

Montpelier Schools
Eleventh Grade
Technology Applications and Information Tools
Ohio Technology Content Standards 3, 4, and 5
Scope and Sequence

Key: I – Introduce, C – Continuation, M - Mastery

Standard 3

Technology for Productivity Applications

Students learn the operations of technology through the usage of technology and productivity tools.

Benchmark A: Integrate conceptual knowledge of technology systems in determining practical applications for learning and technical problem-solving.		
Skills	Level	Comments
Make informed choices among technology systems, resources and services.	C	
Explore state-of-the-art devices to store data.	C	
Research technology systems, resources and services to solve technical problems.	C	

Benchmark B: Identify, select and apply appropriate technology tools and resources to produce creative works and to construct technology-enhanced models.		
Skills	Level	Comments
Apply emerging technology tools and resources for managing and communicating personal/professional information (e.g., distance-learning, voice-recognition tools, personal digital devices, automatic identification systems, bar codes, radio frequency tags).	C	
Assimilate productivity and technological tools into all aspects of solving problems and managing personal information and communications.	C	
Use technology tools to model complex systems of information to improve the communication of and access to the information (e.g., modeling physics principles, graphic/geographic information system, weather modeling).	C	

Standard 4

Technology and Communication Applications

Students use an array of technologies and apply design concepts to communicate with multiple audiences, acquire and disseminate information, and enhance learning.

Benchmark A: Apply appropriate communication design principles in published and presented projects.		
Skills	Level	Comments
Employ design techniques taking into consideration the psychological impact and cultural connotations of color when designing for print media and multimedia, video and Web pages.	C	
Apply principles of design (contrast, repetition, alignment and proximity) for academic and personal needs (e.g., resume, scholarship application).	C	
Adapt design concepts to emerging technologies.	C	
Select and evaluate message-appropriate designs for print, multimedia, video and Web pages for curricular and personal needs (e.g., silly graphics may not be appropriate for academic projects).	C	

Benchmark B: Create, publish and present information, utilizing formats appropriate to the content and audience.		
Skills	Level	Comments
Archive communication products in appropriate electronic forms (e.g., store electronic publications so that they may be accessed when needed).	C	
Critique personal communication products.	C	

Benchmark C: Identify communication needs, select appropriate communication tools and design collaborative interactive projects and activities to communicate with others, incorporating emerging technologies.		
Skills	Level	Comments
Select an appropriate e-mail discussion list to meet communication needs (e.g., purpose of list, participants, audience, topics, ease of use).	C	
Integrate online communication capabilities to make inquiries, do research and disseminate results (e.g., group writing projects, college searches, career information inquiry).	C	
Collaborate in online learning or video-conferencing activities based on research and/or an investigation of real-world problems (e.g., study of community or regional ecosystem).	C	
Select and use appropriate online structured learning experiences to meet individual learning needs.	C	

Standard 5

Technology and Information Literacy

Students engage in information literacy strategies, use the Internet, technology tools and resources, and apply information-management skills to answer questions and expand knowledge.

Benchmark A: Determine and apply an evaluative process to all information sources chosen for a project.		
Skills	Level	Comments
Seek and evaluate information to answer both personal and curricular needs.	C	
Analyze the intent and authorship of information sources used for a curricular need.	C	
Determine valid information for an assignment from a variety of sources.	C	

Benchmark B: Apply a research process model to conduct research and meet information needs.		
Skills	Level	Comments
Select essential questions for research and use a recognized or personally developed model to conduct independent research.	C	
Identify, evaluate information and select relevant and pertinent information found in each source.	C	
Identify relevant facts, check for validity, and record appropriate information keeping track of all sources.	C	
Analyze information and synthesize into a communicated product.	C	
Respect copyright laws and guidelines, and use standard bibliographic format to list sources.	M	
Critique and revise the information product.	C	
Review the research process for efficiency and effectiveness.	C	

Benchmark C:

Formulate advanced search strategies, demonstrating an understanding of the strengths and limitations of the Internet, and evaluate the quality and appropriate use of Internet resources.

Skills	Level	Comments
Demonstrate the use of parentheses for nesting search terms to alter retrieval strategies through multiple Internet resources.	C	
Create a product on a specific curricular topic that includes annotated Web sites constructed according to a standard style manual (e.g., electronic pathfinder on careers).	C	
Develop a systematic approach to judge the value of the retrieved Web information.	C	

Benchmark D:

Evaluate choices of electronic resources and determine their strengths and limitations.

Skills	Level	Comments
Modify a search through the use of different key words and other techniques specific to an electronic resource (e.g., online database, Web-based index).	M	
Integrate online subscription resources and other electronic media to meet needs for research and communication on a routine basis.	C	
Differentiate coverage of electronic resources to select information need.	C	
Support choices of free and fee-based Web information used to create a class project.	C	