a specific record using a single criteria	Demonstration and exercise	P	M	M
Sort data using a single criteria	Demonstration and exercise	P	M	M
Sort data using multiple criteria	Demonstration and exercise	I	P	P
Explain why record keys must be unique	Discussion and demonstration	-	I	M
Describe how data gathering procedures are used in commerce	Discussion and demonstration	E	E	E
Explain the difference between a report and a query	Discussion and demonstration	-	I	D
Test query and report results	Activities	-	I	D
Use AND/OR commands to filter data	Exercises	-	I	P
Design and populate a database with relevant data	Exercises and class project	-	I	P
Add a picture field to a database	Exercises and class projects	-	I	P
Collect data and enter it into a database	Exercises and class projects	I	D	M
Determine whether a spreadsheet or a database is the appropriate tool for the task at hand	Discussion	I	D	M

D= Develop	P= Practice
M= Mastery	I = Introduction
E= Exploration	R= Review

Skill: Spreadsheets

Goal: Students in grades 6-8 will develop basic spreadsheet skills. Students will use graphing, charting to view data in various formats. Formulas will be used to explore productivity tools in support of core curriculum assignments.

Learning Objective	Teaching Method	Grades		
		6	7	8
Define purpose of spreadsheet software	Discussion and demonstration	D	M	M
Recognize a spreadsheet product	Discussion and demonstration	D	M	M
Differentiate between rows and columns	Exercises	P	M	M
Navigate cells	Exercises and activities	P	M	M
Enter text	Exercises and class projects	P	M	M
Format numbers and dates	Exercises and class projects	P	M	M
Select a cell or a block of cells	Exercises	P	M	M
Cut/Copy information between cells	Exercises	P	M	M
Clear cell contents	Exercises and class projects	P	M	M
Locate and open an existing workbook	Exercises and class projects	P	M	M
Insert and delete rows and columns	Exercises and class projects	P	M	M
Modify size of rows and columns	Exercises and class projects	P	M	M
View entered data in chart and graph format	Exercises and class projects	P	P	M
Set the print area	Exercises	P	M	M
Add worksheets to a workbook	Exercises	I	P	M
Display and remove grids	Exercises	I	P	M
Display and remove column and row headings	Exercises	I	P	M
Enter and modify data into a prepared spreadsheet to test "what if" scenarios	Activities	I	P	M
Build a formula into a cell	Exercises	-	-	I
Copy a formula between cells	Exercises	-	-	I
Modify spreadsheet through use of column width, borders, colors, and shading	Exercises	-	I	P
Protect cells from modifications	Exercises	-	I	P
Use SUM, MIN, MAX, AVG, COUNT functions	Exercises	-	-	I
Specify page orientation	Exercises	-	I	M
Move a range of cells	Exercises	-	I	P
Display cell data using bar graphs, pie charts, line graphs, label graphs, and legends	Exercises and class projects	-	I	P
Sort data by specified criteria	Exercises	-	I	P
Rotate text alignment	Exercises	I	M	M
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Learning Objective (Spreadsheets continued)	Teaching Method	Grades		
		6	7	8
Freeze and unfreeze rows and columns	Exercises	-	-	I
Order and analyze information presented in spreadsheet format	Discussion and class projects	D	D	D

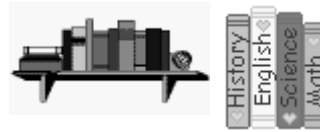
D= Develop	P= Practice
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Skill: Research/Problem Solving

Goal: Students in grades 6-8 will continue to explore the various research and learning tools available. Students will gain competence in selecting and using the appropriate tool to complete a task at hand. Completed assignments will cite references used.

Learning Objective	Teaching Method	Grades		
		6	7	8
Create and execute a title word search	Demonstration, exercises and class projects	P	M	M
Use a variety of software supporting related lesson plan (reference, reading, math)	Activities and exercises	E	E	E
Develop an electronic portfolio	Exercises and class projects	D	D	D
Use a graphing package to gather, organize and display data	Exercises and class projects	D	D	D
Participate in a curriculum-based telecommunications project as a class activity	Class project	E	E	E
Evaluate information found for content accuracy, bias, and usefulness	Demonstration, exercises and class projects	D	D	D
Compare and contrast information received from multiple sources	Discussion and activities	-	I	D
Utilize tutorial software to learn a specific content or skill	Activities and exercises	E	E	E
Skim online articles for major ideas	Exercises and class projects	I	D	D
Skim online article for major ideas and capture notes to a word processing package	Exercises and class projects	D	M	M
Skim several online articles for major ideas and capture notes to a word processing package	Exercises and class projects	I	P	P
Logically order information	Exercises and class project	D	D	D
Access online help as a reference to complete an unfamiliar task	Exercises	P	P	P
Assess the value of various types of electronic resources in relation to the task at hand	Class projects and usage	I	D	D
Classify and group information using a word processor, database or spreadsheet	Class projects and usage	I	D	D
Use electronic simulations to make, revise and test decisions	Activities and class projects	E	E	E

