

North Carolina Eighth Grade Technology Proficiency Standards

The following Technology Proficiency Standards are to be used to determine technology literacy. Eighth grade students must meet seven or more of these standards to be identified as proficient.

Note: The bulleted lists beneath each standard are suggestions only; the bulleted lists are not all inclusive.

Proficiency 1:

Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use.

- The student demonstrates proficiency in recognizing and describing strategies for identifying, solving, and preventing minor hardware and software problems.
- The student demonstrates proficiency in investigating, discussing, and explaining why computers, networks, and information must be protected from viruses, vandalism and intrusion, both malicious and mischievous.
- The student demonstrates proficiency in modeling ethical behavior relating to security, privacy, passwords, and personal information, and recognizing possible consequences of misuse.

Proficiency 2:

Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society.

- The student demonstrates knowledge of new technologies as they continue to evolve.
- The student demonstrates knowledge of information technologies and their effects in society.
- The student demonstrates knowledge of the use of information technologies and their effects in the workplace.

Proficiency 3:

Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse.

- The student demonstrates proficiency in respecting the work of others in the online community (copyright, Fair Use, attributions).
- The student demonstrates proficiency in using technology safely in the online networking community.
- The student demonstrates knowledge of the consequences of the misuse of information technologies.

Proficiency 4:

Use content-specific tools, software, and simulations (e.g., environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research.

- The student demonstrates proficiency in using databases and why they are used in North Carolina (e.g., schools, government, business, and science) to collect and organize information.
- The student demonstrates proficiency in using spreadsheets to organize, report, and display data and why they are useful mathematical tools.
- The student demonstrates proficiency in the selection, organization, and presentation of content area information from the Internet for a specific purpose.
- The student demonstrates proficiency in selecting and using responsibly a variety of computing devices (e.g., probeware, handhelds, digital cameras, scanners) to collect, analyze and present content area information.
- The student demonstrates proficiency in using evaluation tools to select Internet resources and information for content and usefulness in content area assignments.

Proficiency 5:

Student creates multimedia curriculum projects.

- The student demonstrates proficiency in using external computer devices and tools.
- The student demonstrates proficiency in recalling multimedia tools and peripherals throughout the technology curriculum.
- The student demonstrates proficiency when working with external computer devices and tools when working alone and when collaborating in groups.

Proficiency 6:

Student presents multimedia curriculum projects.

- The student demonstrates proficiency in using multimedia presentation resources to communicate to internal and external audiences.
- The student demonstrates proficiency in determining the appropriate communication resource to use with each product and audience.
- The student demonstrates proficiency in communicating curriculum concepts.

Proficiency 7:

Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information, and to develop solutions or products for audiences inside and outside the classroom.

- Student demonstrates proficiency in the appropriate use of various Web 2.0 collaborative tools (wikis, blogs, etc.).
- Student demonstrates proficiency in applying appropriate technology tools to create products or solutions.
- Student demonstrates proficiency using technology in the collection and analysis of data as they solve problems and complete investigations.
- Student demonstrates proficiency in the appropriate use of online communication tools as they collaborate with others.

Proficiency 8:

Student selects technology tools that enhance the efficiency and output of curriculum projects.

- The student demonstrates proficiency in determining the appropriate tools and technology resources to solve problems.
- The student demonstrates proficiency in accomplishing multiple tasks and problems with the appropriate tools and technology resources.
- The student demonstrates proficiency in problem solving and multi-tasking by using the correct technology tools and resources.

Proficiency 9:

Demonstrate an understanding of concepts underlying hardware, software, and connectivity and of practical applications to learning and problem solving.

- The student demonstrates proficiency in selecting and using a variety of technology tools to collect, analyze, and present information.
- The student demonstrates proficiency in identifying and discussing terms/concepts associated with safe, effective, and efficient use of the Internet (e.g., password, firewalls, Spam, security, Fair Use, AUP/IUPs).
- The student demonstrates proficiency in the use of technology terms/concepts to explain the strategies used to collect, organize and present findings for assignments/projects.
- The student demonstrates proficiency in choosing appropriate technology resources to solve problems and complete assignments.
- The student demonstrates proficiency in identifying, discussing and using online collaborative tools (e.g., email, surveys, videoconferencing) to collect data for content area assignments/projects.

Proficiency 10:

Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.

- Student demonstrates proficiency in identifying appropriate online resources for assignments or project-based activities.
- Student demonstrates proficiency in evaluating online information resources (accuracy, points of view, bias, etc.).
- Student demonstrates proficiency in identifying information in online resources that is relevant to research questions or problems to be solved.