

Texas Essential Knowledge and Skills for Technology Applications - Multimedia

| Foundations | | Information Acquisition | |
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| <p>Demonstrates knowledge and appropriate use of hardware components, software programs, and their connections.</p> <p>1A Demonstrate knowledge and appropriate use of operating systems, software applications, and communication and networking components</p> <p>1B Analyze demands for accomplishing multimedia tasks to appropriately use input, processing, output, and primary/secondary storage devices</p> <p>1C Make decisions regarding the selection, acquisition, and use of software in a multimedia classroom/lab taking under consideration its quality, appropriateness, effectiveness, and efficiency</p> <p>1D Delineate and make necessary adjustments regarding compatibility issues including, but not limited to, digital file formats and cross platform connectivity</p> <p>1E Use necessary vocabulary related to multimedia</p> <p>1F Install and configure appropriate software</p> <p>1G Distinguish between and correctly use process color (RGB and CYMK), spot color, and black/white</p> <p>1H Identify color mixing theories and apply these theories to the creation of new colors in the digital format</p> <p>1I Identify and distinguish among the basic sound editing principles including the addition of effects and manipulation of the wave form</p> <p>1J Identify and use compression schemes for photo, animation, video, and graphics</p> <p>1K Distinguish between and determine the appropriate application of bitmapped and vector graphics into a multimedia project</p> | <p>Uses data input skills appropriate to the task.</p> <p>2A Demonstrate proficiency in the use of a variety of electronic input devices including the mouse, keyboard, scanner, voice/sound recorder, disk/disc, video, and digital camera by creating files to be used in multimedia products</p> <p>2B Use digital keyboarding standards for data input such as one space after punctuation, the use of em/en dashes, and smart quotation marks</p> <p>2C Use strategies when digitally capturing files that conserve memory and retain the image integrity</p> <p>2D Differentiate among audio input</p> <p>Complies with laws and examines issues regarding use of technology in society.</p> <p>3A Discuss copyright laws/issues and model ethical acquisition and use of digital information, citing sources using established methods</p> <p>3B Demonstrate proper etiquette and knowledge of acceptable use policies when using networks, especially resources on the Internet and intranet</p> <p>3C Model respect of intellectual property when manipulating, morphing, or editing graphics, video, text, and sound</p> <p>3D Provide examples of the role of multimedia in society</p> | <p>Uses a variety of strategies to acquire information from electronic resources, with appropriate supervision.</p> <p>4A Use strategies to access research information from different resources, including local area networks (LANs), wide area networks (WANs), the Internet, and intranet</p> <p>4B Apply appropriate electronic search strategies in the acquisition of information including keyword and Boolean search strategies</p> <p>Acquires electronic information in variety of formats, with appropriate supervision.</p> <p>5A Acquire information in electronic formats including text, audio, video, and graphics, citing the source</p> <p>5B Identify, create, and use available file formats including text, image, video (analog and digital), and audio files</p> | <p>Evaluates acquired electronic information.</p> <p>6A Identify and employ a method to evaluate the design, functionality, and accuracy of the accessed information</p> <p>6B Use fundamental concepts of graphic design including visual composition and lighting when analyzing multimedia</p> |



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| Solving Problems | | Communication | |
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| <p>Uses appropriate computer-based productivity tools to create and modify solutions to problems.</p> <p>7A Use foundation and enrichment curricula in the creation of multimedia products</p> <p>7B Select and integrate computer-based productivity tools, including, but not limited to, word processor, database, spreadsheet, telecommunications, draw, paint, and utility programs to develop and modify solutions to problems and to create new knowledge for multimedia products</p> <p>7C Use technology tools to create a knowledge base with a broad perspective</p> <p>7D Apply color principles to communicate the mood of the product for the specific audience</p> <p>7E Integrate path and cell animation modules appropriately into multimedia products</p> <p>7F Use the appropriate scripting language to create a multimedia sequence</p> <p>7G Edit files 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>7H Read and use technical documentation</p> <p>Uses research skills and electronic communication, with appropriate supervision, to create new knowledge.</p> <p>8A Participate with electronic communities as a learner, initiator, contributor, and teacher/mentor and use technology to participate in self-directed and practical activities in the larger community and society</p> <p>8B Demonstrate proficiency in, appropriate use of, and navigation of LANs, WANs, the Internet, and intranet for research and for sharing of resources</p> | <p>8C Integrate and use efficiently and effectively a variety of multimedia programs and tools including linear/non-linear authoring tools, image/video editing tools, compression programs, draw/paint/text creation tools</p> <p>8D Extend the learning environment beyond the school walls through the creation and linking of multimedia products via electronic networks</p> <p>8E Develop technical documentation related to multimedia</p> <p>8F Participate in different roles and jobs of a multimedia production crew including project manager, lead programmer, writer, art director, sound engineer, researcher, animator, and presenter</p> <p>8G Distinguish among and appropriately integrate 3-D modeling, animation, and rendering software into multimedia products</p> <p>8H Import video into the digital format for integration into multimedia products</p> <p>8I Capture, record, and integrate sampled and Musical Instrument Digital Interface (MIDI) sound in different sound rates, resolutions, and channels</p> <p>Uses technology applications to facilitate evaluation of work, both process and product.</p> <p>9A Design and implement procedures to track trends, set timelines, and review/evaluate progress for continual improvement in process and product</p> <p>9B Seek and respond to advice from peers and professionals in delineating technological tasks</p> <p>9C Create technology specifications for tasks and rubrics to evaluate products and product quality against established criteria</p> <p>9D Resolve information conflicts and validate information by accessing, researching, and comparing data and demonstrate that products and product quality can be evaluated against established criteria</p> | <p>Formats digital information for appropriate and effective communication.</p> <p>10A Identify quality in multimedia design such as consistency, alignment, repetition, and proximity</p> <p>10B Use content selection and presentation for the defined audience and communication purpose</p> <p>10C Format the multimedia project according to defined output specifications including target audience and viewing environment</p> <p>Delivers the product electronically in a variety of media, with appropriate supervision.</p> <p>11A Publish information in a variety of ways including, but not limited to, printed copy or monitor display</p> <p>11B Publish information in saved files, Internet documents, CD-ROM discs, or video</p> | <p>Uses technology applications to facilitate evaluation of communication, both process and product.</p> <p>12A Determine and employ technology specifications to evaluate projects for design, content delivery, purpose, and audience</p> <p>12B Seek and respond to input from peers and professionals in evaluating the product</p> |

