
The Diocese of Spokane Technology Plan Spokane, Washington



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**A WORKING
DOCUMENT**

The Diocese Technology Committee

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Mission Statement

The Catholic Diocese of Spokane will form globally responsive servant leaders who ethically use technology to reach their potential and benefit humanity. Our mission is to form technologically literate life long learners who create, communicate, and problem solve to meet the challenges of today and prepare for those of tomorrow.

Basic Assumptions

Certain assumptions are central to the process of planning technology integration and use in the schools of the Diocese of Spokane:

- School technology plans must be integrated into all curricular areas.
- The technology goals will be implemented through a three year plan based on annual assessment of diocesan needs and progress. The plan will be flexible and dynamic and will need constant updating due to changing developments in technology.
- The teacher is the key to full utilization of technology in the educational process. Teachers control the delivery of curriculum and design experiences to meet student needs. Teachers will employ technology for expanding learning opportunities for students.
- The Diocese will provide support and staff development opportunities to assist each school with technology utilization for teaching and learning.
- Ongoing access to resources will be necessary to implement the technology plan.
- Technology will continue to develop and provide new expanded opportunities to enhance learning. The diocese and schools must be prepared and committed to stay current with advances and to replace and upgrade technology on an ongoing basis.

GOALS AND STRATEGIES

Goals of the Diocesan School Technology Plan

The Diocese views emerging technology as a catalyst for change and community growth as well as a vehicle to create future generations of life-long learners with the skills needed to compete in a global society.

Six goals were identified to achieve this mission. Strategies and actions were developed to assist the Diocese and individual schools to attain the objectives of each goal. The goals listed are to be viewed as the minimum expectation.

Goal 1 – Student learning

Students will have access and use technology to enhance learning and productivity across the curriculum.

Goal 2 – Instruction

Teachers have access and use technology to enhance instruction and manage administrative tasks.

Goal 3 – Staff Development

Staff will have access to technology inservice training and support programs.

Goal 4 – Technical Support

Each school will be responsible for providing its own technical support and maintenance of equipment.

Goal 5 – Administrative Support

All school and central office operations will use technology to support efficient and effective management and communication of information.

Goal 6 – Infrastructure Support

A variety of infrastructures will be established and maintained to enable total integration of technology throughout the Diocese and each school to maximize the school's investment.

Strategy for Using Telecommunication and Information Technology

The Diocese of Spokane has incorporated an e-mail and Internet server located at the central office. All central office employees, principals, and teachers have been given an e-mail address. Internet service is funded and provided by each individual Diocesan school. IRIS, a notification system has also been incorporated throughout the Diocese. IRIS is a internet based software application designed to improve communications between administrators and recipient for emergency or general informational communication.

Networks have allowed students and teachers to gain access to electronic resources and communication efficiently within the building, across the Diocese or around the world. Students can access their files from any location within the school and communicate with students from other Diocesan schools. Moving to web based resources will provide more universal access to documents and databases and will allow for better collaboration and sharing.

All schools have e-mail, internet access, and individual websites. Many schools have software to enrich their existing academic programs such as Grade Quick, Accelerated Reading, and Star Math. Some schools have online administrative software such as Sycamore, Ed-line, and ITBS data analysis. Due to the fact that hardware and software are constantly evolving, the hardware requirements will constantly change. Purchases should be coordinated as much as possible to allow for cost saving, maintenance and networkability.

Diocesan schools have computers within the individual classrooms and in labs, thus providing access to technology for daily work. This access promotes true integration of technology into the curriculum and teacher use as a demonstration tool in the classroom. Pods of computers in the classroom, when fully networked, are currently the most effective strategy in integrating technology into the curriculum. As schools purchase new computers, teachers' workstations have been upgraded, thus allowing teachers technology to enhance instruction and manage administrative tasks more efficiently.

The Telecommunications Act of 1996 and established e-rate represents the first comprehensive revision of the USA's communications law in more than 60 years. This law allows schools and libraries to obtain access to state of the art services and technology at a discounted rate. The Diocese is fully aware of the impact of this act has and encourages all of its schools to apply for E-Rate funds to help pay for communications costs.

PROFESSIONAL DEVELOPMENT STRATEGY

Diocese of Spokane uses technology to promote a more productive and rewarding school day for each student and teacher. To accomplish this each individual must be empowered to use the tools that technology offers. Under this premise, it is imperative that teacher training be a top priority. The Diocesan Technology plan serves as a model for schools in developing their own local technology plan as well as provides the appropriate professional development for implementation. It is the expectation that each school has a localized technology plan, which has a strong professional development component that addresses how individual schools can effectively integrate technology into their curriculum.