Integrated Curriculum



Technology is used to enhance and reinforce core curriculum content when appropriate, in support of the METS for [Educational Technology Standards and Expectations](#), and Common Core Standards as they are defined and released. It is not the intent to use technology solely for the sake of using technology.

Teachers participate in content specific professional development groups, workshops, and material subscriptions in order to stay current in ideas for technology integration. Additionally, the administrator provides the faculty with subscriptions to technology integration related reference material on a monthly basis.

The use of technology will be designed to:

- Provide simulation for activities that would otherwise not be available to a student.
- Allow for additional practice of a learning unit.
- Augment the scope of available resources for research and problem solving.
- Allow teachers to explain and demonstrate concepts in a variety of manners addressing different learning styles.
- Provide students a means for working on a collaborative project, both within their class and online community.
- Supply the student with additional tools for self-expression.
- Afford the student the ability to work at or above their individual skill level without impacting the rest of the class.

To assist teachers in integrating technology, SMART Boards are permanently mounted in the Grades PreK-8 classrooms. There is a permanently mounted SMART Board in the multimedia center that is accessible on a daily basis to any teacher wishing to use this technology with their class outside of the classroom.

Teachers have a subscription to the online tool, Curriculum Mapper to assist in correlating curriculum to state standards.

Technology in English/Language Arts

Online tools and software is used to reinforce letter recognition, identification of parts of speech, reading skills, and sequencing of events. Students use word processing and authoring software to structure and present thoughts and ideas. Electronic reference tools are used to develop vocabulary, phonics and grammar.

Technology in Mathematics

Visual demonstrations and activities facilitate learning of number recognition, counting and performing computations at varied levels. Software and online tools are used to perform patterns, calculations and graphing. Simulation software allows for testing of hypothesis and “what if” scenarios. The school holds SMART licenses for the add-on Math tool as an additional learning resource.

Technology in Science

Electronic simulations, instrumentation and modeling software make experiences available to the student that would otherwise not be possible. Through the Internet, students have access to on-line data sharing and communities of expertise. Results from current research and scientific trends are immediately available to the learner. In k-3 teachers integrate technology utilizing their ELMO, Projector and online resources in whole class sessions.

Technology in Social Studies

Up-to-date demographic information is available to the students for charting and comparison. Telecommunications allow the teacher to bring remote areas into the classroom through the use of multimedia and Web 2.0 tools. Students can collaborate on projects with partners from schools across the world. Electronic references display visual images of land areas, artifacts, and architecture. Simulations bring history lessons to life and students can follow current explorations.

Technology in Music and Art

Students take virtual tours of museums and orchestra pits. Simulations offer artist palettes and electronic keyboards and other instruments for experimentation. Students listen to sound bites of composers' works, and listen to orchestra members explain their role. Teachers provide presentations focusing on a specific artist or genre of art.

Section 8 Curriculum

N/A This is an elementary K-8 Technology plan the online adult education component is not applicable to this plan.58

Distance Learning

School Internet access offers great opportunities in distance learning for our students. Web quests are a powerful tool that allows even the youngest learner access to controlled URLs through a seamless interface.

Students participate in or view webcasts that put students face to face in real-time with specialists of various disciplines. The NASA educational projects are an example of using this technology in the classrooms.

Online collaborative projects provide another opportunity for students to participate in distance learning. In these projects, students remotely communicate requirements, project results and status, and monitor their overall contribution to the project as it relates to the participation of other schools. The St. Joseph School Teachers utilizes the laptop cart for projects integrating technology in the core subject areas..

Students experience online learning through web tutorials and videos. They discuss, compare, and contrast this learning style from more traditional methods. Additionally, students discuss the impact online learning and remote access has on higher education, telecommuting, and on-the-job training.

All students benefit from the experience of virtual field trips that provide opportunities to explore various areas that might otherwise not be accessible. Students discuss the pros and cons of taking virtual trips.

The school subscribes to the Discovery Education Streaming Video Program. This allows teachers to incorporate segmented video clips for lesson emphasis, or to provide students with a full range of distant learning curriculum enhancement video resources.

