

2009-2010 Technology Plan

School/System: St. Joseph Catholic School, Marion, IA

First Class ID: DBQE39

Section 1 - Integration of NETs Technology Standards for Teachers - Check “√” all teacher standards and indicators which teachers will be expected to use/demonstrate during the 2009/10 academic year, this listing of checked standards should be growing annually and should eventually include all the standards. Describe the staff development plan and evaluation criteria for teacher technology growth areas for the 2009/10 school years.

1.1 Technology Operation and Concepts

Teachers demonstrate a sound understanding of technology operations and concepts. Teachers:

- A. demonstrate introductory knowledge, skills, and understanding of concepts related to technology (as described in ISTE 's Technology Standards for Students).
- B. demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

1.2 Planning and Designing Learning Environments and Experiences

Teachers plan and design effective learning environments and experiences supported by technology.

Teachers:

- A. design developmentally appropriate learning opportunities that apply technology enhanced instructional strategies to support the diverse needs of learners.
- B. apply current research on teaching and learning with technology when planning learning environments and experiences.
- C. identify and locate technology resources and evaluate them for accuracy and suitability.
- D. plan for the management of technology resources within the context of learning activities.
- E. plan strategies to manage student learning in a technology- enhanced environment.

1.3 Teaching, Learning and the Curriculum

Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning. Teachers:

- A. facilitate technology-enhanced experiences that address content standards and student technology standards.
- B. use technology to support learner-centered strategies that address the diverse needs of students.
- C. apply technology to develop students 'higher order skills and creativity.
- D. manage student-learning activities in a technology-enhanced environment.

1.4 Assessment and Evaluation

Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies.

Teachers:

- A. apply technology in assessing student learning of subject matter using a variety of assessment techniques.
- B. use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.
- C. apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning, communication, and productivity.

1.5 Productivity and Professional Practice

Teachers use technology to enhance their productivity and professional practice. Teachers:

- A. use technology resources to engage in ongoing professional development and lifelong learning.
- B. continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.
- C. apply technology to increase productivity.
- D. use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.

1.6 Social, Ethical, Legal, and Human Issues.

Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PreK-12 schools and apply those principles in practice. Teachers:

- A. model and teach legal and ethical practice related to technology use.

- B. apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.
- C. identify and use technology resources that affirm diversity
- D. promote safe and healthy use of technology resources.
- E. facilitate equitable access to technology resources for all students.

Supporting Staff Development Plan:

Explain plan –

1. Technology inservices by the Technology Coordinator and members of the school Technology Committee to instruct teachers and to provide them practice on the topics of: utilizing the communication features of the new school web site; operation of Windows XP; using Microsoft Office (Word, Excel, Power Point); using Microsoft Office Outlook; addressing hardware issues; utilizing Rubistar, Edutopia, and the Iowa AEA Online Resources; operation of a digital still camera, digital video camera, and scanner; utilizing on-line blogging and wikis for communication and education; and utilizing the applications of Inspiration, iPhoto, iTunes, iMovie, Google Earth, Picasa3, and Windows Movie Maker.
2. Technology inservice sessions conducted by the Technology Coordinator and members of the Technology Committee to help teachers to use their laptops, use PowerTeacher proficiently, and to instruct them in the use of any other applications or resources that they find useful.
3. Collaboration among classroom teachers to integrate technology into the curriculum through the utilization of educational CD's, internet-based lessons, digital movies, slide shows, and spreadsheets and graphs in all content areas, at all grade levels, and that empower learners with diverse backgrounds, characteristics, and abilities by using technology to support learner centered strategies that address the diverse needs of all students.
4. Instruct teachers on acceptable ways to reference information obtained from electronic media including CD's and internet sites; current copyright laws involving music, sounds, text, and graphics; legal and ethical use of the internet and e-mail including privacy issues; and how to have their students conduct internet searches that yield appropriate, accurate, and reliable information.

