







# Texas Essential Knowledge and Skills for Technology Applications (Grades K-8)

| K-2  | 3-5  | 6-8   |   |   |   |
|--|--|---|---|---|---|
| <b>Foundations. Demonstrates knowledge and appropriate use of hardware components, software programs, and their connections.</b>   |  |   |   |   |   |
| <p><b>1A</b> Use technology terminology appropriate to the task</p> <p><b>1B</b> Start and exit programs as well as create, name, and save files</p> <p><b>1C</b> Use networking terminology such as on-line, network, or password and access remote equipment on a network such as a printer</p>  | <p><b>1A</b> Use technology terminology appropriate to the task</p> <p><b>1B</b> Save and delete files, use menu options and commands, and work with more than one software application</p> <p><b>1C</b> Identify and describe the characteristics of digital input, processing, and output</p> <p><b>1D</b> Delineate and make necessary adjustments regarding compatibility issues including, but not limited to, digital file format and cross platform connectivity</p> <p><b>1E</b> Access remote equipment on a network such as a printer or other peripherals</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 appropriately use various input, processing, output, and primary/secondary storage devices</p> <p><b>1C</b> Demonstrate the ability to select and use software for a defined task according to 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> Uses technology terminology appropriate to the task</p> <p><b>1F</b> Perform software application functions including, but not limited to, opening an application program and creating, modifying, printing, and saving documents</p> <p><b>1G</b> Explain the difference between analog and digital technology systems and give examples of each</p> <p><b>1H</b> 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 HyperText Markup Language (HTML)</p> <p><b>1I</b> Compare and contrast: LANs, WANs, Internet, and intranet</p> |   |   |   |
| <b>Foundations. Uses data input skills appropriate to the task.</b>  |  |   |   |   |   |
| <p><b>2A</b> Use a variety of input devices such as mouse, keyboard, disk drive, modem, voice/sound recorder, scanner, digital video, CD-ROM, or touch screen</p> <p><b>2B</b> Use proper keyboarding techniques such as correct hand and body positions and smooth and rhythmic keystroke patterns as grade-level appropriate</p> <p><b>2C</b> Demonstrate touch keyboarding techniques for operating the alphabetic, numeric, punctuation, and symbol keys as grade-level appropriate</p> <p><b>2D</b> Produce documents at the keyboard, proofread, and correct errors</p> <p><b>2E</b> Use language skills including capitalization, punctuation, spelling, word division, and use of numbers and symbols as grade-level appropriate</p>   | <p><b>2A</b> Use a variety of input devices such as mouse, keyboard, disk drive, modem, voice/sound recorder, scanner, digital video, CD-ROM, or touch screen</p> <p><b>2B</b> Use proper keyboarding techniques such as correct hand and body positions and smooth and rhythmic keystroke patterns</p> <p><b>2C</b> Demonstrate touch keyboarding techniques for operating the alphabetic, numeric, punctuation, and symbol keys as grade-level appropriate</p> <p><b>2D</b> Produce documents at the keyboard, proofread, and correct errors</p> <p><b>2E</b> Use language skills including capitalization, punctuation, spelling, word division, and use of numbers and symbols as grade-level appropriate</p> <p><b>2F</b> Demonstrate an appropriate speed on short timed exercises depending upon the grade level and hours of instruction</p> | <p><b>2A</b> Demonstrate proficiency in the use of a variety of input devices such as mouse/trackball, keyboard, microphone, digital camera, printer, scanner, disk/disc, modem, CD-ROM, or joystick</p> <p><b>2B</b> Demonstrate keyboarding proficiency in technique and posture while building speed</p> <p><b>2C</b> Uses digital keyboarding standards for data input such as one space after punctuation, em/en dashes and smart quotation marks</p> <p><b>2D</b> Develop strategies for capturing digital files while conserving memory and retaining image quality</p>  |   |   |   |
| <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; border: none; vertical-align: bottom;">  <p style="margin: 0;">Texas Center for Educational Technology<br/><a href="http://www.tcet.unt.edu">http://www.tcet.unt.edu</a></p> </td> <td style="width: 33%; border: none; vertical-align: bottom; text-align: center;"> <p style="margin: 0;">The Texas Education Agency - Educational Technology<br/><a href="http://www.tea.state.tx.us/technology">http://www.tea.state.tx.us/technology</a></p> </td> <td style="width: 33%; border: none; vertical-align: bottom; text-align: right;">  </td> </tr> </table> |  |   |  <p style="margin: 0;">Texas Center for Educational Technology<br/><a href="http://www.tcet.unt.edu">http://www.tcet.unt.edu</a></p> | <p style="margin: 0;">The Texas Education Agency - Educational Technology<br/><a href="http://www.tea.state.tx.us/technology">http://www.tea.state.tx.us/technology</a></p> |  |
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# Texas Essential Knowledge and Skills for Technology Applications (Grades K-8)