Our school currently uses PowerSchool, in grades 1-8. PowerSchool enables us to offer our school community a more powerful tool to help our students and families be successful in handling project management, communications, grades, and assignments. PowerSchool will be available to all school students and families.

K-2 Technology Integration

The following describes core curriculum learning units planned for grades K-2. Technology is used whenever appropriate and advantageous, to enhance student learning in the following areas:



Kindergarten

Learning Units:

- Upper and Lower Case Letters
- Identify Sight Words
- Timelines
- Positional Words
- Shapes and Spatial Reasoning

Special Projects:

- Citizenship
- Simple Graphs
- Virtual Trip: Rainforest

First Grade

Learning Units:

- Graphic Data
- Simple Maps
- Single and Plural Nouns
- Telling Time

Special Projects:

- American Symbols
- Virtual Trip: White House

Second Grade

Learning Units:

- Community
- Map Symbols and Legends
- Diverse Communities
- Counting Money

Special Projects:

- Consult Reference Materials
- Adjectives and Adverbs
- Virtual Trip: Outer Space

K-2 Software Packages

Laptops

- Microsoft Office Pro 2010
 - MS Word
 - MS PowerPoint
 - MS Excel
 - MS Outlook Express
 - MS Paint
-
- SMART Board access in all classrooms

3-5 Technology Integration

The following describes core curriculum learning units planned for grades 3-5. Technology will be used whenever appropriate and advantageous, to enhance student learning in the following areas:

Third Grade

- Learning Units:
- Basic Fractions
 - Interpret Data
 - Use Search Tools
- Special Projects:
- Virtual Trip: Michigan Studies
 - Recount Stories Through Multimedia

Fourth Grade

- Learning Units:
- Generate and Analyze Patterns
 - Measurement and Conversion
 - Topic Reports
- Special Projects:
- Virtual Trip: Michigan History
 - Online Collaborative Discussion

Fifth Grade

- Learning Units:
- Graph Points
 - Represent and Interpret Data
 - American Indian Peoples
- Special Projects:
- Virtual Trip: Colonization and Settlement
 - Multimedia Components and Visual Display



3-5 Software Packages

- Microsoft Office Pro 2010
 - MS Word
 - MS PowerPoint
 - MS Access
 - MS Excel
 - MS Outlook Express
 - MS Publisher

- Powerschool access for online classroom management (grades 1-8)

- 6 X RCA Small Wonder camcorders software

- Classroom installed SMART Board for supplemental online learning resources all classes

6-8 Technology Integration

The following describes core curriculum learning units planned for grades 6-8. Technology will be used whenever appropriate and advantageous, to enhance student learning in the following areas:

Sixth Grade

- Learning Units:
- Primary and Secondary Source Documents
 - Author Point of View
 - Area, Surface Area and Volume

- Special Projects:
- Virtual Trip: Western Hemisphere
 - Informational Projects

Seventh Grade

- Learning Units:
- Multicultural Literature
 - Cell Structure
 - Verb Voice and Mood
 - Probability Models
 - Draw and Compare Inferences

- Special Projects:
- Virtual: Eastern Hemisphere
 - Multimedia Viewpoint Presentations

Eighth Grade

- Learning Units:
- Civil War and Reconstruction
 - Using and Evaluating Different Mediums
 - Linear Equations
 - Cylinders, Cones and Spheres
 - Topic Research

- Special Projects:
- Virtual Trip: U.S. History
 - Sacramental Studies



6-8 Software Packages

- Microsoft Office Pro 2010
 - MS Word
 - MS PowerPoint
 - MS Access
 - MS Excel
 - MS Outlook Express
 - MS Publisher
- Edline/Powerschool access for online classroom management
- Photoshop Elements 9.0
- Adobe Premiere Elements 4.0
- PhotoStory 3
- Audacity
- Inspiration® 7.5
- 6 X RCA Small Wonder Camcorder software
- Scratch open source programming language software
- Classroom installed SMART Board for supplemental learning resources
- ELMO's for presentations in each classroom

Parental Communication

UAP/Letter

At the beginning of each school year the *Student Acceptable Use Policy* is sent home. Parents review this with their child and are required to sign it prior to their child being allowed Internet access at the school. Our *Student Handbook* is also posted on the school web page to be sure both parents and students have easy access to our school policies.

Open House

Although parents are welcome to visit the school and the various classrooms at any time, there is an official Open House held each school year. During this time, teachers invite parents into the classrooms, library, and computer lab to view the technology available to their students. Additionally, the school technology plan is posted online for ease of access.

School Website

The school website is kept current to post administrative and classroom announcements. Each grade has a page on the web site where current activities are posted (daily assignments in K-5) with pictures and text outlining recent in-class activities.

