

# Texas Essential Knowledge and Skills for Technology Applications - Web Mastering

Foundations		Information Acquisition	
<p><b>Demonstrates knowledge and appropriate use of hardware components, software programs, and their connections.</b></p> <p><b>1A</b> Demonstrate knowledge and appropriate use of operating systems, software applications, and communication and networking components</p> <p><b>1B</b> Compare, contrast, and use appropriately the various input, processing, output, and primary/secondary storage devices</p> <p><b>1C</b> Make decisions regarding the selection, acquisition, and use of software taking under consideration its quality, appropriateness, effectiveness, and efficiency</p> <p><b>1D</b> Delineate and make necessary adjustments regarding compatibility issues including, but not limited to, digital file formats and cross platform connectivity</p> <p><b>1E</b> Use vocabulary related to web mastering and delineate between the Internet and an intranet</p> <p><b>1F</b> Summarize the technical needs of a World Wide Web (WWW) server including Random Access Memory (RAM), hard disk capacity, Central Processing Unit (CPU) speed, methods of connectivity, and appropriate software</p> <p><b>1G</b> Summarize the development of Internet protocols including, but not limited to, hypertext transfer protocol (http), gopher, file transfer protocol (ftp), telnet, and wide area information system (wais)</p>	<p><b>Uses data input skills appropriate to the task.</b></p> <p><b>2A</b> Outline differences among a variety of electronic input devices</p> <p><b>2B</b> Demonstrate proficiency in the use of a variety of electronic input devices such as keyboard, scanner, voice/sound recorder, mouse, touch screen or digital video by incorporating such components while publishing WWW pages</p> <p><b>Complies with laws and examines issues regarding use of technology in society.</b></p> <p><b>3A</b> Discuss copyright laws/issues and model ethical acquisition and use of digital information, citing sources using established methods</p> <p><b>3B</b> Demonstrate proper etiquette and knowledge of acceptable use policies when using networks, especially resources on the Internet and intranet</p> <p><b>3C</b> Analyze the impact of the WWW on society through research, interviews, and personal observation</p>	<p><b>Uses a variety of strategies to acquire information from electronic resources, with appropriate supervision.</b></p> <p><b>4A</b> Use local area networks (LANs) and wide area networks (WANs) including the Internet and intranet in research and resource sharing</p> <p><b>4B</b> Construct appropriate search strategies in the acquisition of information from the Internet including keyword and Boolean search strategies</p> <p><b>4C</b> Obtain Uniform Resource Locators (URLs) and distinguish among the protocols including hypertext transfer protocol (http), gopher, file transfer protocol (ftp), telnet, and wide area information system (wais)</p>	<p><b>Acquires electronic information in variety of formats, with appropriate supervision.</b></p> <p><b>5A</b> Acquire information in electronic formats including text, audio, video, and graphics, citing the source</p> <p><b>5B</b> Identify, create, and use available file formats including text, image, video (analog and digital), and audio files</p> <p><b>Evaluates acquired electronic information.</b></p> <p><b>6A</b> Determine and employ methods to evaluate the design (for content delivery) and functionality (for navigation and interaction) of WWW pages and compare the method with other established methods</p> <p><b>6B</b> Demonstrate skill in testing the accuracy of information</p> <p><b>6C</b> Investigate and choose electronic security methods for a web server to protect from unauthorized access and negative intentions</p>



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Solving Problems		Communication	
<p><b>Uses appropriate computer-based productivity tools to create and modify solutions to problems.</b></p> <p><b>7A</b> Use technology tools to create a knowledge base with a broad perspective</p> <p><b>7B</b> Select and integrate appropriate productivity tools including, but not limited to, word processor, database, spreadsheet, telecommunication, draw, paint, and utility programs into the creation of WWW documents</p> <p><b>7C</b> Use foundation and enrichment curricular content in the creation of WWW pages</p> <p><b>7D</b> Create WWW pages using specific authoring tools such as text-based editing programs or graphical-based editing programs</p> <p><b>7E</b> Read, use, and develop technical documentation</p> <p><b>7F</b> Create and edit WWW documents using established design principles including consistency, repetition, alignment, proximity, ratio of text to white space, image file size, color use, font size, type, and style</p> <p><b>7G</b> Demonstrate the ability to control access to the WWW site via password controls and global access/deny controls</p> <p><b>7H</b> Establish a folder/directory hierarchy for storage of a web page and its related or linked files</p>	<p><b>Uses research skills and electronic communication, with appropriate supervision, to create new knowledge.</b></p> <p><b>8A</b> Demonstrate proficiency in, appropriate use of, and navigation of LANs, WANs, the Internet, and intranet for research and for sharing of resources</p> <p><b>8B</b> Extend teaching and learning in the local environment to the worldwide community through the creation and sharing of WWW documents</p> <p><b>8C</b> Synthesize and generate new information from data gathered from electronic and telecommunications resources</p> <p><b>8D</b> Create and format WWW documents containing bookmarks of on-line resources and share them electronically</p> <p><b>8E</b> Demonstrate the use of WWW pages, collaborative software, and productivity tools to create products</p> <p><b>8F</b> Participate with electronic communities as a learner, initiator, contributor, and teacher/mentor</p> <p><b>8G</b> Participate in relevant, meaningful activities in the larger community and society to create electronic projects</p> <p><b>Uses technology applications to facilitate evaluation of work, both process and product.</b></p> <p><b>9A</b> Design and implement procedures to track trends, set timelines, and review/evaluate progress for continual improvement in process and product</p> <p><b>9B</b> Seek and respond to advice from peers and professionals in delineating technological tasks</p> <p><b>9C</b> Create technology specifications for tasks and evaluation rubrics</p> <p><b>9D</b> Resolve information conflicts and validate information through accessing, researching, and comparing data</p>	<p><b>Formats digital information for appropriate and effective communication.</b></p> <p><b>10A</b> Use hypertext linking appropriately when creating WWW pages</p> <p><b>10B</b> Develop interactivity for the web server via scripting additions such as Common Gateway Interface (CGI), Java Script, or JAVA</p> <p><b>10C</b> Demonstrate the ability to conduct secure transactions from the web server to the client</p>	<p><b>Delivers the product electronically in a variety of media, with appropriate supervision.</b></p> <p><b>11A</b> Synthesize and publish information in a variety of ways including, but not limited to, printed copy, monitor display, Internet documents, and video</p> <p><b>11B</b> Identify and use LANs, WANs, and remote resources to exchange and publish information</p> <p><b>Uses technology applications to facilitate evaluation of communication, both process and product.</b></p> <p><b>12A</b> Create technology specifications for tasks and evaluation rubrics</p> <p><b>12B</b> Seek and respond to input from peers and professionals in evaluating the product</p>

