



**21<sup>st</sup> Century Learning Educational Technology Standard**  
**Catalina Foothills School District**  
**Grades 9-12**

A 21<sup>st</sup> Century Learning Community

<b>1. CREATIVITY AND INNOVATION</b> <ul style="list-style-type: none"> <li>• <b>KNOWLEDGE AND IDEAS</b></li> <li>• <b>MODELS AND SIMULATIONS</b></li> <li>• <b>TRENDS AND POSSIBILITIES</b></li> <li>• <b>ORIGINAL WORKS</b></li> </ul>	
ET9-12.1.1	Analyzes, evaluates, and synthesizes information to generate new ideas, processes, or products.
ET9-12.1.2	Predicts and tests the relationships amongst interdependent elements of a digital model, simulation or system.
ET9-12.1.3	Proposes or creates a model, simulation, or system.
ET9-12.1.4	Predicts how one system operates by comparing it to multiple systems, digital models or simulations.
ET9-12.1.5	Analyzes patterns and trends and their logical links to form inferences, and forecast possibilities providing novel insights.
ET9-12.1.6	Creates innovative products or projects using digital tools to express original ideas.
ET9-12.1.7	Uses digital collaborative tools to synthesize information, produce original works, and express ideas.
<b>2. COMMUNICATION AND COLLABORATION</b> <ul style="list-style-type: none"> <li>• <b>EFFECTIVE COMMUNICATION AND DIGITAL INTERACTIONS</b></li> <li>• <b>DIGITAL SOLUTIONS</b></li> <li>• <b>GLOBAL CONNECTIONS</b></li> </ul>	
ET9-12.2.1	Collaborates with peers, experts, or others in the global community employing a variety of digital tools to share findings and/or publish in a variety of ways.
ET9-12.2.2	Communicates information and ideas respectfully and effectively to multiple audiences using a variety of digital environments.
ET9-12.2.3	Communicates and collaborates for the purpose of producing original works or solving problems.
ET9-12.2.4	Engages in a global community to contribute to a specific global issue.
<b>3. RESEARCH AND INFORMATION LITERACY</b> <ul style="list-style-type: none"> <li>• <b>PLANNING</b></li> <li>• <b>PROCESSING</b></li> </ul>	
ET9-12.3.1	Identifies and defends effective key words, phrases, and strategies for conducting information searches.
ET9-12.3.2	Evaluates diverse information sources.
ET9-12.3.3	Locates and synthesizes information utilizing advanced search strategies including a variety of search engines, metadata search engines, deep web searches and databases.
ET9-12.3.4	Defends the authority of primary and/or secondary sources used in research.
ET9-12.3.5	Evaluates information identifying facts, opinions, bias, inaccurate and misleading information by analyzing multiple sources.
ET9-12.3.6	Synthesizes research information to create new understanding and innovative solutions.
ET9-12.3.7	Applies ethical use of information and media by respecting the principles of copyrights, intellectual freedom and property rights, using information and media technology responsibly, and citing resources appropriately.

<b>4. CRITICAL THINKING, PROBLEM SOLVING AND DECISION MAKING</b> <ul style="list-style-type: none"> <li>• INVESTIGATION</li> <li>• EXPLORING SOLUTIONS</li> </ul>	
ET9-12.4.1	Writes essential questions to investigate a complex (multi-step) issue using digital tools and resources.
ET9-12.4.2	Plans and manages an individual learning project that collects multiple data sets from diverse sources, creating planning adjustments and course corrections from the knowledge gained.
ET9-12.4.3	Presents defensible solutions and makes decisions from multiple perspectives using collected resources and data.
<b>5. DIGITAL CITIZENSHIP</b> <ul style="list-style-type: none"> <li>• SAFETY AND ETHICS</li> <li>• LEADERSHIP FOR DIGITAL CITIZENSHIP</li> <li>• IMPACT OF TECHNOLOGY</li> </ul>	
ET9-12.5.1	Determines when it is appropriate and safe to use various personal digital devices.
ET9-12.5.2	Describes strategies to deal with cyber-bullying situations.
ET9-12.5.3	Advocates and practices safe, legal, and responsible use of digital tools as defined by school board policy and procedures.
ET9-12.5.4	Demonstrates safe online communication practices regarding personal information.
ET9-12.5.5	Analyzes and compares how web advertising influences consumer choices.
ET9-12.5.6	Advocates and exhibits legal and ethical behavior when using technology.
ET9-12.5.7	Exhibits digital citizenship by consistently leading by example and advocating social and civic responsibility to others.
ET9-12.5.8	Develops a possible technological solution for a contemporary issue.
<b>6. TECHNOLOGY OPERATIONS AND CONCEPTS</b> <ul style="list-style-type: none"> <li>• UNDERSTANDING</li> <li>• APPLICATIONS</li> <li>• PROBLEM SOLVING</li> <li>• TRANSFER OF KNOWLEDGE</li> </ul>	
ET9-12.6.1	Describes how the components of a system are integrated using appropriate terminology.
ET9-12.6.2	Defines and applies knowledge of various technical process terms.
ET9-12.6.3	Chooses technology applications appropriate for the audience and task.
ET9-12.6.4	Recognizes and demonstrates ergonomically safe and sound use of equipment.
ET9-12.6.5	Investigates and evaluates physical risks of using digital technology.
ET9-12.6.6	Demonstrates speed and accuracy using appropriate data entry tools.
ET9-12.6.7	Composes a multiple section document that applies the most appropriate media and advanced formatting.
ET9-12.6.8	Uses spreadsheets to calculate, graph, organize, and present data in a variety of real-world settings.
ET9-12.6.9	Uses database features to export, organize, compile, and output data.
ET9-12.6.10	Composes media for the web with interactive capabilities.
ET9-12.6.11	Creates, evaluates and critiques web structure and content.
ET9-12.6.12	Uses network protocols for moving files and secure web access.
ET9-12.6.13	Identifies and uses online help and other support to learn about features of hardware, software, and connectivity as well as to assess and resolve problems.
ET9-12.6.14	Transfers understanding of current technologies to new and novel learning situations.