PowerSchool

PowerSchool online grading system is utilized, in order to meet compliance with a consistency initiative within the Archdiocese of Detroit. PowerSchool enables us to offer our school community a more powerful tool to help students and families be successful in handling project management, communications, grades, and assignments. PowerSchool also will allow the school to better communicate administrative information at a diocesan and state-wide level.

Technology Plan

Our school *Technology Plan* is available for student/parents to download from the school website. Copies are also kept in the School Office and computer lab. Additionally, both the School Commission and the school staff review, monitor and contribute to the Technology Plan and its implementation.

Professional Development Component

Staff Training

The St. Joseph Parish School administration recognizes the need for faculty and staff to possess technical competencies as outlined in the *Michigan Standards for Ensuring Excellent Educators* published by the Michigan Department of Education, as well as the NETS for Teachers, and NETS for Administrators.

Informal technical training is offered on a one-to-one basis as needed for each K-8 teacher to attain technical proficiency, and comfort. Teachers individually share and collaborate to assess their comfort level and expertise in working with and integrating technology.

The administration accommodates for staff training during school hours. This assists in ensuring that the technology initiative is not perceived as an increased workload for the staff. Yearly, a hands-on workshop is hosted in the school to train teachers on recent technology initiatives (such as curriculum mapping, SMART tools, and recent software or equipment purchases).

Each year a professional development day is provided for group sharing among the staff. This practice focuses on alternative teaching approaches to be used in the classroom and collaboration among teachers.

Professional Resources

The following resources are currently employed by St. Joseph School in support of this technology plan:

- Teacher access to **Michigan Learnport** for supplemental courseware credit or topic tutorials
- **REMC** discount pricing
- **Discovery Education Video Streaming** subscription
- **PowerSchool** Online Learning Community subscription
- Internet filtering subscription
- **RESA** professional development workshop offerings
- Staff professional technology memberships, such as **MACUL**
- Shared professional development and software resources within the **Archdiocese of Detroit**
- Staff tuition discount for professional development at **Madonna University**

Professional Development Timeline

The following details the projected timeline for Staff Professional Development in order to implement this Technology Plan:

2015-2016

Professional development activities during the 2015-2016 school year for all faculty and staff will focus on conversion, training, and implementation of online communication to students and parents. Activities will include:

- Faculty and staff skill development through workshops and internal training on the use of online grading system/web site
- Faculty and staff skill development on grading system supplemental tools, such as reporting and online communication through email and blogging
- Staff sharing and documentation of tips, troubleshooting, and best practice techniques in the use of online grading system and web site information
- Curriculum mapping utilizing excel spreadsheets
- Math integration using online resources

2016-2017

Professional development activities during the 2016-2017 school year for all teachers of grades (K-8) will focus on online Curriculum Mapping and technology integration to core subjects. Activities will include:

- Accessing and maintaining information in the Curriculum Mapping utilizing excel to include all subject areas
- Conversion of existing documented lesson plans to meet Archdiocese Core Curriculum Standards
- Staff sharing and documentation of tips, troubleshooting, and best practice techniques in SMART Board Software/activities to support subject areas
- Science integration using online resources

2017-2018

Professional development activities during the 2017-2018 school year for all teachers of grades (K-8) will focus on resources for online self-directed learning. Activities will include:

- Identifying and accessing webinars and online professional development groups to meet customized learning needs/MACUL.
- Accessing and utilizing Michigan Learnport for earning SCECHS, and individualized supplemental learning
- Accessing and utilizing Michigan eLibrary (Mel.org), and researching to write papers.

Administration and staff review state and national standards addressing technology competencies for teachers, administrators, and other relevant educators.

Technology Access and Resources

Student Access

All classrooms have computers for students with filtered Internet access. Teachers in grades K-8 have laptops connected to a SMART Board/Interactive Board to aid student learning. A SMART Board is installed in the media center, available to all teachers to use with their class for alternative delivery strategies.

St. Joseph School works with special services provided by the Trenton Public School District to provide students with assistive technologies as deemed necessary.

The computer cart equipment is open to students during regular school hours. Internet content filtering is provided through an annual subscription to ContentWatch Pro. Student online access is consistently facilitated by a faculty member, allowing students to work in a safe and monitored environment.

The school provides each student with network storage. Students are allowed to take their work home electronically on a flash drive in order to complete assignments. Students are also allowed to bring in their own portable storage devices to transfer work.

Our school uses PowerSchool for our 1st through 8th graders to remotely access assignments, grades, supporting course documents, and pertinent announcements. This Learning Community Management System (LCMS) is a tool to help our students be successful in handling their project management and workload. The school will convert to an online communication for students/parents and staff through SchoolSpeak and Google apps/drive.

