

ARCADIA PUBLIC SCHOOLS

Technology Curriculum

Technology Philosophy

The purpose of technology education at Arcadia Public Schools is to prepare students for higher education, careers, and personal needs by introducing and using different types of technology in their daily lives.

The school must provide computer awareness for all K-12 students and teachers, plus the opportunity for all to further their training in the use of technology. A computer curriculum must be an ongoing, flexible program developing first an awareness and then a utilization of technology within the total school curriculum.

Educating students across the curriculum about computer technology includes personal use experiences, career preparation, and the interaction skills necessary for future applications. Keyboarding skills and basic operation skills are essential to technological literacy. Technology education prepares the student intellectually through mental challenges, and the development of higher order thinking skills, such as problem solving and logic based reasoning.

Technology Exit Outcomes

By the end of the twelfth grade, students at Arcadia Public Schools will be able to....

1. make informed choices among technology systems, resources, and services (i.e., hardware);
2. understand advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole;
3. use technology tools and resources for managing and communicating personal or professional information;
4. select and apply technology tools for research, information analysis, problem solving, and decision-making in content learning;
5. routinely and efficiently use on-line information resources to meet learning needs;
6. collaborate with others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works.

Technology Strands

1. Basic Operations and Concepts
 - A. General Computer Knowledge
 - B. Keyboarding Strategies
 - C. Multimedia Resource Knowledge
 - D. Networking
2. Ethics, Safety, and Career Issues
 - A. Ethics Issues
 - B. Internet Safety
 - C. Career Options
3. Productivity Tools
 - A. Word Processing
 - B. Graphics
 - C. Multimedia
 - D. Web Programming
 - E. Desktop Video Production
 - F. Spreadsheet
 - G. Peripheral Devices
4. Technology Communication Tools
 - A. E-Mail
 - B. Telecommunications Collaborations
 - C. Presentation Skills
5. Technology Research Tools
 - A. Web Research
 - B. Evaluation
 - C. Documentation
6. Technology Problem-Solving and Decision-Making Tools
 - A. Selection of Appropriate Tools
 - B. Media Literacy

Technology Curriculum Matrix

Identifier	Objective	Computers 7	Computers 8	Digital Media
1.A.1	Identify simple computer parts using correct terms (e.g., mouse, keyboard, monitor, disk, printer, CD-ROM).	<i>I, M</i>		
1.A.2	Demonstrate start up and shut down procedures of basic technology components (e.g. computers, video players, tape recorders).	<i>I, M</i>		
1.A.3	Use technology devices to complete a task (e.g. mouse, keyboard, printer, remote control, microphone).	<i>I, M</i>		
1.A.4	Log into and out of the network using name and ID number.	<i>I, M</i>		
1.A.5	Launch new programs.	<i>I, M</i>		
1.A.6	Open a new or saved document.	<i>I, M</i>		
1.A.7	Use the window scroll bar to effectively move through the application screen.	<i>I, M</i>		
1.A.8	Save files to proper locations using "save" and "save as."	<i>I, M</i>		
1.A.9	Choose printer.	<i>I, M</i>		
1.A.10	Print document.	<i>I, M</i>		
1.A.11	Organize files into folders.	<i>I, M</i>		
1.A.12	Navigate between programs.	<i>I, M</i>		
1.A.13	Use the troubleshooting process (e.g., identify problem, check obvious, note error messages, seek assistance).	<i>I, M</i>		
1.B.1	Holds and positions the mouse.	<i>I, M</i>		
1.B.2	Uses proper keyboard positions (e.g., hand orientation, space bar, key shift, return).	<i>I, M</i>		
1.B.3	Keyboard at 15 words per minute (wpm).	<i>I, M</i>		
1.B.4	Keyboard at 25 wpm.	<i>I, M</i>		
1.B.5	Keyboard at 30+ wpm.		<i>I, M</i>	
1.C.1	Use multimedia resources (e.g., interactive books, educational software, multimedia encyclopedias).	<i>I</i>		<i>M</i>
1.C.2	Demonstrate functional operation of technology devices (e.g. LCD projectors, digital cameras, scanners, scientific probes).		<i>I, M</i>	
1.D.1	Identify parts of a network using correct terms (e.g., hardware, software, connectivity components).			<i>I, M</i>
2.A.1	Use common network courtesies (e.g., login in using own name and password, respecting another students' work).	<i>I, M</i>		
2.A.2	Be aware of and follow district network guidelines and consequences of misuse.	<i>I, M</i>		
2.A.3	Understands the appropriate and inappropriate uses of internet communication on the jobsite.	<i>I</i>		<i>M</i>
2.A.4	Observe copyright laws and responsible use of intellectual property (e.g., cite sources, obtain permission to use others' work, music downloads).	<i>I</i>		<i>M</i>

