Technology Standards Articulation by Grade

Fourth Grade

**STRAND 1: Basic Computer Operations and Concepts**

Every student will understand the operation and function of current technology and become proficient in its use.



**Concept 1: Communicate about technology using appropriate and accurate terminology.**

Students will:

B 1. Identify and use basic computer components, including input and output devices (e.g. mouse, monitor, keyboard, storage devices, cursor, printer, headphones, microphone, digital camera, USB drive)

B 2. Use basic appropriate technology vocabulary (e.g. desktop, monitor, keyboard, mouse, start, logoff, print, click and double-click, backspace, delete, maximize, minimize, icons, taskbar, open and close)

B 3. Use applications, folders, hard drive, recycle bin, network folder, document icons

B 4. Recognize the purpose of basic file menu options (e.g. new, open, save, save as, quit, exit, print, print preview, undo, and redo etc.)



**Concept 2: Computer Access**

Students will:

B 1. Power on/power off computer

B 2. Login/logout of computer/network

B 3. Demonstrate proper use/handling of computer drives and peripherals

B 4. Open and quit an application



**Concept 3: Input Devices**

Students will:

B 1. Navigate with a pointing device (e.g. use of drop down menus, use of vertical and horizontal scrolling, ability to choose options within a program)

B 2. Use left-click mouse function

B 3. Use double-click mouse function

B 4. Use right-click mouse function



**Concept 4: Computer Navigation**

Students will:

B 1. Locate, launch and exit software applications using icons or shortcuts that are appropriate for the designed task (e.g. local and network)

Technology Standards Articulation

Fourth Grade

B 2. Use file management to create, locate and save files from local and network drives

B 3. Perform simple editing functions (e.g. copy, paste, spell check, and paragraph setup)

B 4. Navigate using browser, address bar, refresh, forward, back, URL, stop, home, search, link, etc.

B 5. Open and use multiple programs, windows, and/or browser tools simultaneously



**Concept 5: Output Devices**

Students will:

B 1. Print independently choosing printer, (e.g. local, network, color, etc.), quality, number of pages, format



**Concept 6: Media Resources**

Students will:

B 1. Operate interactive white board

B 2. Operate a digital camera



**Concept 7: Troubleshoot Systems and Applications**

Students will:

B 1. Apply strategies for identifying and solving routine frozen screens that occur in everyday use

B 2. Select technology tools and software to solve problems

B 3. Perform undo/redo function

B 4. Use guess and check strategies

11/12/2011 2

Technology Standards Articulation

Fourth Grade

**STRAND 2: Digital Citizenship**

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



**Concept 1: Develop Positive Technology-Related Behaviors and Attitudes**

Students will:

B 1. Follow directions when using computers and peripherals

B 2. Work collaboratively with others

B 3. Assist others when needed

B 4. Complete tasks as assigned

B 5. Respect the rights of others

B 6. Recognize how technology is used in today’s world



**Concept 2: Acceptable Use**

Students will:

B 1. Use school network and Internet ethically and appropriately

B 2. Demonstrate ethical behaviors when using technology (e.g. Internet, Cell Phone)

B 3. Handle external media carefully (e.g.cd, dvd etc...)

B 4. Demonstrate correct and responsible use and care of technology

B 5. Follow school’s Acceptable Use Policy (AUP) and know the consequences of noncompliance

B 6. Understand and abide by laws and penalties, pertaining to copyright and intellectual property including duplication of text and audio files

B 7. Understand the ethical implications of plagiarism and avoid its use



**Concept 3: Internet Personal Safety**

Students will:

B 1. Recognize and understand responsible cyber-community citizenship (e.g. Club Penguin and Webkinz, or similar websites)

B 2. Understand and practice responsible use of personal safety (e.g. password, personal and family information)

B 3. Recognize and understand the use of technology as a way to communicate with others and access information for learning

B 4. Understand proper netiquette when communicating with others online

B 5. Practice positive attitudes and understand how cyber-bullying affects others

11/12/2011 3

Technology Standards Articulation

Fourth Grade

**STRAND 3: Technology Tools that Promote Creativity and Innovation**

Every student will demonstrate creative thinking, construct knowledge and develop innovative products and processes using technology.



**Concept 1: Experience a variety of software and online applications to complete innovative products and processes.**

Students will:

B 1. Use appropriate software application(s) to complete tasks (e.g. Kid Pix, Power Point, Paint, Word Processing)

B 2. Experiment with various types of multimedia resources to help complete curriculum tasks (e.g. text, color, design, transitions, animation, audio/sound, video, etc.)