Evaluation Criteria to be used to determine if the checked “√” standards and indicators have been reached:

1. Teachers will compile and document use of technological applications in their lesson planning, student activities and projects, and communications with parents, students, faculty and staff, and the larger community. This compilation and documentation will take place through the teacher's Iowa Teaching Standards Professional Portfolio, their lesson planning book, and regular faculty technology surveys.
2. Evaluation of the utilization of educational CD's and internet-based lessons will occur through the teacher's Iowa Teaching Standards Professional Portfolio, their lesson planning book, and regular faculty technology surveys.
3. Evaluation of the effectiveness of the training mentioned in #4 in the previous subsection will be determined by the evaluation of student work involving the use of technology by the classroom teacher (and the Principal, where possible.)

Section 2 - Integration of NETs Technology Standards for Students: The Next Generation:

“What students should know and be able to do to learn effectively and live productively in an increasingly digital world.” Check “√” the student technology standards/indicators that will be planned for and integrated into the appropriate levels of student learning for the 2009/10 school year; check only those standards for grades present at this site. The listing of checked standards should be growing annually and should eventually include all the standards. After each level, briefly describe in the shaded area some of the ways (3-5) the standards will be demonstrated/met by students (technology standards should be integrated throughout the curriculum).

All students should have opportunities to demonstrate the following performances. (Numbers in parentheses following each performance indicator refer to the standards category to which the performance is linked).

Technology Foundation Standards 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 & 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.

Prior to completion of Grade 2, students will:

1. Illustrate and communicate original ideas and stories using digital tools and media-rich resources. (1,2)
2. Identify, research, and collect data on an environmental issue using digital resources and propose a developmentally appropriate solution. (1,3,4)
3. Engage in learning activities with learners from multiple cultures through e-mail and other electronic means. (2,6)
4. In a collaborative work group, use a variety of technologies to produce a digital presentation or product in a curriculum area. (1,2,6)
5. Find and evaluate information related to a current or historical person or event using digital resources. (3)
6. Use simulations and graphical organizers to explore and depict patterns of growth such as the life cycles of plants and animals. (1,3,4)
7. Demonstrate safe and cooperative use of technology. (5)
8. Independently apply digital tools and resources to address a variety of tasks and problems. (4,6)
9. Communicate about technology using developmentally appropriate and accurate terminology. (6)
10. Demonstrate the ability to navigate in virtual environments such as electronic books, simulation software, and Web sites. (6)

Students in grades K-2 will demonstrate the above standards to the computer teacher by:

Explain plan –

1. Manipulating the mouse and keyboard through the use of educational games on CD and the Internet.
2. Researching information in small cooperative groups from Worldbook Online, Ask Jeeves, ClipArt.com, and EBSCOhost in order to create products with text, photos, clip art, and/or original computer artwork.
3. Creating desktop published artwork and diagrams with captions, and picture books of longer length.
4. Exploring educational web sites cooperatively that relate to topics that are being studied in other subjects.

Prior to completion of Grade 5, students will:

1. Produce a media-rich digital story about a significant local event based on first-person interviews. (1,2,3,4)
2. Use digital-imaging technology to modify or create works of art for use in a digital presentation. (1,2, 6)
3. Recognize bias in digital resources while researching an environmental issue with guidance from the teacher. (3,4)
4. Select and apply digital tools to collect, organize, and analyze data to evaluate theories or test hypotheses. (3,4,6)
5. Identify and investigate a global issue and generate possible solutions using digital tools and resources (3,4)
6. Conduct science experiments using digital instruments and measurement devices. (4,6)
7. Conceptualize, guide, and manage individual or group-learning projects using digital planning tools with teacher support. (4,6)
8. Practice injury prevention by applying a variety of ergonomic strategies when using technology. (5)

9. Debate the effect of existing and emerging technologies on individuals, society, and the global community. (5,6)
10. Apply previous knowledge of digital technology operations to analyze and solve current hardware and software problems. (4,6)

Students in grades 3-5 will demonstrate the above standards by:

Explain plan –

1. Researching information and obtaining graphics individually and in small cooperative groups from Worldbook Online, Ask Jeeves, Google, ClipArt.com, AP Multimedia Archive, netTrekker d.i., AccuWeather.com, EBSCOhost, Atomic Learning, and Discovery Education Streaming in order to create reports and slide show presentations with text, photos, clip art, music, sounds, and/or original computer artwork.
2. Creating and manipulating spreadsheets, graphs, and databases to store and illustrate data.
3. Word processing poems, stories, letters, essays, and spelling sentences in conjunction with other courses.
4. Learning how to proficiently operate a digital still camera and a digital video camera for individual, small group, and entire class projects and presentations.
5. Using secure passwords for our local area network, PowerSchool communication and gradebook web program, and the new school web site.
6. Keyboarding efficiently and effectively at an age-appropriate speed and with minimal errors.

Prior to completion of Grade 8, students will:

1. Describe and illustrate a content-related concept or process using a model, simulation, or concept-mapping software. (1,2)
2. Create original animations or videos documenting school, community, or local events. (1,2,6)
3. Gather data, examine patterns, and apply information for decision making using digital tools and resources. (1,4)
4. Participate in a cooperative learning project in an online learning community. (2)
5. Evaluate digital resources to determine the credibility of the author and publisher and the timeliness and accuracy of the content. (3)
6. Employ data-collection technology such as probes, handheld devices, and geographic mapping systems to gather, view, analyze, and report results for content-related problems. (3,4,6)
7. Select and use the appropriate tools and digital resources to accomplish a variety of tasks and to solve problems. (3,4,6)
8. Use collaborative electronic authoring tools to explore common curriculum content from multicultural perspectives with other learners. (2,3,4,5)
9. Integrate a variety of file types to create and illustrate a document or presentation. (1,6)
10. Independently develop and apply strategies for identifying and solving routine hardware and software problems. (4,6)

Students in grades 6-8 will demonstrate the above standards by –

Explain plan –

1. Following a list of trouble-shooting tips for common hardware, software, and printing problems.
2. Using secure passwords for our local area network, PowerSchool communication and gradebook web program, and the new school web site.
3. Researching information individually and in small cooperative groups from Worldbook Online, Ask Jeeves, Google, ClipArt.com, AP Multimedia Archive, netTrekker d.i., AccuWeather.com, MarcoPolo, EBSCOhost, Atomic Learning, Discovery Education Streaming, and other useful Internet sites in order

to create reports and slide show presentations with text, photos, clip art, music, sounds, and/or original computer artwork.

4. Creating and manipulating spreadsheets, graphs, and databases to store and illustrate data.
5. Word processing research papers with bibliographies and title pages correctly and with minimal errors.
6. Word processing business letters (open punctuation, block format) correctly and with minimal errors.
7. Learning how to proficiently utilize digital photo, music, and video editing software (i.e. iPhoto, iTunes, and iMovie) to create curriculum-integrated projects.
8. Keyboarding efficiently and effectively at an age-appropriate speed and with minimal errors.
9. Word processing poems, stories, letters, essays, and spelling sentences in conjunction with other courses.
10. Learn how to design web pages using our new school web site, wikis, AppleWorks, and Word.

Section 3 - Space, Hardware, and Connectivity Plans - Include plans/next steps for implementing each of the following areas for the 2009/10 school year in the gray space provided behind each statement.

On-going implementation of the local Media, Library, Technology Center focus – Conduct a power survey of the Technology Lab and the Library to see if they can support air conditioning. Upgrade TV/VCR/DVD Player units as needed. Install a unit for remote connectivity to the projector in the Technology Lab.

Hardware Focus (maintenance, purchase, redeployment, mobile, wireless, handheld, etc.) – Continue to purchase new desktop computers for the PreK - 8 classrooms annually. Upgrade operating system software and application software as needed. Continue to donate older computers and monitors to school families, Goodwill, or for recycling of components. Investigate grant opportunities to purchase another classroom set of laptop computers with wireless capability for student use. Investigate on-line backup of our file server. Purchase an additional digital video camera and additional digital still cameras. Investigate acquiring multimedia projectors to be mounted to the ceiling of every classroom.

