

*San Antonio Independent School District
Grades 6 - 8 Technology Applications
Scope and Sequence Skills*

Upon Completion of Grade 8:

Students are expected to:

- Apply strategies for identifying and solving routine hardware and software problems
- Demonstrate knowledge of current changes in information technologies and their effects on society and the workplace.
- Demonstrate and exhibit legal and ethical behaviors when using information and technology
- Use content-specific tools, software and simulations to support learning and research
- Demonstrate an understanding of Acceptable Use
- Have the ability to work in cooperative groups to complete projects utilizing technology and media resources to enhance the learning experience
- Design, develop, publish, and present products using technology resources that demonstrate and communicate curriculum concepts
- Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources
- Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems.

Format adapted from National Educational Technology Standards for Students and aligned to Technology Applications:TEKS.

Grades 6-8 Scope and Sequence

“I – A – M” Technology Literate:

(I = Introduced A = Applied M = Mastery)

Performance Descriptor	Grade Levels		
	6	7	8
(1) Foundations: The student demonstrates knowledge and appropriate use of hardware components, software programs, and their connections. The student is expected to:			
(A) demonstrate knowledge and appropriate use of operating systems, software applications, and communication and networking components;	A	M	M
(B) compare, contrast, and appropriately use the various input, processing, output, and primary/secondary storage devices;	M	M	M
(C) demonstrate the ability to select and use software for a defined task according to quality, appropriateness, effectiveness, and efficiency;	M	M	M
(D) delineate and make necessary adjustments regarding compatibility issues including, but not limited to, digital file formats and cross platform connectivity;	A	M	M
(E) use technology terminology appropriate to the task;	A	M	M
(F) perform basic software application functions including, but not limited to, opening an application program and creating, modifying, printing, and saving documents;	M	M	M
(G) explain the differences between analog and digital technology systems and give examples of each;	I	A	M
(H) use terminology related to the Internet appropriately including, but not limited to, electronic mail (e-mail), Uniform Resource Locators (URLs), electronic bookmarks, local area networks (LANs), wide area networks (WANs), World Wide Web (WWW) page, and Hyper-Text Markup Language (HTML); and	I	A	M
(I) compare and contrast LANs, WANs, Internet, and intranet.	I	A	M
(2) Foundations. The student uses data input skills appropriate to the task. The student is expected to:			
(A) demonstrate proficiency in the use of a variety of input devices such as mouse/track pad, keyboard, microphone, digital camera, printer, scanner, disk/disc, modem, CD-ROM, or joy-	A	M	M
(B) demonstrate keyboarding proficiency in technique and posture while building speed;	M	M	M
(C) use digital keyboarding standards for data input such as one space after punctuation, the use of em/en dashes, and smart quotation marks; and	M	M	M
(D) develop strategies for capturing digital files while conserving memory and retaining image quality.	M	M	M

		Grade Levels		
Performance Descriptor		6	7	8
(3) Foundations. The student complies with the laws and examines the issues regarding the use of technology in society. The student is expected to:				
(A)	discuss copyright laws/issues and model ethical acquisition and use of digital information citing sources using established methods;	A	M	M
(B)	demonstrate proper etiquette and knowledge of acceptable use while in an individual classroom, lab, or on the Internet and intranet;	A	A	M
(C)	describe the consequences regarding copyright violations including, but not limited to, computer hacking, computer piracy, intentional virus setting, and invasion of privacy;	I	A	M
(D)	identify the impact of technology applications on society through research, interviews, and personal observation; and	I	A	M
(E)	demonstrate knowledge of the relevancy of technology to future careers, life-long learning, and daily living for individuals of all ages.	I	A	M
(4) Information acquisition. The student uses a variety of strategies to acquire information from electronic resources, with appropriate supervision. The student is expected to:				
(A)	use strategies to locate and acquire desired information on LANs and WANs, including the Internet, intranet, and collaborative software; and	A	M	M
(B)	apply appropriate electronic search strategies in the acquisition of information including keyword and Boolean search strategies.	A	M	M
(5) Information acquisition. The student acquires electronic information in a variety of formats, with appropriate supervision. The student is expected to:				
(A)	identify, create, and use files in various formats such as text, bitmapped/vector graphics, image, video, and audio files;	A	M	M
(B)	demonstrate the ability to access, operate, and manipulate information from secondary storage and remote devices including CD-ROM/laser discs and on-line catalogs; and	I	A	M
(C)	use on-line help and other documentation.	A	M	M
(6) Information acquisition. The student evaluates the acquired electronic information. The student is expected to:				
(A)	determine and employ methods to evaluate the electronic information for accuracy and validity;	A	M	M
(B)	resolve information conflicts and validate information through accessing, researching, and comparing data; and	A	M	M
(C)	demonstrate the ability to identify the source, location, media type, relevancy, and content validity of available information.	I	A	M

