

GRADE LEVEL TECHNOLOGY SKILLS

from the Salem Public Schools Technology Plan 2008 - 2012

GRADE 9

- Demonstrate keyboarding proficiency in technique and posture.
- Use a variety of external peripherals and understand how they connect to the computer.
- Back up files.
- Format disks for multiple operating systems and save documents to allow translation in multiple operating systems.
- Use multiple applications simultaneously and navigate among them.
- Demonstrate an understanding of the concepts of file size, application size and memory needed for an operation.
- Follow classroom rules for responsible and ethical use of computers (responsible behavior around equipment, respect for other people's work, and appropriate collaborative behavior).
- Demonstrate a clear understanding of the District's Acceptable Use Policy (return signed AUP form).
- Site electronic sources correctly using MLA formatting for text and images gathered from electronic sources.
- Discuss copyright issues and the specific limitations for text, music and video.
- Plan, create and edit documents created in word processing program using readable fonts, alignment, page set up, tabs, and ruler settings.
- Customize thesaurus and dictionary tools.
- Create an original database, defining field formats and adding new records.
- Use features such as sort, filter, and find.
- Create an original spreadsheet, entering formulas and functions.
- Format columns and rows.
- Customize formatting of charts or graphs created in a spreadsheet.
- Use components of multimedia software (e.g., text, graphics, sound, video, and animation) to design a project.
- Participate in a variety of curriculum-based online projects with guidance.
- Use technologies such as e-mail, professional interchange networks, and research databases to access and exchange information.
- Select appropriate electronic sources with guidance. (e.g. web sites, online periodicals databases, and online catalogs.)
- Select and use search engines with guidance. Understand the differences between search engines.
- Introduce effective search strategies to locate and retrieve information using Boolean logic operators.
- Use bookmarks that have been organized into folders for further reference.
- Demonstrate the ability to identify the source, location and media type
- Use technology tools to create and modify solutions to problems.
- Organize ideas and plan projects with brainstorming, outlining or concept-mapping software.

GRADE 10

- Connect external peripherals (printers, zip drives, scanner, digital camera, projectors, etc.) to a computer.
- Create directories and folders on local hard drive, removable media and network.
- Demonstrate a basic understanding of how files, printers and applications can be shared on a network.
- Demonstrate file management skills (e.g. compress and expand files as needed and download files when appropriate).

- Follow classroom rules for responsible and ethical use of computers (responsible behavior around equipment, respect for other people's work, and appropriate collaborative behavior).
- Demonstrate a clear understanding of the District's Acceptable Use Policy .
- Demonstrate and explain copyright laws/issues and model ethical acquisition and use of digital information.
- Import/export and link data between word-processed document and other applications.
- Save (retrieve, load, import) documents in different file formats (RTF, HTML, etc.).
- Apply database features such as mailing labels and mail merges.
- Sort and query information in a database.
- Select and create graphs and charts appropriate to a curriculum project.
- Create and manipulate illustrations with computer graphics software (adjust scale, size, shape, etc.) for a multimedia presentation.
- Participate in a variety of curriculum-based online projects.
- Share text, graphics and sound files as attachments in an e-mail message.
- Select appropriate electronic sources. (e.g. web sites, online periodicals databases, and online catalogs.).
- Select and use search engines independently.
- Apply and explain appropriate electronic search strategies in the acquisition of information including keywords and Boolean search strategies.
- Organize bookmarks into folders for further reference.
- Evaluate the acquired information for accuracy, relevance, appropriateness and bias.
- Evaluate when to use technology and determine the appropriate tools and resources.
- Use calendars, time management or project management software to assist in conducting an inquiry.

GRADE 11

- Operate independently subject specific peripheral input devices and other equipment (e.g., digital cameras, camcorders, probes, midi keyboards, graphic tablets, etc.).
- Choose appropriate software preferences or properties.
- Ability to transport files from one computer station to another computer station that lacks network support
- Follow classroom rules for responsible and ethical use of computers (responsible behavior around equipment, respect for other people's work, and appropriate collaborative behavior).
- Identify ways in which technology is widely used in the workplace and in society.
- Demonstrate a clear understanding of the District's Acceptable Use Policy.
- Demonstrate an ability to evaluate various media resources, such as web sites, text, sound, images, video and animation for appropriateness, accuracy, and non -bias.
- Create and integrate databases, graphics, and spreadsheets into word processing documents to manage information and create reports.
- Utilize different views of a database (list, data).
- Import/ export and link data to and from a spreadsheet.
- Import text, sound, video and graphics from a variety of sources into a multimedia presentation.
- Collaborate with peers, experts and others online regarding a curriculum-based project.
- Demonstrate the function of electronic conferencing tools such as electronic bulletin boards, FTP, video conferencing, listservs and newsgroups.
- Collect, organize, analyze and graphically present technology research information using available productivity tools.
- Demonstrate the ability to access, operate and manipulate information from secondary storage devices including CD-ROM and online catalogs.
- Integrate with correct citations electronic resource results including primary source material in curriculum projects.
- Demonstrate how specialized technology tools can be used for problem-solving, decision-making and creativity.

GRADE 12

- Understand and use subject specific peripheral input devices and other equipment as required through individual course selection.
- Identify and use methods for transferring, downloading, and converting graphics, sound and video files.
- Apply basic troubleshooting strategies for the hardware and software components of the computer system.
- Resolve commonly occurring error messages.
- Follow classroom rules for responsible and ethical use of computers (responsible behavior around equipment, respect for other people's work, and appropriate collaborative behavior).
- Demonstrate a clear understanding of the District's Acceptable Use Policy .
- Demonstrate an understanding of the consequences regarding copyright violations, including computer hacking, computer piracy, intentional virus setting and invasion of privacy.
- Use advanced word processing skills to create a research paper including footnotes, citations, and style sheets.
- Copy database structure but not data.
- Use advanced formatting features of a spreadsheet application. (e.g. reposition columns and rows, add and name worksheet)
- Research, plan, create, edit and present a polished multimedia presentation.
- Collaborate with others via electronic conferencing or discussion groups (bulletin boards, listservs or interactive video).
- Present information, ideas and results of work using a variety of communications technologies (e.g. multimedia presentations, web pages, videotapes, desktop published documents).
- Justify the use of technology research tools to locate, evaluate and collect information from a variety of sources, to process data and to report results.
- Resolve information conflicts and validate information through accessing, researching and comparing.
- Evaluate when to use specialized technology tools for problem solving, decision-making and creativity.