B 3. Illustrate knowledge and understanding of curriculum using animation, photo-editing, word processing, spreadsheet, or multimedia software.



**Concept 2: Keyboarding**

Students will:

B 1. Locate, identify and use A-Z and 0-9 keys

B 2. Locate special keys (e.g. enter, spacebar, escape, tab key, arrow keys, home key, shift, caps lock, num lock, delete and backspace keys)

B 3. Locate and utilize keyboard shortcuts (e.g. Esc, Ctrl, Alt, Del, and function keys)

B 4. Use correct home row hand positions, fingering and posture



**Concept 3: Word Processing**

Students will:

B 1. Use basic word processing skills to enhance the writing process

B 2. Use clip art to illustrate concepts and ideas

B 3. Identify, locate and practice terms and concepts related to word processing (e.g. toolbars, alignment, font style, font size, font color, margins, etc.)

B 4. Use word processing skills to format text (e.g. centering, spell check, thesaurus)

B 5. Be able to open, create, delete, copy, paste, save, locate and/or print a file/document

B 6. Be able to import/export a document file or folder



**Concept 4: Skill Building with Spreadsheets**

Students will:

B 1. Identify and define terms and concepts related to spreadsheets (e.g. sort, row, column, cell address, classify, line-graphics, etc.)

11/12/2011 4

Technology Standards Articulation

Fourth Grade

B 2. Be able to enter data into cells of spreadsheet program and perform simple calculations

B 3. Be able to create a spreadsheet and display results in a graph using given data



**Concept 5: Multimedia**

Students will:

B 1. Identify and define terms and concepts related to multimedia (e.g. transition, slides and graphics)

B 2. Utilize draw / paint software, to create original works

B 3. Locate, import and adjust graphics to enhance original works of self-expression

B 4. Produce a 3-5 page multimedia presentation independently (e.g. text, graphics ,clipart, sound, and transitions)

B 5. Use a variety of peripherals (e.g. digital camera, interactive white board)



**Concept 6: Transfer Current Knowledge to Learning of New Technologies**

Students will:

B 1. Use concepts and basic skills and apply them to more advanced software.



**Concept 7: Skill Building with Desktop Publishing**

Students will:

B 1. Use basic desktop publishing skills

B 2. Use digital cameras

B 3. Create a visually appealing presentation that includes a graph, clip art, borders and a variety of fonts

11/12/2011 5

Technology Standards Articulation

Fourth Grade

**STRAND 4: Communication & Collaboration**

Every student will use productivity tools and will collaborate, publish and interact with peers, experts and other audiences by using telecommunications and media



**Concept 1: Communication**

Students will:

B 1. Use digital media to gain understanding of cultural differences in a global society with teacher guidance

B 2. Use various digital media to communicate and exchange ideas

B 3. Collect and publish information for peers using digital resources



**Concept 2: Collaboration**

Students will:

B 1. Collaborate with others using digital media to learn, develop and share information or create a project in a curriculum area

B 2. Use technology tools to exchange stories and information about their lives and local community

B 3. Use digital resources to gain understanding and appreciation of others

B 4. Evaluate ones own work and the work of others.

11/12/2011 6

Technology Standards Articulation

Fourth Grade

**STRAND 5: Technology Research Tools**

Every student will utilize technology based research tools to locate and collect information pertinent to the task, as well as evaluate and analyze information from a variety of sources.



**Concept 1: Researching Tools**

Students will:

B 1. Access a website that is bookmarked or linked

B 2. Launch a web browser, enter web address and access the information

B 3. Gather information using appropriate internet resources

B 4 Use search engines effectively to locate information

B 5. Locate and analyze technology resources to complete a specific task

B 6 Evaluate the information of Internet reference sources, checking for bias and validity

B 7. Discuss and respect ownership of resources

11/12/2011 7

Technology Standards Articulation

Fourth Grade

**STRAND 6: Technological Critical Thinking, Problem Solving, and Decision Making**

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



**Concept 1: Critical Thinking**

Students will:

B 1. Understand how technology impacts their daily life

B 2. Research a topic and identify a problem, with teacher guidance



**Concept 2: Problem Solving**

Students will:

B 1. Follow and manage activities to develop a solution or complete a project

B 2. With teacher assistance collect data to identify a problem and find a solution.

B 3. Use spreadsheet tools and/or graphing programs to analyze and symbolize numerical data



**Concept 3: Decision Making**

Students will:

B 1. Use technology tools and resources provided to address a variety of tasks and problems

B 2. Use multiple processes to explore alternative solutions

B 3. Use technology to analyze information to solve basic problems

11/12/2011 8