| K-2  | 3-5   | 6-8   |
|--|---|---|
| <b>Foundations. Complies with laws and examines issues regarding use of technology in society.</b>   |   |   |
| <p><b>3A</b> Follow acceptable use policies when using computers</p> <p><b>3B</b> Model respect of intellectual property by not illegally copying software or another individual's electronic work</p> | <p><b>3A</b> Follow acceptable use policies when using computers</p> <p><b>3B</b> Model respect of intellectual property by not illegally copying software or another individual's electronic work</p>  | <p><b>3A.</b> Discuss copyright laws/issues and models, 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 while in an individual classroom, lab, or on the Internet or intranet</p> <p><b>3C</b> Describe consequences regarding copyright violations including, but not limited to, hacking, piracy, intentional virus setting and invasion of privacy</p> <p><b>3D</b> Identify the impact of technology applications on society through research, interviews, and personal observation</p> <p><b>3E</b> Understand relevancy of technology in future careers, life-long learning and daily living for individuals of all ages</p> |
| <b>Information Acquisition. Uses a variety of strategies to acquire information from electronic resources, with appropriate supervision.</b>   |   |   |
| <p><b>4A</b> Apply keyword searches to acquire information</p> <p><b>4B</b> Select appropriate strategies to navigate and access information for research and resource sharing</p>                     | <p><b>4A</b> Apply appropriate electronic search strategies in the acquisition of information including keyword and Boolean search strategies</p> <p><b>4B</b> Select appropriate strategies to navigate and access information on local area networks (LANs) and wide area networks (WANs), including the Internet and intranet, for research and resource sharing</p> | <p><b>4A</b> Use strategies to locate and acquire desired information on LANs and WANs, including Internet, intranet, and collaborative software</p> <p><b>4B</b> Apply appropriate electronic search strategies in the acquisition of information including keyword and Boolean search strategies</p>  |
| <b>Information Acquisition. Acquires electronic information in variety of formats, with appropriate supervision.</b>   |   |   |
| <p><b>5A</b> Acquire information including text, audio, video, and graphics</p> <p><b>5B</b> Use on-line help</p>  | <p><b>5A</b> Acquire information including text, audio, video, and graphics</p> <p><b>5B</b> Use on-line help and documentation</p>   | <p><b>5A</b> Identify, create, and use files in various formats, such as text, bitmapped/vector graphics, image, video, and audio files</p> <p><b>5B</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</p> <p><b>5C</b> Use on-line help and other documentation</p>   |
| <b>Information Acquisition. Evaluates acquired electronic information.</b>   |   |   |
| <p><b>6A</b> Determine the success of strategies used to acquire electronic information</p> <p><b>6B</b> Determine usefulness and appropriateness of digital information</p>                           | <p><b>6A</b> Apply critical analysis to resolve information conflicts and validate information</p> <p><b>6B</b> Determine the success of strategies used to acquire electronic information</p> <p><b>6C</b> Determine usefulness and appropriateness of digital information.</p>  | <p><b>6A</b> Determine and employ methods to evaluate the electronic information for accuracy and validity</p> <p><b>6B</b> Resolve information conflicts and validate information through accessing, researching, and comparing data</p> <p><b>6C</b> Demonstrate the ability to identify the source, location, media type, relevancy, and content validity of available information</p>   |