The school maintains a Weebly Website with each teacher having control over their classroom page for useful links and information.

Although students are not given private email access, the school has become a “Google School” with online collaboration available to upper grades.

Staff Access

Although we are in the process of upgrading the wireless connectivity is available throughout the school for any teacher wireless enabled laptops.

The computer cart is available during open hours where teachers can bring the cart to their class to use technology in support of a lesson or assignment. Faculty has SMART boards, ELMO's and a laptop in every room.

Each teacher is provided with a secure network folder on our newly purchased NAS as well as Google Drive to access files and folders from any location.

All classrooms have computers for students with filtered Internet access. Teachers in grades K-8 have laptops connected to a SMART Board to aid student learning, and deliver technology enhanced lesson plans.

All teachers presently have access to PowerSchool for online communication.

There is a need for increased infrastructure to support the amount of computers in the school presently.

Infrastructure, Hardware, Technical Support and Software

Inventory Component

Additional Equipment:

- ImageMate Dual Card Reader – ScanDisc
- Epson PowerLite 82c LCD Projector
- 2 x Superstack II Baseline 2024 Switch 24 Port (Model 3C16471)
- SuperStack III Baseline 10/100 Switch 12 Port (Model 3C16464C)
- ProScope USB 50x Imaging Device (Digital Microscope)
- 6 RCA Small Wonder camcorders
- 9 ELMO's
- 6 Teacher Chrome Books
- 30 Lenovo Laptops
- Rolling storage cart for laptops

Budgeting/Funding Component

In May of 2014, St. Joseph School purchased the required computer laptop cart and 30 laptops for a total cost of approximately \$30,000. A total payment was made for this cost with no outstanding balance owed.

The school administration works annually with the parish Stewardship Committee in order to ensure a yearly balanced budget, strategize projected costs, optimize gifts and donations, and subsidize school tuition.

The school has used Federal Title Funds to purchase 6 ChromeBooks for teachers to use for training. This will prepare them for the upcoming purchase of Student ChromeBooks to better prepare the students for Gabriel Richard H.S..

The School Commission works with the administration to define and implement fundraising initiatives for equipment refreshes - optimally on a 5 year schedule. There is a need for increased infrastructure/wireless internet hardware.

The appropriate personnel of the St. Joseph Parish staff and school administration collaboratively define and plan for a technology fund. Funding is detailed for the following budgeting components:

Hardware. Hardware includes such items as computers, printers, scanners, and peripheral equipment. Planning for this component accommodates equipment refresh rates at 3-5 year increments. Although the school has received a grant from the Archdiocese the past two years, the school must allocate funds for technology in the future.

Infrastructure. Any planned connectivity upgrades may result in infrastructure related costs.

Maintenance. Computers, printers, peripheral devices, monitors, keyboards will require maintenance, routine cleaning, and repair to extend their usability duration. As a parochial school, there is no district level support. Therefore, once equipment has extended the warranty timeframe, volunteers, or the cost of equipment servicing is dependent upon available funds.

Software. Instructional software is routinely reviewed to continually improve and support our curriculum. Additionally, system software, virus protection programs, content filtering, and utilities are upgraded as warranted. The school is implementing free web tools and Google Docs and Apps.

Telecommunications Access. Internet provider access fees will be an ongoing cost.

Routine Operation. A cost is associated with running the computer cart on a routine basis. Such costs include printer paper, print cartridges, projector bulbs, and cleaning supplies for equipment. Adequate budgeting ensures that daily activities can run uninterrupted.

Training. Technology staff will attend workshops and seminars to stay current of technology trends and tools available to the educational community.

2015-2016 Technology Budget

Item	Cost	QTY	Description/comments
Annual Subscriptions			
Windows Security Essentials	Free	65	
Monthly Internet/phone Access	\$3136.		\$261. Per month
United Streaming Video	\$605		For entire school
CheckPoint Filtering Software	\$2000		For all classes 3 year subscription
Chrome Books	\$9000		30 at 300 each
Yahoo Webpage Hosting subscription	\$155.40		\$12.95 monthly web hosting for school site
Online grading system subscription	\$2200	170	
Weebly Account	\$19.95		Yearly
Routine Supplies			
Black Inkjet Print Cartridges	\$200	\$23.70	
Color Inkjet Print Cartridges	\$200	\$24.40	
Miscellaneous			
As needed incidentals	\$200		Patch cables, clasps, zip-ties, cords, etc
Miscellaneous unexpected hardware/software needs	\$1,500		
Annual Total:	\$19216.35		