Identifier	Objective	Computers 7	Computers 8	Digital Media
2.B.1	Identifies dangers and prevention of viruses, worms and spyware.	<i>I</i>		<i>M</i>
2.B.2	Identifies personal safety issues when using chat rooms, and on-line discussions internet.	<i>I</i>		<i>M</i>
2.B.3	Understand the long-term consequences of posting personal information about self and others on the internet.	<i>I</i>		<i>M</i>
2.B.4	Understands the dangers and consequences of cyber-bullying and harassment.	<i>I</i>		<i>M</i>
2.B.5	Identifies ways to prevent identity theft when using the internet.	<i>I</i>		<i>M</i>
2.C.1	Explore technology related career choices.		<i>I</i>	<i>M</i>
3.A.1	Enter and delete text.	<i>I, M</i>		
3.A.2	Apply editing techniques (e.g., spell check, thesaurus, find, copy/cut/paste).	<i>I, M</i>		
3.A.3	Apply advanced editing techniques (e.g., spell check, thesaurus, find, copy/cut/paste).	<i>I, M</i>		
3.A.4	Apply formatting techniques (e.g., alignment, tabs, fonts, styles, spacing).	<i>I</i>	<i>M</i>	
3.A.5	Apply advanced formatting techniques (e.g., alignment, tabs, fonts, styles, spacing).	<i>I</i>	<i>M</i>	
3.A.6	Manipulate text layout and design for presentation projects.	<i>I</i>		<i>M</i>
3.A.7	Enter and edit text with a variety of input devices (e.g., optical character reader, speech recognition).	<i>I, M</i>		
3.B.1	Use painting and drawing tools (e.g., text, line, shapes, eraser, brush, spray can, paint bucket).	<i>I, M</i>		
3.B.2	Insert original or commercial clip art into documents/projects.	<i>I, M</i>		
3.B.3	Edit and manipulate graphics (e.g., move, resize).	<i>I</i>	<i>M</i>	
3.B.4	Use advanced painting and drawing tools (e.g., text, line, shapes, eraser, brush, spray can, paint bucket).	<i>I, M</i>		
3.B.5	Capture digital images and insert into a document/project.	<i>I, M</i>		
3.B.6	Insert clip art from a variety of sources into documents/projects (e.g., internet, camera).	<i>I, M</i>		
3.B.7	Edit and manipulate graphics (e.g., cropping, rotating, changing file size).	<i>I</i>	<i>M</i>	
3.B.8	Capture digital images and insert into document/project (e.g., pictures, scanned images, video footage).	<i>I, M</i>		
3.C.1	Use a graphic organizer (e.g., Inspiration, storyboard) for multimedia production.			<i>I, M</i>
3.C.2	Create developmentally appropriate multimedia projects.	<i>I</i>		<i>M</i>
3.C.3	Incorporate multiple components into multimedia projects (e.g., text, graphics, sound, drawing).	<i>I</i>		<i>M</i>
3.C.4	Use advanced multimedia techniques (e.g., animations, new button actions, web links).		<i>I</i>	<i>M</i>
3.D.1	Develop a graphic organizer (e.g., Inspiration, storyboard) for web production.			<i>I, M</i>
3.D.2	Create a web page using text, graphics, links.		<i>I</i>	<i>M</i>
3.E.1	Identify video production equipment parts (e.g., cameras, connections, audio equipment, tripods, lights).			<i>I, M</i>

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3.E.2	Demonstrate appropriate care of video production equipment (e.g., camera, cables, computer).			<i>I, M</i>
3.E.3	Storyboard video collaboratively with peers.			<i>I, M</i>
3.E.4	Use video filmed by others to develop productions.			<i>I, M</i>
3.E.5	Film quality footage.			<i>I, M</i>
3.E.6	Film quality footage using advanced techniques (e.g., video mixing, mobile video, aligning video to genre).			<i>I, M</i>
3.E.7	Import video into computer.			<i>I, M</i>
3.E.8	Edit video footage adding effects (e.g., sound, text, transitions).			<i>I, M</i>
3.E.9	Edit video footage adding effects using advanced techniques (e.g., multiple video sources, overlaying video).			<i>I, M</i>
3.F.1	Enter and sort information in a spreadsheet.			<i>I, M</i>
3.F.2	Create simple graphics (e.g., bar graph, pie chart, line graph).	<i>I</i>	<i>D</i>	<i>M</i>
3.F.3	Demonstrate basic spreadsheet functions (e.g., +, -, *, /, and average).	<i>I</i>	<i>D</i>	<i>M</i>
3.F.4	Use advanced graph formatting techniques (e.g., step size, 3-dimensional, color, shading, labeling).			<i>I, M</i>
3.F.5	Use advanced spreadsheet formatting (e.g., font, alignment, line, shade, color, dimension).			<i>I, M</i>
4.A.1	Access account, retrieve, compose, send, and reply to messages using individual accounts.	<i>I, M</i>		
4.A.2	Manage e-mail messages (e.g., deleting, saving, organizing).	<i>I, M</i>		
4.A.3	Print message.	<i>I, M</i>		
4.A.4	Create an address book.	<i>I, M</i>		
4.A.5	Use advanced e-mail features (e.g., postpone, edit, forward, carbon copy, multiple recipients, attachments).	<i>I</i>	<i>M</i>	
5.A.1	Access teacher identified web sites.	<i>I, M</i>		
5.A.2	Maneuver within web-based resources (e.g., navigate, use links, forward, back).	<i>I, M</i>		
5.A.3	Enter address/URL.	<i>I, M</i>		
5.A.4	Bookmark web sites.	<i>I, M</i>		
5.B.1	Recognize the significance of the URL address (e.g., .org, .com, .net, . gov).	<i>I</i>	<i>D</i>	<i>M</i>
5.B.2	Assess web sites for relevance and validity (e.g., purpose of research, validity of site).			<i>I, M</i>
5.B.3	Determine and prioritize appropriate electronic resources.			<i>I, M</i>

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