

Texas A&M University- Texarkana

Master Technology Teacher Certification Program

Prerequisite Knowledge and Skills Questionnaire

The Master Technology Teacher Certification is an advance program that requires prior technology skills and knowledge for successful completion. This questionnaire assesses where you are with your technology knowledge and skills to enable us help you plan effective strategies for success in the program. The questionnaire is based on the knowledge and skills contained in Technology Applications Standards I-XI as defined by State Board for Educator Certification (SBEC)

<http://www.sbec.state.tx.us/SBECOnline/standtest/edstancertfieldlevl.asp>

Assess your knowledge/skill in the following technology applications according to the scale: **1 = little or no knowledge/skill, 2 = somewhat adequate, 3 = adequate, 4 = proficient.**

Please note that where you indicate adequate to proficient as your response, you must show evidence in your portfolio

Technology Application Skills/Knowledge		1	2	3	4
1a.	Technology-related terminology and concepts				
1b.	Hardware components and software applications				
1c.	Input and output devices				
2a.	Working with digital technologies (e.g., text, graphics, animation, video, sound, Internet applications)				
2b.	Evaluating productivity and authoring tools for selection, acquisition, and use				
3a.	Teaching others to use technology for curricular enhancement				
4a.	Strategies for searching locating, and acquiring information from electronic resources (e.g., collaborative software, the Internet, intranets).				
4b.	Evaluating validity, accuracy, and relevance of information acquired from a variety of digital and other sources				
4c.	Techniques for storing and retrieve electronic information in various formats				
4d.	Familiarity with copyright laws and ethical issues in technology access and usage, fair use, and acceptable use policy				
4e.	Citing the sources of print and digital information from a variety of resources				
5a.	Basic elements of graphic design (e.g., proportion, balance, color, variety, emphasis, harmony, symmetry, unity)				
5b.	Using graphics to communicate effectively and assist others in the creation of graphic products.				
5c.	Basic computer animation concepts (e.g., storyboarding, timeline, color depth, layers, animated GIFs, frames, keyframes, tweening, object behaviors)				
6a.	Working with sounds including those captured from a variety of sources				

	(e.g., audio CD, tape, microphone).				
6b.	Work with multimedia tools to design products for a variety of purposes (e.g., posters, stationery, brochures, slideshows, Web pages, presentations)				
7a.	Familiarity with mechanisms for navigating, accessing, transferring, sharing, and storing Web-based information across networks (e.g., intranets, the Internet).				
7b.	Creating and editing Web pages using appropriate tools and design principles; and page elements (e.g., hyperlinks, HTML tags, alt tags for accessibility)				
7c.	Manage elements of a web site; establishing and accessing folder/directory, and related files				
7d.	Maintenance of a Web site including network security and access issues (e.g., firewalls, password controls)				
8a.	Basic video technology concepts (e.g., analog, digital) and video editing techniques				
8b.	Basic concepts of video filming (e.g., composition, ratio of image to frame, position in frame, line of gaze, pans/tilts, movement, perspective); and lighting techniques				
8c.	Familiarity with compression methods for a variety of file types (e.g., photographs, animation, audio, video, graphics) and implication for integrity of digitally captured images				
8d.	Analog to digital video conversion and vice versa				
8e.	Postproduction techniques (e.g., editing and creating control and/or time coded tracks; creating transitions, captions, and titles; applying 2-D and 3-D animation effects).				
9a.	Familiarity with Texas Essential Knowledge and Skills in desktop publishing, graphics and animation, multimedia, video technology, and web mastering for students in grade levels that you currently teach				

Portfolio Information

A portfolio of sample works must be submitted with this questionnaire. Choose the best works that you have completed either during professional development sessions or as part of the products/techniques you currently use in your classroom. Note that you do not have to provide examples for every item in the questionnaire. However, you must have enough and variety of work samples in the portfolio to provide a representative view of your technology skills and knowledge. Selected works must be annotated, indicating which knowledge or skills the works illustrate.