2016-2017 Technology Budget

Item	Cost	QTY	Description/comments
Annual Subscriptions			
Windows Security Essentials	Free	65	
Monthly Internet Access	\$3136		
United Streaming Video	\$605		For entire school
CheckPoint Filtering Software			3 year subscription
Wireless Hardware for school/gym	\$10000		
Yahoo Webpage Hosting subscription	\$155.40		\$12.95 monthly web hosting for school site
Online grading system subscription	\$2200	170	
Weebly Account	\$19.95		Yearly
Routine Supplies			
Black Inkjet Print Cartridges	\$200	\$23.70	
Color Inkjet Print Cartridges	\$200	\$24.40	
Miscellaneous			
As needed incidentals	\$200		Patch cables, cords
Miscellaneous unexpected hardware/software needs	\$1,500		
Replacement for SMART Projector/bulb	\$375		Projected cost
Annual Total:	\$18591.35		

2017-2018 Technology Budget

Item	Cost	QTY	Description/comments
Annual Subscriptions			
Windows Security Essentials	Free	65	
Monthly Internet Access	\$3136		
United Streaming Video	\$605		For entire school
CheckPoint Filtering Software			For all classes 3 year subscription
Chrome Books	\$9000		30 at 300 each
Yahoo Webpage Hosting subscription	\$155.40		\$12.95 monthly web hosting for school site
Online grading system subscription	\$2200	170	
Weebly Account	\$19.95		Yearly
Routine Supplies			
Black Inkjet Print Cartridges	\$200	\$23.70	
Color Inkjet Print Cartridges	\$200	\$24.40	
Miscellaneous			
As needed incidentals	\$200		Patch cables, clasps, zip-ties, cords, etc
Miscellaneous unexpected hardware/software needs	\$1,500		
Annual Total:	\$17216.35		

Subtotal:	\$17216.35		
SMART projector potential bulb replacement	\$275		
Potential replacement of laserjet printer	\$1,200		
Miscellaneous hardware/software needs	\$1,500		
Annual Total:	\$20191.35		

Technical Support

A parent/staff volunteer base has provided support for our school when items break or malfunction. The school has a technical support company which is used very sparingly.

Student Acceptable Use Policy

St. Joseph Parish School Student Network/Internet Policy

Student Telecommunications Use Agreement

Adapted from NCEA's From the Chalkboard to the Chatroom. 2001

As a computer user, I agree to follow the rules and code of ethics in all of my work with computers while attending St. Joseph Parish School:

1. I recognize that all computer users have the same right to use the equipment; therefore, I will not use the computer resources for non-academic purposes. I will not waste or take supplies such as paper, printer cartridges, and discs that are provided by the school. When I am in the computer lab, I will talk softly and work in ways that will not disturb other users. I will keep my computer work area clean and will not eat or drink in the computer lab.
2. I recognize that software is protected by copyright laws; therefore, I will not make unauthorized copies of software and I will not give, lend, or sell copies of software to others. I understand that I will not be allowed to bring software applications, games, or CD-ROMs from home to be used on school equipment without proof of licensure and prior approval of appropriate school personnel.
3. I recognize that the work of all users is valuable; therefore, I will protect the privacy of others by not trying to learn their password; I will not copy, change, read, or use files from another user without prior permission from that user; I will not attempt to gain unauthorized access to system programs for computer equipment; I will not use computer systems to disturb or harass other computer users or use inappropriate language in my communications. I will not disable filter software.

I will honor my school's procedures for the storage of information. I realize that after prior notice has been given to me, files may be deleted from the system to protect the integrity of the network or because of space limitations on the computer's hard drive.

4. Each student who received Internet access will be instructed in the proper use of the network. The use of the Internet must be in support of education and research consistent with the educational objectives of the school. Students using network or computing resources must comply with the appropriate rules for that network or resource.

As a user of a network, I will not use bulletin boards, social networking sites, or chat lines for personal use. In addition, I will not reveal my personal information, home address, or personal phone number or those of students, teachers, or other staff members. Transmission of any material in violation of any U. S. or state regulation is prohibited. This includes, but is not limited to: copyrighted material, threatening or obscene material, or material protected by trade secret. The use of school computers and networking resources for commercial activities is not permitted. Their use for product advertisement or political lobbying is also prohibited.

5. Although a content filter is enabled on all student and classroom computers, parents must realize that their students may encounter material online that they do not consider appropriate (vulgar jokes, statements of belief that some might consider immoral, etc.). The student is responsible for not pursuing or sharing material that could be considered offensive.