The goal of the Diocese is to show teachers how to use technology within their own workplace. This would include e-mail, calendar usages, grade book programs that are Internet based. Teacher should be instructed on how to publish lesson plans and daily activities for students who are absent due to illness. Training on all of the productivity tools that would be helpful and useful for teachers in their classrooms and schools must be a priority. Some Diocesan schools have selected specific days to focus on technology related professional development. Specific trainings schools have incorporated are Digital Storytelling, Project-based learning, and Differentiating Instruction with technology. Schools have also provided training for internet-based software application such as ATLAS curriculum mapping and Sycamore.

The Diocese of Spokane will consult with Educational Service District 101 (ESD 101) and Spokane Public Schools to provide technology training sessions focusing on various skill levels such as basic and advanced Word operations, power point, and excel. Training in Internet morality, safety, rights and privacy issues, will also be a focus. Other trainings will be provided on search engines and how to use the Internet in areas where it is effectual. The Diocese will also continue to provide information regarding technology offerings from other organizations.

Specific emphasis will be given to the use of technology as an integral part of existing curriculums. The Diocese will apply technology to assessing student learning and subject matter. Technology will be used as a better means for collecting and analyzing data and as a way to improve communication between student and teacher, teacher and parents, parents, students, and teachers in the entire community. The Diocesan schools are currently being provided with professional development for assessment data through Riverside as well as Rubicon International.

It is recommended that each school have a well-qualified staff member that can be called upon as a technology resource specialist/coordinator as well provide supplemental in-service training at each local school. The Diocese also recommends school staff meet with others within the Diocese who are already further along in implementing technology.

ASSESSMENT OF TELECOMMUNICATIONS SERVICES, HARDWARE, SOFTWARE, AND OTHER SERVICES NEEDED

Assessment of the telecommunications services, hardware, software, and other services that will be needed to improve education will be the responsibility of each school. Methods used for assessing the telecommunication, hardware and software needs may include:

- Checklists
- Survey/Questionnaires seeking input from students, faculty, parents, and administration
- Interviews using open-ended questions
- Focus Groups

BUDGET

Funding for staffing and curriculum needs in the schools of the Diocese of Spokane is based upon a model that is more properly referred to as parochial, rather than district-based. Funds for teacher, administration, and staff salaries are the responsibility of the individual school and parish with which the schools are affiliated. Funding for these schools is provided by a combination of tuition revenue, fundraising, and parish support. No public funds are available for the schools' operating budgets. The schools are able to utilize some federal funding designated for the improvement of student learning, such as Title programs, the E-rate program funded by the Telecommunications Act, and the federal free and reduced lunch program is utilized by those schools that have appropriate kitchen facilities. The result of the above mentioned realities are that the programs and services provided by the schools of the Diocese of Spokane are not of the scope and magnitude of those available in the public sector. Tuition, fundraising, and parish support provide the "hard monies" to fund basic operating budgets. Included in each school's budget are funds allocated annually for curriculum and for technology needs.

The Diocese of Spokane's budget funds basic telecommunications and the infrastructure supporting diocesan school e-mail.

EVALUATION

Evaluation of this plan is an ongoing process. The Diocesan Technology Committee will annually review the plan and reassess progress towards meeting the objectives outlined. The committee will also evaluate the goals and objectives as they relate to the current needs of the Diocese. The effectiveness of this plan will be evaluated using responses derived from the assessment and evaluation process. Methods used for the assessment and evaluation process may include:

- Checklists based upon intended goals and objectives
- Survey/Questionnaires seeking input from students, faculty, parents, and administration

- Interviews using open-ended questions to identify issues that must be addressed in the Technology Plan
- Focus Groups for conducting revisions of the plan.

The Technology Committee will report on the progress towards goals and bring recommendations for modifications of the plan to the Principals.

In the last three years, the Diocese has made progress toward the goals of the prior technology plan, Students have accessed and used technology in the classroom to enhance their learning and productivity. They increasingly use power point, word, and the internet. Students consistently increase their technology skills and usage. Through staff development opportunities, teachers are increasingly using technology to augment their instructional practices; however, more growth in this area is needed. An area of strength for our schools is the use of technology to support efficient and effective management and communication of information. As more funding is available, the Diocese will be more likely to attain the goals in which it strives.

