

STRAND 1: BASIC OPERATIONS AND CONCEPTS

I	Introduce	D	Develop	IU	Independent User
---	-----------	---	---------	----	------------------

Standard 1: Students demonstrate a sound understanding of the nature and operation of technology systems.													
K	1	2	3	4	5	6	7	8	9	10	11	12	Performance Indicators
I	D	IU	IU	IU	IU	IU	IU	IU	IU	IU	IU	IU	1.1.1 Identify the hardware and software components of a computer system (e.g. mouse, monitor, keyboard, disk drive, CD-ROM drive, printer, Mac OS, Windows OS, applications).
I	D	D	IU	IU	IU	IU	IU	IU	IU	IU	IU	IU	1.1.2 Use input devices (e.g. mouse, keyboard) and output devices (e.g. monitor, printer, and other technology) to successfully operate hardware.
I	D	D	D	IU	IU	IU	IU	IU	IU	IU	IU	IU	1.1.3 Opens and quits an application correctly.
I	D	D	D	IU	IU	IU	IU	IU	IU	IU	IU	IU	1.1.4 Starts and shuts down computer, monitor, and printer correctly.
	I	D	D	IU	IU	IU	IU	IU	IU	IU	IU	IU	1.1.5 Works with windows, icons, and menus
			I	D	D	IU	IU	IU	IU	IU	IU	IU	1.1.6 Utilize appropriate storage devices (e.g. disks, hard drives, CD-ROMS, servers, etc)
			I	D	D	D	D	IU	IU	IU	IU	IU	1.1.7 Identify basic trouble shooting strategies with the teacher’s assistance (e.g. check power, cable connections, peripheral connections, etc.) Note: Children should not plug or unplug anything.
			I	D	D	D	D	IU	IU	IU	IU	IU	1.1.8 Identify and use basic features of a computer operating system (e.g. find and open files and folders, use taskbar/finder)
				I	D	IU	IU	IU	IU	IU	IU	IU	1.1.9 Run multiple applications simultaneously, alternating among them.
				I	D	D	IU	IU	IU	IU	IU	IU	1.1.10 Identifying routine hardware, and software problems that occur during everyday use. (This indicator is not required prior to grade 8.)
				I	D	D	D	IU	IU	IU	IU	IU	1.1.11 Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use (e.g. select printers, connect peripheral devices, locate and save files).
				I	D	D	D	D	IU	IU	IU	IU	1.1.12 Demonstrate file management skills (e.g. saving files to specified location I.e. desktop, hard drive, shared folder, network server, create folders on local or remote drives as appropriate, compress and expand files as needed, download files as appropriate,)

Standard 2: Students are proficient in the use of technology.													
K	1	2	3	4	5	6	7	8	9	10	11	12	Performance Indicators
I	D	D	D	D	D	D	D	D	D	IU	IU	IU	1.2.1 Use age appropriate software to achieve a learning goal (e.g. CD-ROM, computer software).
I	D	D	D	D	D	D	D	IU	IU	IU	IU	IU	1.2.2 Use a variety of developmentally appropriate resources (e.g.. interactive books, educational software, Internet resources, electronic reference tools, online card catalogs) to support learning.
		I	D	D	IU	IU	IU	IU	IU	IU	IU	IU	1.2.3 Use browser features to utilize Internet resources.
			I	D	D	D	D	D	D	IU	IU	IU	1.2.4 Develop keyboarding skills.
			I	D	D	IU	IU	IU	IU	IU	IU	IU	1.2.5 Print a document with appropriate page setup and orientation.
				I	D	D	D	D	D	IU	IU	IU	1.2.6 Make informed decisions when choosing appropriate tools to complete a specific task. (e.g. teacher selected web sites, word processing for reports, spreadsheet for charting, databases for collecting information, etc.)
				I	D	D	D	D	D	D	D	IU	1.2.7 Operate peripheral equipment (e.g. scanner, digital camera, camcorder).
						I	D	D	D	D	D	IU	1.2.8 Identify and use methods for transferring, downloading, and converting graphic, sound, and video files. Use different graphic file formats where appropriate (e.g. PICT, JPEG, TIFF, MP3, MOV, MPEG).