6. The use of the computer is a privilege, not a right, and inappropriate use will result in the cancellation of these privileges. Vandalism or intentional modification of system settings will result in cancellation of privileges and/or school disciplinary action. The school reserves the right to seek financial restitution for any damage caused by a student or other user. The system administrators will deem what is inappropriate use, and their decision is final. The administration, faculty, and staff of the school may request that the system administrator deny, revoke, or suspend specific user privileges. Violations of the rules described above will be dealt with seriously.

Parent/Guardian Signature

Date

Student Signature

Date

Technology Plan Monitoring and Evaluation

The St. Joseph Parish School Commission is comprised of the School Administrator, 6th grade teacher, and parent representatives. This body meets annually to evaluate the school's technology program. Feedback from regularly scheduled Archdiocesan accreditation procedures/visits is reviewed at this time, as well as responses solicited from families, the administration and the staff.

The administration will appoint, or assemble the appropriate subcommittees to identify any obstacles - and present possible solutions to any unmet or unsuccessful goal. The responsible party will also submit to the administrator a timeline and required steps for goal resolution.

The following is used as guiding questions for determining the success of the computer instruction and integrated curriculum initiative:

- How has the integration of technology and available learning resources changed instructional techniques?
- Has the integration of technology affected the learner's enthusiasm and level of motivation?
- Has the integration of technology impacted the learner's ability to grasp concepts previously taught in a conventional manner?
- Has the integration of technology had a positive effect on learner test scores?
- Has the integration of technology resulted in teacher enthusiasm for identifying new instructional resources and lesson plans?
- Has the integration of technology increased the teacher workload?
- Has the staff technical training motivated the teachers to work with the Technology Coordinator in integrating traditional lesson plans?
- Has staff technical training allowed the teachers to be self-sufficient in identifying and implementing new instructional resources and lesson plans?
- Have the network and technology equipment available to the students been reliably accessible?
- Is the software available effectively meeting learners' needs?
- Is the Student Internet/Network policy sufficiently supporting desired behavior?
- Is the Staff Internet/Network policy sufficiently supporting desired behavior?
- What administration and/or staff recommendations have been made to improve the computer curriculum?
- What administration and/or staff recommendations have been made to improve the use of technology in the core curriculum?
- What administration and/or staff recommendations have been made to improve the staff technology training?

- What School Commission recommendations have been made to improve the use of technology in the school?
- What steps will be taken to validate, prioritize, and implement any of the recommendations made as part of this evaluation process?

Measuring Technology Plan Effectiveness

The St. Joseph School computer curriculum is enhanced throughout the year as new technology ideas, standards, and resources emerge or become available to the school.

Newly identified technology goals are addressed through curriculum development and lesson integration. The technology coordinator works with the teachers to identify any necessary development that will assist in optimally integrating technology into classroom curriculum. For this reason, teachers routinely share lesson themes with the technology coordinator so that the computer curriculum frequently integrates with classroom learning.

The school administrator annually reviews and approves the school's technology budget. With input from the staff, School Commission, Principal, and 6th grade teacher; resources are acquired as appropriate to maintain our technical currency and reach our technology curriculum goals.

Measurement of technology plan effectiveness:

Kindergarten:
100% of kindergartners will be able to identify ways in which computers are used for work, school, and play.
100% of kindergartners will be able to independently launch an application from a CD and a desktop icon.
100% of kindergartners will be able to identify and close any open windows.
100% of kindergartners will be able to informally locate and type letters, as well as identify the purpose of and use the backspace, spacebar, and Enter keys.
100% of kindergartners will be able to use a graphic tool to create representational and creative pictures.
100% of kindergartners will be able to effectively use a mouse (right-click, click, drag and drop, click and drag) and keyboard to navigate computer applications.
First Grade
100% of first graders will be able to distinguish the appropriate software for the task at hand (word processor or graphic tool) and be able to independently navigate the software menu.
100% of first graders will be able to name the major hardware components of the computer system (monitor, keyboard, mouse, speakers, CD Drive).
100% of first graders will understand the concept of saving and opening previously saved work.
100% of first graders will be able to merge graphic and keyboarding skills in order to creatively illustrate a