		Grade Levels		
Performance Descriptor		6	7	8
(7) Solving problems. The student uses appropriate computer-based productivity tools to create and modify solutions to problems. The student is expected to:				
(A) plan, create, and edit documents created with a word processor using readable fonts, alignment, page setup, tabs, and ruler settings;		A	M	M
(B) create and edit spreadsheet documents using all data types, formulas and functions, and chart information;		A	M	M
(C) plan, create, and edit databases by defining fields, entering data, and designing layouts appropriate for reporting;		A	M	M
(D) demonstrate proficiency in the use of multimedia authoring programs by creating linear or non-linear projects incorporating text, audio, video, and graphics;		A	M	M
(E) create a document using desktop publishing techniques including, but not limited to, the creation of multi-column or multi-section documents with a variety of text-wrapped frame formats;		I	A	M
(F) differentiate between and demonstrate the appropriate use of a variety of graphic tools found in draw and paint applications;		A	M	M
(G) integrate two or more productivity tools into a document including, but not limited to, tables, charts and graphs, graphics from paint or draw programs, and mail merge;		I	A	M
(H) use interactive virtual environments, appropriate to level, such as virtual reality or simulations;		I	A	M
(I) use technical writing strategies to create products such as a technical instruction guide; and		I	A	M
(J) use foundation and enrichment curricula in the creation of products.		A	A	M
(8) Solving problems. The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to:				
(A) participate with electronic communities as a learner, initiator, contributor, and teacher/mentor;		A	M	M
(B) complete tasks using technological collaboration such as sharing information through on-line communications;		I	A	M
(C) use groupware, collaborative software, and productivity tools to create products;		I	A	M
(D) use technology in self-directed activities by sharing products for defined audiences; and		I	A	M
(E) integrate acquired technology applications skills, strategies, and use of the word processor, database, spreadsheet, telecommunications, draw, paint, and utility programs into the foundation and enrichment curricula.		I	A	M
(9) Solving problems. The student uses technology applications to facilitate evaluation of work, both process and product. The student is expected to:				
(A) design and implement procedures to track trends, set timelines, and review/evaluate progress for continual improvement in process and product; and		I	A	M
(B) resolve information conflicts and validate information through research and comparison of data.		I	A	M

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(10) Communication. The student formats digital information for appropriate and effective communication. The student is expected to:				
(A) use productivity tools to create effective document files for defined audiences such as slide shows, posters, multimedia presentations, newsletters, brochures, or reports;		I	A	M
(B) demonstrate the use of a variety of layouts in a database to communicate information appropriately including horizontal and vertical layouts;		I	A	M
(C) create a variety of spreadsheet layouts containing descriptive labels and page settings;		I	A	M
(D) demonstrate appropriate use of fonts, styles, and sizes, as well as effective use of graphics and page design to effectively communicate; and		I	A	M
(E) match the chart style to the data when creating and labeling charts.		I	A	M
(11) Communication. The student delivers the product electronically in a variety of media, with appropriate supervision. The student is expected to:				
(A) publish information in a variety of ways including, but not limited to, printed copy, monitor display, Internet documents, and video;		A	M	M
(B) design and create interdisciplinary multimedia presentations for defined audiences including audio, video, text, and graphics; and		A	M	M
(C) use telecommunication tools for publishing such as Internet browsers, video conferencing, or distance learning.		I	A	M
(12) Communication. The student uses technology applications to facilitate evaluation of communication, both process and product. The student is expected to:				
(A) design and implement procedures to track trends, set timelines, and review and evaluate the product using technology tools such as database managers, daily/monthly planners, and		I	A	M
(B) determine and employ technology specifications to evaluate projects for design, content delivery, purpose, and audience, demonstrating that process and product can be evaluated		A	M	M
(C) select representative products to be collected and stored in an electronic evaluation tool; and		A	M	M
(D) evaluate the product for relevance to the assignment or task.		A	M	M