DRAFT

STRAND 2: SOCIAL, ETHICAL, AND HUMAN ISSUES

Standard 3: Students understand the ethical, cultural, and societal issues related to technology.													
K	1	2	3	4	5	6	7	8	9	10	11	12	Performance Indicators
I	D	D	IU	IU	IU	IU	IU	IU	IU	IU	IU	IU	2.3.1 Understand and follow the district Acceptable Use Policy
I	D	D	D	IU	IU	IU	IU	IU	IU	IU	IU	IU	2.3.2 Demonstrate positive social behaviors when using technology (e.g. share equipment, help others, working collaboratively).
I	D	D	D	D	D	IU	IU	IU	IU	IU	IU	IU	2.3.3 Identify/explore common uses of technology in daily life and the advantages and disadvantages those resources provide (e.g. grocery store scanners, cable TV, satellite dishes, automobile diagnostic equipment).
		I	D	D	D	IU	IU	IU	IU	IU	IU	IU	2.3.4 Demonstrate and advocate legal and ethical issues or concepts regarding the use of technology and information. (e.g. , observe copyright laws, don't plagiarize, citing electronic resources).

Standard 4: Students practice responsible use of technology systems, information, and software.													
K	1	2	3	4	5	6	7	8	9	10	11	12	Performance Indicators
I	IU	IU	IU	IU	IU	IU	IU	IU	IU	IU	IU	IU	2.4.1 Follow classroom rules for responsible use of computers.
I	D	IU	IU	IU	IU	IU	IU	IU	IU	IU	IU	IU	2.4.2 Exhibit responsible care of technology (e.g. practice appropriate care and use of equipment, software, and facilities).
I	D	D	D	IU	IU	IU	IU	IU	IU	IU	IU	IU	2.4.3 Demonstrate safe use of Internet. (e.g. do not share personal information, don't download files of unknown origin (virus)

Standard 5: Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.													
K	1	2	3	4	5	6	7	8	9	10	11	12	Performance Indicators
	I	D	D	D	D	D	D	IU	IU	IU	IU	IU	2.5.1 Work cooperatively and collaboratively when using technology in the classroom (e.g. cooperative in group work, keypals, online projects).
								I	D	D	D	IU	2.5.2 Identify capabilities and limitations of contemporary and emerging technology resources and assess the potential of these systems and services to address personal, lifelong learning and workplace needs. (e.g. wireless, cell phones, PDAs. How do you purchase new technology with future needs in mind?)