Networking/Internet Access (direct internet access for all students and staff): – Investigate upgrading Internet speed and throughput (currently have Qwest DSL with up to 6 MB download speed with a VPN connection to Grant Wood AEA). Increase the speed of the VPN connection to our file server.

Faculty and student expectations for learning and integration of the Iowa AEA online resources - In all curricular areas students will research information individually and in small cooperative groups from Worldbook Online, ClipArt.com, AP Multimedia Archive, netTrekker d.i., AccuWeather.com, EBSCOhost, Atomic Learning, and Discovery Education Streaming in order to create reports, research projects, and slide show presentations with text, photos, clip art, music, sounds, and/or original computer artwork. Teachers in all curricular areas are expected to use these online resources in their lesson designs and to promote their use among their students' learning.

Internet Filtering Software/Service, which is used (FCC's Children's Internet Protection Act [CIPA]), indicate/describe program/service used: - X-Stop by 8e6 Technologies through Grant Wood AEA is currently used on every computer in our school with Internet. Investigate other Internet content filtering software and/or devices for future years.

Usage of the Iowa Communication Network (ICN) for both student learning and staff development – Teachers, administrators, and staff occasionally attend ICN inservices at Xavier High School, other local

schools, and Grant Wood AEA. Students occasionally have interactive discussions with authors and other experts on a variety of topics through the ICN.

Ongoing local implementation of PowerSchool: Plan/next steps – Utilization of added features in newer versions of PowerSchool by students, parents, teachers, and administration.

Section 4 - Technology Budget - Complete the technology expense budget sheet on the last page of this plan; **ONLY** include dollar amounts and dollar equivalencies for items related to the technology program/plan for the 2009/10 school year at the local site. Each line item should include only the moneys/services related to this technology plan. Items to include but not limited to: Technology Trainers Program expenses and substitute fees, purchase of hardware and software, security systems, filtering fees/charges, ICN charges, frame relay charges, service contracts for any technology related issue, staff development, etc. the plan should reflect all anticipated expenses from fund raisers and parent /booster organizations which is used to support the technology program/plan for the 2009/10 school year.

Instructions to Complete Budget Spreadsheet - To access the budget spreadsheet double click anywhere on the chart below. A new spreadsheet will open with the title Worksheet in E99_TechPlan0910. Enter your budget figures on this new worksheet. Your figures will automatically be entered on the budget form below. There's no need to save the Worksheet in E99_TechPlan0910. Be sure to save your E99_TechPlan0910.

USF √ = Add a "√" (option v) in column A on the Worksheet in E99_TechPlan0910 for any service/item which will be covered in part by USF discount; a "√/" indicates that the local sites portion of this service is budgeted for in 2009/10.

USF	Series/Number	Category/Line Item	PK-12
	1100/1103	Instruction/Salaries - Professional	\$ 20,590.00
	1100/1107	Instruction/Salaries – Teacher Aides	
X	1100/1110	Instruction/Electronic Media/Internet Fees	\$ 755.28
	1100/1137	Instruction/AV/Technology Aids (Software)	\$ 7,965.00
	1100/1148	Instruction/In-Service/Staff	
	1100/1160	Instruction/Other	
		Series 1100 Totals	\$ 29,310.28
	1200/1216	Administration/Administrative Software/Security	
	1200/1220	Administrative/Dues and Subscriptions	\$ 672.00
	1200/1271	Administration/Other	
		Series 1200 Totals	\$ 672.00
X	1300/1350	Maintenance/Telephone Pager/Cell Phone	\$ 2,544.60
	1300/1350	Maintenance/Frame Relay/ICN Rental Fees	
	1300/1358	Maintenance/Cable Network Fees	
		Series 1300 Totals	\$ 2,544.60
	1700/1710	Capital Outlay/Furniture and Equipment	\$ 5,223.00
	1700/1711	Capital Outlay/Technology Hardware	
	1700/1721	Capital Outlay/Other	
		Series 1700 Totals	\$ 5,223.00
		Expense Totals	\$ 37,749.88