Technology Standards for All Students

The technology standards for students are divided into six broad categories. Standards within each category are to be introduced, reinforced, and mastered by students. Teachers can use these standards as guidelines for planning technology-based activities in which students achieve success in learning, communication, and life skills. These standards are derived from NETS for Students 2006. For 2007 standards for students, teachers, and administrators visit www.iste.org.

Technology Standards for Students

- 1 Basic operations and concepts
 - Students demonstrate a sound understanding of the nature and operation of technology systems.
 - Students are proficient in the use of technology.
- 2 Social, ethical, and human issues
 - Students understand the ethical, cultural, and societal issues related to technology.
 - Students practice responsible use of technology systems, information, and software.
 - Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.
- 3 Technology productivity tools
 - Students use technology tools to enhance learning, increase productivity, and promote creativity.
 - Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.
- 4 Technology communications tools
 - Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
 - Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.
- 5 Technology research tools
 - Students use technology to locate, evaluate, and collect information from a variety of sources.
 - Students use technology tools to process data and report results.
 - Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.
- 6 Technology problem-solving and decision-making tools
 - Students use technology resources for solving problems and making informed decisions.
 - Students employ technology in the development of strategies for solving problems in the real world.

*Catholic Diocese of Spokane
Instructional Technology 2010*

Grade Level Skills

Kindergarten

1. Basic operations and concepts

Students will:

- Name basic computer parts (e.g. monitor, computer, keyboard, mouse, printer)
- Identify keyboard letters and numbers
- Use mouse skills to point, click, double click, and click and drag
- Launch/quit applications
- Use a previously set-up CD-ROM

2. Social, ethical, and human issues

Students will:

- Demonstrate responsible treatment of equipment/applications
- Demonstrate positive social behavior while using technology
- Understand consequences for misuse of technology
- Demonstrate behavior consistent with the school's acceptable use policy,
- Use appropriate language and behavior when communicating with others

3. Technology productivity tools

Students will:

- Use computer to introduce basic paint, text and graphic manipulation tools programs as directed by the teacher

4. Technology communication tools

Students will:

- Use bookmarks and or/hyperlink to access the Internet

5. Technology research tools

Students will:

- Communicate awareness that technology can be used for information gathering

6. Technology problem solving and decision making tools

Students will:

- Communicate awareness that technology can be used to provide resources for problem-solving and decision making
- Use applications/electronic resources to make a decision or construct new knowledge

First Grade

1. Basic operations and concepts

Students will:

- Name basic computer parts and media types (e.g. monitor, computer, keyboard, mouse, printer, CD-ROM, flash drive)
- Use age-appropriate computer terminology (e.g. window, menu, login, icon)
- Demonstrate basic computer operations (e.g. start up, login, log-off)
- Identify keyboard non-alphanumeric keys, letters and numbers
- Use mouse skills to point, click, double click, and click and drag
- Open/close windows
- Launch/quit applications
- Use menus and/or toolbars as needed
- Print a document
- Launch an application from a CD-ROM
- Insert, access, and eject CD-ROMs

2. Social, ethical, and human issues

Students will:

- Demonstrate responsible treatment of equipment/applications
- Demonstrate positive social behavior while using technology
- Communicate awareness of conservation issues (e.g. paper, ink)
- Understand consequences for misuse of technology
- Demonstrate behavior consistent with the school's acceptable use policy
- Use appropriate language and behavior when communicating with others
- Recognize the risks of providing personal information on the Internet

3. Technology productivity tools

Students will:

- Use computer applications as directed by the teacher
- Create, save, and print a variety of simple documents

4. Technology communication tools

Students will:

- Use the Internet to access information
- Communicate awareness of telecommunications tools (e.g. Internet, email)

5. Technology research tools

Students will:

- Demonstrate awareness that technology can be used for information gathering
- Explore teacher-designated electronic resources
- Access the Internet and use teacher-reviewed bookmarks and/or links

6. Technology problem solving and decision making tools

Students will:

- Communicate awareness that technology can be used to provide resources for problem-solving and decision making
- Use applications/electronic resources to solve a problem or make a decision

Second Grade

1. Basic operations and concepts

Students will:

- Use age-appropriate computer terminology (e.g. computer parts, desktop features)
- Demonstrate basic computer operations and skills (e.g. start up, login, logoff, shutdown, launch and quit applications, use of mouse and keyboard)
- Use menus and/or toolbars as needed
- Demonstrate awareness of basic keyboarding technique (e.g. posture, position, two hands on keyboard)
- Insert, access, and eject CD-ROMs

2. Social, ethical, and human issues

Students will:

- Demonstrate responsible treatment of equipment/applications
- Demonstrate positive social behavior while using technology
- Demonstrate behavior consistent with the school's acceptable use policy
- Use appropriate language and behavior when communicating with others
- Demonstrate cooperative learning skills while using technology
- Communicate awareness of copyright/plagiarism issues
- Communicate awareness of technology conservation issues (e.g. paper, power)
- Understand consequences for misuse of technology
- Recognize the risks of providing personal information on the Internet

3. Technology productivity tools

Students will:

- Use computer applications as directed by the teacher
- Create, save, and print a variety of simple documents
- Create, save and share a presentation or publication

4. Technology communication tools

Students will:

- Communicate awareness of telecommunications tools (e.g. Internet, email)
- Share thoughts, ideas, and stories using technology
- Create and share one or more curriculum-related presentations or publications
- Show or explain completed work, with assistance (e.g. slide show with voice, printed documents/drawings for class book bulletin board, posted work on the Internet)

5. Technology research tools

Students will:

- Access the Internet and use teacher-reviewed bookmarks and/or links
- Use keyword searches for accessing and retrieving information

6. Technology problem solving and decision making tools

Students will:

- Communicate awareness that technology can be used to provide resources for problem-solving and decision-making
- Use applications/electronic resources to solve a problem, make a decision, or construct new knowledge

Third Grade

1. Basic operations and concepts

Students will:

- Use age-appropriate computer terminology (e.g. computer parts, desktop features, etc.)
- Demonstrate desktop management skills (e.g. open, close, maximize, minimize windows, use task bar)
- Demonstrate basic computer operations and skills (e.g. start up, login, logoff, shutdown, launch and quit applications, use of mouse and keyboard)
- Use menus, toolbars, and views in a variety of applications
- Demonstrate proper use of a variety of peripheral devices as required by projects (e.g. scanners, cameras, flash drives)
- Insert, access, and eject CD-ROMs
- Name, save, and print documents to designated locations
- Demonstrate improved efficiency in home row keyboarding technique
- Organize personal folders and files

2. Social, ethical, and human issues

Students will:

- Demonstrate responsible treatment of equipment/applications
- Demonstrate positive social behavior while using technology
- Demonstrate cooperative learning skills while using technology
- Demonstrate behavior consistent with the school's acceptable use policy
- Use appropriate language and behavior when communicating with others
- Communicate awareness of copyright/plagiarism issues
- Communicate awareness of technology conservation issues (e.g. paper, power)
- Understand consequences for misuse of technology
- Communicate awareness of technology use outside the school environment
- Recognize the risks of providing personal information on the Internet

3. Technology productivity tools

Students will:

- Use computer applications as directed by the teacher
- Create, save, and print a variety of documents
- Create, save and share a presentation or publication
- Use a multimedia authoring tool to create a presentation
- Use technology to create graphs to share information
- Use copy and paste features of various applications
- Import graphics, clip art, and/or original art work into documents and multimedia presentations from a variety of sources
- Edit graphics for use in various applications
- Demonstrate use of an appropriate tool to create and share a presentation and publication
- Demonstrate use of basic design principles in multimedia presentations

4. Technology communication tools

Students will:

- Communicate awareness of telecommunications tools (e.g. Internet, email)
- Share thoughts, ideas, and stories using technology
- Create and present one or more curriculum-related multimedia projects to an audience
- Show or explain completed work, with assistance (e.g. slide show with voice, printed documents/drawings for class book bulletin board, posted work on the Internet)

5. Technology research tools

Students will:

- Access and use Internet sites to locate and record information and use teacher-reviewed bookmarks and/or links
- Use effective searches for information retrieval (e.g. keyword, author, title, natural language)
- Use grade-level appropriate means to cite information sources

6. Technology problem solving and decision making tools

Students will:

- Determine when technology is an appropriate choice for problem-solving
- Use technology applications/electronic resources to solve a problem, make a decision, or construct new knowledge
- Use technology to facilitate student-directed collaborative problem-solving activities

Fourth Grade

1. Basic operations and concepts

Students will:

- Use appropriate computer terminology
- Demonstrate intermediate computer operations and skills (e.g. short cut keys, customize tool bar, right click)
- Demonstrate proper use of a variety of peripheral devices as required by projects
- Demonstrate improved efficiency in home row keyboarding technique
- Organize personal folders and files

2. Social, ethical, and human issues

Students will:

- Demonstrate responsible treatment of equipment/applications
- Demonstrate positive social behavior while using technology
- Demonstrate behavior consistent with the school's acceptable use policy
- Use appropriate language and behavior when communicating with others
- Demonstrate cooperative learning skills while using technology
- Use electronic resources within copyright limitations
- Demonstrate technology conservation (e.g. paper, power, ink, data storage)
- Understand consequences for misuse of technology
- Communicate awareness of technology uses in education, business and industry
- Recognize the risks of providing personal information on the Internet
- Recognize it is very difficult to know the true identity of the person with whom you are communicating on the Internet
- Have an awareness of cyber bullying and demonstrate strategies for addressing it

3. Technology productivity tools

Students will:

- Use computer applications as directed by the teacher
- Create, save, retrieve, edit, format, and print a variety of documents
- Use a multimedia authoring tool to create and share a presentation
- Use technology to facilitate a collaborative writing experience
- Use copy and paste features of various applications
- Import graphics, clip art, and/or original art work into documents and multimedia presentations from a variety of sources
- Edit graphics for use in various applications
- Demonstrate use of basic design principles in multimedia presentations

4. Technology communication tools

Students will:

- Share thoughts, ideas, and stories using technology
- Create and present one or more curriculum-related multimedia projects
- Show or explain completed work, with assistance (e.g. slide show with voice, printed documents/drawings for class book bulletin board, posted work on the Internet)

5. Technology research tools

Students will:

- Access and use Internet sites to locate and record information and use bookmarks and/or links
- Use a research process that includes using electronic resources
- Use effective searches for information retrieval (e.g. keyword, author, title, natural language)
- Evaluate accuracy and relevance of information gathered from electronic resources
- Use grade-level appropriate means to cite information sources

6. Technology problem solving and decision making tools

Students will:

- Determine when technology is an appropriate choice for problem-solving
- Use applications/electronic resources to solve a problem, make a decision, or construct new knowledge
- Use technology resources to solve a problem or make a decision (e.g. computers, calculators)
- Use technology to facilitate student-directed collaborative problem-solving activities

Fifth Grade

1. Basic operations and concepts

Students will:

- Use appropriate computer terminology
- Demonstrate intermediate computer operations and skills (e.g. short cut keys, customize tool bar, right click, document formatting, copy/paste, working between programs)
- Use menus, and toolbars as needed
- Demonstrate proper use of a variety of peripheral devices as required by projects
- Name, save, and print documents to designated locations
- Demonstrate improved efficiency in keyboarding technique
- Organize personal folders and files
- Demonstrate basic troubleshooting skills

2. Social, ethical, and human issues

Students will:

- Demonstrate responsible treatment of equipment/applications
- Demonstrate positive social behavior while using technology
- Demonstrate behavior consistent with the school's acceptable use policy
- Use appropriate language and behavior when communicating with others
- Demonstrate cooperative learning skills while using technology
- Demonstrate awareness of copyright/plagiarism issues
- Demonstrate technology conservation (e.g. paper, power, ink)
- Understand consequences for misuse of technology
- Communicate awareness of technology uses in education, business and industry
- Communicate awareness of malicious software (e.g. viruses, worms, spy ware)
- Recognize the risks of providing personal information on the Internet
- Recognize it is very difficult to know the true identity of the person with whom you are communicating on the Internet
- Have an awareness of cyber bullying and demonstrate strategies for addressing it

3. Technology productivity tools

Students will:

- Use computer programs as directed by the teacher
- Open and use a template
- Use a multimedia authoring tool to create and share a presentation/publication
- Use technology to create graphs to share information
- Use technology to facilitate a collaborative writing experience
- Import graphics, clip art, and/or original art work into documents and multimedia presentations from a variety of sources
- Edit graphics for use in various applications
- Demonstrate use of basic design principles in multimedia presentations

4. Technology communication tools

Students will:

- Share thoughts, ideas, and stories using technology
- Create and present one or more curriculum-related multimedia projects
- Show or explain completed work, with assistance (e.g. slide show with voice, printed documents/drawings for class book bulletin board, posted work on the Internet)

5. Technology research tools

Students will:

- Access and use Internet sites to locate and record information and use bookmarks and/or links
- Use a research process that includes using electronic resources
- Use effective keyword, series, author, title, and natural language searches for information retrieval
- Evaluate accuracy and relevance of information gathered from electronic resources
- Use effective searches for information retrieval (e.g. keyword, author, title, natural language)
- Use grade-level appropriate means to cite information sources

6. Technology problem solving and decision making tools

Students will:

- Determine when technology is an appropriate choice for problem-solving
- Use applications/electronic resources to solve a problem, make a decision, or construct new knowledge
- Use technology to facilitate student-directed collaborative problem-solving

Sixth -Eighth Grade

1. Basic operations and concepts

Students will:

- Use appropriate computer terminology
- Demonstrate intermediate computer operation and file organization skills
- Use menus and toolbars as needed
- Demonstrate proper use of a variety of peripheral devices as required by projects
- Name, save, and print documents to designated locations
- Demonstrate improved efficiency in keyboarding technique
- Organize personal folders and files
- Routinely use basic troubleshooting skills for problems inherent to everyday use of technology
- Make informed choices among technology resources

2. Social, ethical, and human issues

Students will:

- Demonstrate responsible treatment of equipment/applications
- Demonstrate positive social behavior while using technology
- Demonstrate behavior consistent with the school's acceptable use policy
- Use appropriate language and behavior when communicating with others
- Demonstrate cooperative learning skills while using technology
- Demonstrate conservation of electronic storage space (e.g. managing file size, purging out-dated files, etc.)
- Demonstrate an awareness of the potential uses and risks of relying on current or emerging technologies
- Advocate legal and ethical behavior while using technology among peers, family, and the community
- Communicate an awareness of the consequences for misuse of technology resources
- Respect the principles of copyright/plagiarism issues when using technology
- Routinely demonstrate conservation of technology resources (e.g. paper, power, ink)
- Communicate the relevance, bias and appropriateness of electronic resources
- Communicate knowledge of changes in technology and the effect those changes have on education, business and industry
- Recognize the risks of providing personal information on the Internet
- Recognize it is very difficult to know the true identity of the person with whom you are communicating on the Internet
- Have an awareness of cyber bullying and demonstrate strategies for addressing it

3. Technology productivity tools

Students will:

- Use technology to facilitate personal productivity, group collaboration, and problem-solving activities
- Create, open and use a template
- Create, save, share and print a variety of documents for presentation/ publication
- Use a multimedia authoring tool to create and share a presentation
- Use spread sheets to support learning as directed by the teacher
- Use technology to create graphs to share information

- Use technology to facilitate a collaborative writing experience
- Import graphics, clip art, and/or original art work into documents and multimedia presentations from a variety of sources
- Create graphs to share and analyze information
- Create an appropriate graphic organizer for planning a presentation
- Apply principles of design and formatting techniques to presentations and documents
- Select appropriate media and software to compile artifacts for electronic student documentation (e.g. portfolio or project)
- Merge files or features from one program into another

4. Technology communication tools

Students will:

- Share thoughts, ideas, and stories using technology
- Create and present one or more curriculum-related multimedia projects
- Show or explain completed work, with assistance (e.g. slide show with voice, printed documents/drawings for class book bulletin board, posted work on the Internet)
- Use appropriate language and behavior when communicating with others
- Use technology to share information/knowledge with an audience beyond the classroom
- Select and organize appropriate artifacts to share in an electronic student portfolio or project

5. Technology research tools

Students will:

- Access and use Internet sites to locate and record information and use bookmarks and/or links
- Use a research process that includes using electronic resources
- Use search tools to gather information
- Use a variety of electronic resources to locate and record information and visual images
- Use effective searches for information retrieval (e.g. keyword, author, title, natural language)
- Use Boolean operators (where effective) when performing searches
- Evaluate accuracy and relevance of information gathered from electronic resources
- Use grade-level appropriate means to cite information sources
- Demonstrate the effective use of a database to gather resources
- Apply research skills to gather information from a variety of print and non-print sources.
- Evaluate accuracy, bias, appropriateness and relevance of information gathered from the Internet as it relates to a research topic
- Synthesize and share research findings and conclusions in a technology rich presentation
- Explain common elements of a website URL

6. Technology problem solving and decision making tools

Students will:

- Determine when technology is an appropriate choice for problem-solving
- Use technology to facilitate student-directed collaborative problem-solving activities

