

Arlington Public Schools Technology Benchmark Standards

Technology Skills Every Arlington Student Should Know, Grades 9-12

Computer Ethics

- Explain and demonstrate understanding of classroom rules regarding responsible use of computers, including ethical and legal behavior in copying files, applications, media, and email.
- Explain potential problem of computer viruses and exercise caution in opening e-mail attachments from unknown sources.
- Explain safe practices for sharing personal information via e-mail and the Internet.
- Explain proper e-mail etiquette.
- Know the school's Acceptable Use Policy and the consequences of violating that policy.
- Validate a web site for authenticity by identifying site sponsor; author; last update.
- Explain how media and technology can be misused to distort or exaggerate information.
- Write correct citations for text and images gathered from electronic sources; understand the fair use rule of copyright law.

Word Processing

- Identify and use editing and formatting features of a word processing program, such as centering, line spacing, margins, cut and paste, fonts, styles, spelling, page numbers.
- Insert images (photos, graphics, tables) from other files into word-processed document.
- Import/import and link data between word processors and other applications.

Mastery of these skills will help students build on their technology expertise as they prepare to meet the requirements for high school graduation.

Multimedia

- Create a multimedia presentation, desktop-published report, or web page that incorporates data from other files.
- Create and manipulate illustrations using a drawing or painting program to adjust such attributes as scale, size, and shape.
- Communicate results of research and learning with others using desktop-published or word-processed reports, multimedia presentation, and other tools.
- Manipulate data using charting tools and graphic organizers such as concept mapping, flow charting, and outlining software to connect ideas and organize information.
- Present information, ideas, and results of work using a variety of communications technologies, such as multimedia presentations, web pages, videotapes, desktop-published documents.
- Import graphics, photos, other media into presentations, citing sources appropriately.
- Demonstrate how such applications as simulators, environmental probes, computer-aided design, graphing calculators, art and music creation software can be applied for problem-solving, decision-making, and creativity.

Basic PC Skills

- Select the appropriate hardware or software for each task and know how to use equipment safely.
- Identify and use basic computer operating system features such as format/initialize disks, access file statistics, create folders.
- Run multiple applications simultaneously, alternating among them.
- Save files to the desktop, the hard drive, and external storage media.
- Resolve commonly-occurring error messages, hardware and software problems.
- Demonstrate an efficient keyboarding technique.
- Identify, download, and convert various graphic, sound, and video file formats.
- Connect and operate such external peripheral equipment as printers, scanners, digital cameras, and camcorders.

Databases

- Describe structure and function of database, identify components and create a database, defining field formats and adding records.

Internet Skills

- Identify and use navigation features of an internet browser.
- Using a browser, bookmark a web site for future reference and organize bookmarks.
- Identify basic web site elements of web sites such as URL, hyperlinks, and site maps.
- Copy an image from a web site into a file on the desktop and write a citation in keeping with copyright law.

Spreadsheets

- Use formulas in a spreadsheet.
- Define and use functions such as sort, filter, find.
- Describe structure and function of a spreadsheet and create an original spreadsheet, entering data, simple formulas, and creating and customizing charts and graphs.
- Use features of spreadsheet such as mail merges, data and application linking, repositioning columns, and number formats.
- Duplicate spreadsheet structure without data.

Research

- Routinely evaluate web sites for authenticity during use.
- Explain such search strategies to locate and retrieve electronic information as syntax and Boolean logic operators.
- Identify the capabilities of technology resources and understand how they can be used for lifelong learning.