STRAND 3: TECHNOLOGY PRODUCTIVITY TOOLS

Standard 6: Students use technology tools to enhance learning, increase productivity, and promote creativity.													
K	1	2	3	4	5	6	7	8	9	10	11	12	Performance Indicators
I	D	D	D	D	D	D	D	D	D	D	D	IU	3.6.1 Use productivity tools and peripherals (I.e. scanners, digital cameras, video cameras) to support personal productivity, remediate skill deficits, and facilitate learning throughout the curriculum.
	I	D	D	D	D	IU	IU	IU	IU	IU	IU	IU	3.6.2 Use word processor to create documents to achieve a learning goal.
		I	D	D	D	D	D	IU	IU	IU	IU	IU	3.6.3 Within a word processor, use appropriate editing and formatting features. (e.g. alignment, spacing, font, cut, paste, spell check, etc.)
					I	D	D	D	D	IU	IU	IU	3.6.4 Use advanced word processing features.(e.g. set tabs, insert a page break, add automatic page numbers, use the thesaurus, insert a column break, insert headers/footers, create a text box, and create tables, and export to different file formats, hyperlink, insert images)
I	D	D	D	D	D	D	D	IU	IU	IU	IU	IU	3.6.5 Use graphics program to create documents to achieve a learning goal. (KipPix, AppleWorks, Word)
			I	D	D	D	IU	IU	IU	IU	IU	IU	3.6.6 Use grade appropriate software to create a slideshow presentation (e.g. PowerPoint, AppleWorks, HyperStudio, etc.) to achieve a learning goal. (include storyboarding, editing slides)
				I	D	D	D	IU	IU	IU	IU	IU	3.6.7 Within a graphics program can create, import, and export graphics including images from the Internet for educational fair-use.
				I	D	D	D	D	D	D	D	D	3.6.8 Use grade appropriate software to create a video presentation (e.g. iMovie, Movie Producer, QuickTime, etc.) to achieve a learning goal. (include storyboarding, editing)
						I	D	D	D	D	D	IU	3.6.9 Within presentation programs demonstrate the use of importing and exporting different file and media types.
		I	D	D	D	D	D	IU	IU	IU	IU	IU	3.6.10 Use database to access, organize, and analyze data. (e.g. simple finds, sorting)
					I	D	D	D	D	IU	IU	IU	3.6.11 Create a database to organize information and define relationships..
						I	D	D	D	IU	IU	IU	3.6.12 Use advanced database features. (e.g. queries, mail merge, importing, exporting)
			I	D	D	D	D	D	D	IU	IU	IU	3.6.13 Use spreadsheets to organize, perform calculations, chart, and analyze data.
					I	D	D	D	D	D	IU	IU	3.6.14 Create a spreadsheet to quantitatively manipulate and analyze data.
									I	D	D	D	3.6.15 Use desktop publishing software to create documents to achieve a learning goal.

Standard 7: Students use productivity tools to collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works.													
K	1	2	3	4	5	6	7	8	9	10	11	12	Performance Indicators
			I	D	D	D	D	D	IU	IU	IU	IU	3.7.1 Use technology resources for producing grade appropriate products (e.g. graphs, illustrated story).
				I	D	D	D	IU	IU	IU	IU	IU	3.7.2 Use technology tools (multimedia authoring, presentation, web tools, digital cameras, scanners) to create knowledge products for audiences inside and outside the classroom. (e.g. presentations for various audiences such as PTSA, other classrooms, community organizations; personal, class or community web pages)
					I	D	D	IU	IU	IU	IU	IU	3.7.3 Apply productivity/multimedia tools and peripherals to support group collaboration. (e.g. file sharing, group presentations, publishing CD yearbook, publish class web page).
									I	D	D	IU	3.7.4 Use technology tools and resources for managing and communicating personal/professional information (e.g. finances, schedules, addresses, purchases, correspondence).

Standard 8: Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.													
K	1	2	3	4	5	6	7	8	9	10	11	12	Performance Indicators
			I	D	D	D	D	IU	IU	IU	IU	IU	4.8.1 Use collaborative online tools to investigate curriculum-related problems, and issues with peers, experts, and others. (online experiments such as Environmental Distance Learning (EDL) or Exploratorium, math problems using Illuminations)
			I	D	D	D	D	D	IU	IU	IU	IU	4.8.2 Gathers information and communicates with others using telecommunications for direct and independent learning, and to pursue personal interests. (e.g. use classroom email account, web chats with authors or scientists, student selected research projects)
				I	D	D	D	D	D	IU	IU	IU	4.8.3 Post a student authored work to a local or global audience. (e.g. post student work on local server or class web page, student created WebQuests published)
									I	D	D	IU	4.8.4 Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compute, synthesize, produce, and disseminate information, models, and other creative works.

Standard 9: Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.													
K	1	2	3	4	5	6	7	8	9	10	11	12	Performance Indicators
		I	D	D	D	D	IU	IU	IU	IU	IU	IU	4.9.1 Use age appropriate software to create classroom/school publications. (e.g. brochure, newsletter)
			I	D	D	D	IU	IU	IU	IU	IU	IU	4.9.2 Use age appropriate software to create classroom/school presentations. (e.g. slide shows, video, webpage)
			I	D	D	D	D	IU	IU	IU	IU	IU	4.9.3 Incorporate sound, video, and graphics in class/school presentations.
					I	D	D	IU	IU	IU	IU	IU	4.9.4 Incorporate spreadsheet tables and charts in class/school presentation and publication.