classroom concept.
100% of first graders will be able to navigate a spreadsheet in order to enter information and interpret provided graphs in support of a classroom problem.
100% of first graders will be able to express their thoughts in a word processing document through the use of ClipArt and text formatting.
Second Grade
100% of second graders will be able to cite online privacy information safety guidelines.
100% of second graders will be able to use a child's online dictionary to research an assigned topic.
100% of second graders will be able to convert researched information into a slideshow in support of a classroom theme, complete with custom timing and transitions.
Third Grade
100% of third graders will be able to understand the "shared work" concept of using a file server and be able to navigate to and save their work onto the server during collaborative projects.
100% of third graders will be able to organize their work through the use of folders.
100% of third graders will be able to save files to project folders on their CDs, and be able to open their saved work from either the server or a personal CD.
100% of third graders will be able to use an online encyclopedia for research of an assigned topic.
100% of third graders will be able to express an idea through the use of a digital camera, web cam, or digital camcorder and insert the file into a software application.
100% of third graders will be able to use spellchecker, thesaurus, and print preview on a word processing document.
100% of third graders will be able to compare various graphic package capabilities and select the best tool for the assigned task.
Fourth Grade
100% of fourth graders will be able to size spreadsheet rows and columns, format data, and create the appropriate graph in order to esthetically display data in support of a classroom project.
100% of fourth graders will be able to write a basic formula to calculate and interpret spreadsheet information.
100% of fourth graders will be able to name at least 4 Internet domain extensions and provide the definition of each.
100% of fourth graders will be able to define the meaning of an Internet search engine and name at least 2 kid-friendly search engines.
100% of fourth graders will be able to compose and execute a keyword search for an Internet query.
100% of fourth graders will be able to evaluate a returned search query for relevance.
Fifth Grade
100% of fifth graders will be able to use various multimedia tools in support of digital projects, such as a scanner, webcam, digital camcorder, camera, and microphone and merge results into a final product.
100% of fifth graders will be able to cite 5 concepts to look for when evaluating the credibility of a website.

100% of fifth graders will be able to compose and execute a keyword phrase for an Internet search query.
100% off fifth graders will be able to explain the varying size capacity of a flash drive, a CD, a hard drive, and a network drive and select the appropriate storage media for the task at hand.
Sixth Grade
100% of sixth graders will be able to convert researched data into an electronic presentation composed of custom designs, custom animation, automatic transitions, embedded hyperlinks, and audio loops.
100% of sixth graders will be able to compare and contrast the benefits of various publishing tools and select the appropriate tool for the task at hand.
100% of sixth graders will be able to organize, analyze, and graphically display data in a workbook and interpret patterns, and trends.
100% of sixth graders will be able to independently conduct and evaluate research for an assigned topic, organize and summarize information, and present their findings in a variety of media (slideshow, digital narration, database, podcast)
100% of sixth graders will be able to use online tools to generate proper citations.
Seventh Grade
100% of seventh graders will be able to market a product, or convey a classroom topic, through the use of a web authoring tool.
100% of seventh graders will be able to enter, interpret, compare, and hypothesize workbook data through the use of Excel formulas.
100% of seventh graders will be able to verbalize several strategies for problem solving equipment and software malfunctions.
100% of seventh graders will be able to independently use an online tutorial to develop a skill or area of knowledge,
100% of seventh graders will be able to cite risks and dangers associated with social networking sites, and describe steps to prevent danger.
Eighth Grade
100% of eighth graders will be able to independently interpret project requirements and select the appropriate tools to develop a supporting technical product using various software applications (Audacity, PowerPoint, Web 2.0 tools, Photoshop Elements, video editing, etc) and
100% of eighth graders will be able to explain copyright and piracy guidelines for both educational and personal use of media files.
100% of eighth graders will be able to interpret written technical directions and apply them in order to complete a technical project using an unfamiliar software package.
100% of eighth graders will be able to convert files from one format to another for an optimal technical solution.
100% of eighth graders will be able to design an advanced search query using Boolean operators.

Additional feedback for the school technology plan effectiveness is obtained from the following forums:

- Yearly review and comparison of METS and NETS standards to existing technology curriculum by school technology coordinator, as well as review of the Common Core Curriculum Standards
- Roundtable review of current classroom technology happenings at monthly staff meetings
- Yearly technology review meeting from the School Commission
- Feedback from regularly scheduled Archdiocesan accreditation procedures
- Classroom teacher feedback relating to student ability to produce technical products in support of assignments
- Observable amount of student assistance required during open computer lab to complete assigned tasks
- Review of student performance as it relates to rubric grading of assigned technology projects
- Feedback from parents and staff of our local high schools on technical capacity of our graduating students

When unmet goals are identified internally, the administrator, School Commission, and technology coordinator meet to define resources needed and a resolution timeline. When unmet goals are identified through the Archdiocesan accreditation processes, procedures mandate that the resolution timeline be submitted to the accreditation review team. Progress is evaluated through regularly scheduled school accreditation visits, which occur on 7 year intervals.

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