# Texas Essential Knowledge and Skills for Technology Applications (Grades K-8)

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| <b>Solving Problems. Uses appropriate computer-based productivity tools to create and modify solutions to problems.</b>   |   |  |
| <p><b>7A</b> Use software programs with audio, video, and graphics to enhance learning experiences</p> <p><b>7B</b> Use appropriate software including the use of word processing and multimedia, to express ideas and solve problems</p> | <p><b>7A</b> Use software programs with audio, video, and graphics to enhance learning experiences</p> <p><b>7B</b> Use appropriate software to express ideas and solve problems including the use of word processing, graphics, databases, spreadsheets, simulations, and multimedia</p> <p><b>7C</b> Use a variety of data types including text, graphics, digital audio, and video</p>               | <p><b>7A</b> Plan, create, and edit documents created with a word processor using readable fonts, alignment, page setup, tabs, and ruler settings</p> <p><b>7B</b> Create and edit spreadsheet using all data types, formulas and functions, and chart information</p> <p><b>7C</b> Plan, create, and edit databases by defining fields, entering data, and designing layouts appropriate for reporting</p> <p><b>7D</b> Demonstrate proficiency in use of multimedia authoring programs by creating linear or nonlinear projects incorporating text, audio, video, and graphics</p> <p><b>7E</b> 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</p> <p><b>7F</b> Differentiate between and demonstrate appropriate use of a variety of graphic tools found in draw and paint applications</p> <p><b>7G</b> 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</p> <p><b>7H</b> Use interactive virtual environments, appropriate to level, such as virtual reality or simulations</p> <p><b>7I</b> Use technical writing strategies to create products such as a technical instruction guide</p> <p><b>7J</b> Use foundation and enrichment curricula in the creation of products</p> |
| <b>Solving Problems. Uses research skills and electronic communication, with appropriate supervision, to create new knowledge.</b>  |   |  |
| <p><b>8A</b> Use communication tools to participate in group projects</p> <p><b>8B</b> Use electronic tools and research skills to build a knowledge base regarding a topic, task, or assignment</p>                                      | <p><b>8A</b> Use communication tools to participate in group projects</p> <p><b>8B</b> Use interactive technology environments, such as simulations, electronic science or mathematics laboratories, virtual museum field trips, or on-line interactive lessons, to manipulate information</p> <p><b>8C</b> Participate with electronic communities as a learner, initiator, contributor, or mentor</p> | <p><b>8A</b> Participate with electronic communities as a learner, initiator, contributor, and teacher/mentor</p> <p><b>8B</b> Complete tasks using technological collaboration such as sharing information through on-line communications</p> <p><b>8C</b> Use groupware, collaborative software, and productivity tools to create products</p> <p><b>8D</b> Use technology in self-directed activities by sharing products for defined audiences</p> <p><b>8E</b> Integrate acquired technology application skills, strategies, and use of the word processor, database, spreadsheet, telecommunications, draw, paint, and utility programs into the foundation and enrichment curricula</p>   |
| <b>Solving Problems. Uses technology applications to facilitate evaluation of work, both process and product.</b>   |   |  |
| <p><b>9A</b> Use software features, such as on-line help, to evaluate work progress</p> <p><b>9B</b> Use software features, such as slide show previews, to evaluate final product</p>  | <p><b>9A</b> Use software features, such as on-line help, to evaluate work progress</p> <p><b>9B</b> Use software features, such as slide show previews, to evaluate final product</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> Resolve information conflicts and validate information through research and comparison of data</p>   |



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| <b>Communication. Formats digital information for appropriate and effective communication.</b>   |   |  |
| <p><b>10A</b> Use font attributes, color, white space, and graphics to ensure that products are appropriate for the defined audience</p> <p><b>10B</b> Use font attributes, color, white space, and graphics to ensure that products are appropriate for the communication media including multimedia screen displays and print material</p> | <p><b>10A</b> Use font attributes, color, white space, and graphics to ensure that products are appropriate for the defined audience</p> <p><b>10B</b> Use font attributes, color, white space, and graphics to ensure that products are appropriate for the communication media including multimedia screen displays, Internet documents, and printed material</p> <p><b>10C</b> Use appropriate applications including, but not limited to, spreadsheets and databases to develop charts and graphs by using data from various sources.</p> | <p><b>10A</b> Use productivity tools to create effective document files for defined audiences such as slide shows, posters, multimedia presentations, newsletters, brochures, or reports</p> <p><b>10B</b> Demonstrate use of a variety of layouts in a database to communicate information appropriately including horizontal and vertical layouts</p> <p><b>10C</b> Create a variety of spreadsheet layouts containing descriptive labels and page settings</p> <p><b>10D</b> Demonstrate appropriate use of fonts, styles, and sizes, as well as effective use of graphics and page design to effectively communicate</p> <p><b>10E</b> Match the chart style to the data when creating and labeling charts</p> |
| <b>Communication. Delivers the product electronically in a variety of media, with appropriate supervision.</b>   |   |  |
| <p><b>11A</b> Publish information in a variety of media including, but not limited to, printed copy or monitor display</p> <p><b>11B</b> Publish information in a variety of media including, but not limited to, stored files or video</p>  | <p><b>11A</b> Publish information in a variety of media including, but not limited to, printed copy, monitor display, Internet documents and video</p> <p><b>11B</b> Use presentation software to communicate with specific audiences</p>   | <p><b>11A</b> 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> Design and create interdisciplinary multimedia presentations for defined audiences including audio, video, text, and graphics</p> <p><b>11C</b> Use telecommunication tools for publishing such as Internet browsers, video conferencing, or distance learning</p>  |
| <b>Communication. Uses technology applications to facilitate evaluation of communication, both process and product.</b>  |   |  |
| <p><b>12A</b> Select representative products to be collected and stored in an electronic evaluation tool</p> <p><b>12B</b> Evaluate the product for relevance to the assignment or task</p>  | <p><b>12A</b> Select representative products to be collected and stored in an electronic evaluation tool</p> <p><b>12B</b> Evaluate the product for relevance to the assignment or task</p> <p><b>12C</b> Create technology assessment tools to monitor progress of project such as checklists, timelines, or rubrics</p>   | <p><b>12A</b> 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 project management tools</p> <p><b>12B</b> Determine and employ technology specifications to evaluate projects for design, content delivery, purpose, and audience, demonstrating that process and product can be evaluated using established criteria or rubrics</p> <p><b>12C</b> Select representative products to be collected and stored in an electronic evaluation tool</p> <p><b>12D</b> Evaluate the product for relevance to the assignment or task</p>   |