STRAND 5: TECHNOLOGY RESEARCH TOOLS

Standard 10: Students use technology to locate, evaluate, and collect information from a variety of sources.													
K	1	2	3	4	5	6	7	8	9	10	11	12	Performance Indicators
			I	D	D	D	D	IU	IU	IU	IU	IU	5.10.1 Use the Internet for research, information analysis, problem solving, and decision-making in content learning.
			I	D	D	D	D	D	D	IU	IU	IU	5.10.2 Use content-specific tools, software, and simulations (e.g. environmental probes, graphing calculators, exploratory environments, CD based electronic resources) to support learning and research.
				I	D	D	D	IU	IU	IU	IU	IU	5.10.3 Use effective Internet search strategies. (e.g. browser navigation, key word searches, Boolean logic (AND/OR)).
				I	D	D	D	D	D	D	IU	IU	5.10.4 Evaluate relevancy of electronic content and validity of source.

Standard 11: Students use technology tools to process data and report results.													
K	1	2	3	4	5	6	7	8	9	10	11	12	Performance Indicators
			I	D	D	D	IU	IU	IU	IU	IU	IU	5.11.1 Use technology resources (e.g. calculators, data collection probes, videos, education software) for problem-solving, self-directed learning and extended learning activities.
				I	D	D	D	D	IU	IU	IU	IU	5.11.2 Incorporate data into an appropriate reporting format (e.g. spreadsheet generated chart, presentation software, word processing document)

Standard 12: Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.													
K	1	2	3	4	5	6	7	8	9	10	11	12	Performance Indicators
								I	D	D	D	IU	5.12.1 Analyze, evaluate, and select new technology based options for effectiveness in accomplishing a given task. (e.g.. record and edit music & video, incorporate new technologies/software)

DRAFT

STRAND 6: TECHNOLOGY PROBLEM-SOLVING AND DECISION MAKING TOOLS

Standard 13: Students use technology resources for solving problems and making informed decisions.													
K	1	2	3	4	5	6	7	8	9	10	11	12	Performance Indicators
	I	D	D	D	D	D	IU	IU	IU	IU	IU	IU	6.13.1 Use a graphic organizer to map out strategies for solving problems (e.g. use information from KWL chart, brainstorming, Venn diagrams, or affinity diagram to set goals; flowchart a classroom process, illustrate relationships).
			I	D	D	D	D	D	D	IU	IU	IU	6.13.2 Select and use appropriate tools to develop a solution to the problem (timeline, model, database, spreadsheet, calculator).
			I	D	D	D	D	D	D	D	D	IU	6.13.3 Determine hardware, software, or connectivity capabilities needed to accomplish a given task. (I.e. Choose Excel to chart graphs for science fair project, choose computer, LCD projector, and PowerPoint to create and present a group project)
				I	D	D	D	IU	IU	IU	IU	IU	6.13.4 Use appropriate software to collect and chart trend data. (I.e. science fair projects, Graph Club, survey data, etc.)

Standard 14: Students employ technology in the development of strategies for solving problems in the real world.													
K	1	2	3	4	5	6	7	8	9	10	11	12	Performance Indicators
				I	D	D	D	D	D	IU	IU	IU	6.14.1 Apply results of electronic research to formulate solutions to real world problems.
				I	D	D	D	D	D	D	D	IU	6.14.2 Participate in an authentic work place scenario to develop problem solving skills that will transfer to future occupations. (e.g. television media production, Enterprise Village/Finance Park, Synergistics labs, Workforce Development)
					I	D	D	D	D	IU	IU	IU	6.14.3 Research and evaluate the source of electronic information concerning real world problems. (Take into consideration accuracy, relevance, appropriateness, bias, and completeness of information)