


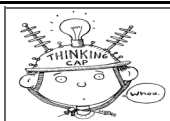




Strand	Knowledge and Skill	Student Expectation
 <p>Creativity and Innovation</p>	1. The student uses creative thinking and innovative processes to construct knowledge, generate new ideas, and create products. The student is expected to:	<p>(A) identify, create, and use files in various formats such as text, raster and vector graphics, video, and audio files;</p> <p>(B) create original works as a means of personal or group expression;</p> <p>(C) explore complex systems or issues using models, simulations, and new technologies to make predictions, modify input, and review results; and</p> <p>(D) discuss trends and possible outcomes.</p>
 <p>Communication and Collaboration</p>	2. The student collaborates and communicates both locally and globally to reinforce and promote learning. The student is expected to:	<p>(A) participate in personal learning networks to collaborate with peers, experts, or others using digital tools such as blogs, wikis, audio/video communication, or other emerging technologies;</p> <p>(B) communicate effectively with multiple audiences using a variety of media and formats; and</p> <p>(C) read and discuss examples of technical writing.</p>
 <p>Research and Information Fluency</p>	3. The student acquires, analyzes, and manages content from digital resources. The student is expected to:	<p>(A) create a research plan to guide inquiry;</p> <p>(B) discuss and use various search strategies, including keyword(s) and Boolean operators;</p> <p>(C) select and evaluate various types of digital resources for accuracy and validity; and</p> <p>(D) process data and communicate results.</p>
 <p>Critical Thinking, Problem Solving and Decision Making</p>	4. The student makes informed decisions by applying critical-thinking and problem-solving skills. The student is expected to:	<p>(A) identify and define relevant problems and significant questions for investigation;</p> <p>(B) plan and manage activities to develop a solution, design a computer program, or complete a project;</p> <p>(C) collect and analyze data to identify solutions and make informed decisions;</p> <p>(D) use multiple processes and diverse perspectives to explore alternative solutions;</p> <p>(E) make informed decisions and support reasoning; and</p> <p>(F) transfer current knowledge to the learning of newly encountered technologies.</p>
 <p>Digital Citizenship</p>	5. The student practices safe, responsible, legal, and ethical behavior while using technology tools and resources. The student is expected to:	<p>(A) understand copyright principles, including current laws, fair use guidelines, creative commons, open source, and public domain;</p> <p>(B) practice ethical acquisition of information and standard methods for citing sources;</p> <p>(C) practice safe and appropriate online behavior, personal security guidelines, digital identity, digital etiquette, and acceptable use of technology; and</p> <p>(D) understand the negative impact of inappropriate technology use, including online bullying and harassment, hacking, intentional virus setting, invasion of privacy, and piracy such as software, music, video, and other media.</p>
 <p>Technology Operations and Concepts</p>	6. The student demonstrates a thorough understanding of technology concepts, systems, and operations. The student is expected to:	<p>(A) define and use current technology terminology appropriately;</p> <p>(B) select technology tools based on licensing, application, and support;</p> <p>(C) identify, understand, and use operating systems;</p> <p>(D) understand and use software applications, including selecting and using software for a defined task;</p> <p>(E) identify, understand, and use hardware systems;</p> <p>(F) understand troubleshooting techniques such as restarting systems, checking power issues, resolving software compatibility, verifying network connectivity, connecting to remote resources, and modifying display properties;</p> <p>(G) demonstrate effective file management strategies such as file naming conventions, location, backup, hierarchy, folder structure, file conversion, tags, labels, and emerging digital organizational strategies;</p> <p>(H) discuss how changes in technology throughout history have impacted various areas of study;</p> <p>(I) discuss the relevance of technology as it applies to college and career readiness, life-long learning, and daily living;</p> <p>(J) use a variety of local and remote input sources;</p> <p>(K) use keyboarding techniques and ergonomic strategies while building speed and accuracy;</p> <p>(L) create and edit files with productivity tools, including:</p> <ul style="list-style-type: none"> (i) a word processing document using digital typography standards such as page layout, font formatting, paragraph formatting, and list attributes; (ii) a spreadsheet workbook using basic computational and graphic components such as basic formulas and functions, data types, and chart generation; (iii) a database by manipulating components such as entering and searching for relevant data; and (iv) a digital publication using relevant publication standards; <p>(M) plan and create non-linear media projects using graphic design principles; and</p> <p>(N) integrate two or more technology tools to create a new digital product.</p>