

INSTRUCTIONAL TECHNOLOGY GRADES 9-12 (continued)

Students will:

Standard 1 (continued)

- Explain effective search strategies to locate and retrieve electronic information (e.g., understand and use syntax and Boolean logic operators)
- 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 (e.g., adjust scale, size, shape)
- Identify capabilities of technology resources and understand how they can be used for lifelong learning
- Select the appropriate technology tool for a task

Standard 2

- Identify ways in which technology is used in the workplace and in society
- Demonstrate a clear understanding of the school's Acceptable Use Policy
- Explain laws restricting use of copyrighted materials on the Internet
- Explain how to evaluate electronic sources of information
- Cite electronic sources correctly
- Understand issues of ergonomics and practice safe use of equipment

Standard 3

- Continue to address earlier skills as needed
- Use all appropriate electronic sources in conducting research (web sites, online periodical databases, online catalogs)
- Integrate (with correct citations) electronic research results into a research project
- Routinely evaluate web sites for authenticity when using them
- Create multiple links among various pieces of information residing in different applications
- Demonstrate how specialized technology tools can be used for problem-solving, decision-making, and creativity



OUR MISSION

The Pentucket Regional School District seeks to inspire its students with a love of learning and to enable them to develop their academic potential and individual talents in an atmosphere that cultivates independent thinking. We will prepare our students to develop respect for others and to be responsible citizens of a global society.

OUR VALUES

Respect
Accountability
Integrity
Opportunity

Schools in the Pentucket Regional School District are dedicated to providing an up-to-date and challenging curriculum at each grade level. These curriculum brochures represent an overview of the comprehensive competencies at each grade level and in each subject and/or specialist area. Students and parents are able to review the rich curriculum offered in our District.

Pentucket Regional School District does not discriminate on the basis of race, color, religion, national origin, gender, sexual orientation, disability, or age.



Dr. Frederick N. Sweetsir School
104 Church Street
Merrimac, MA 01860
Tel: 978-346-8319/Fax: 978-346-7844
Grades Pre K-2

Helen R. Donaghue School
2 Union Street Extension
Merrimac, MA 01860
Tel: 978-346-8921/Fax: 978-346-7839
Grades 3-6

Dr. Elmer S. Bagnall School
253 School Street
Groveland, MA 01834
Tel: 978-372-8856/Fax: 978-521-8956
Grades Pre K-6

Dr. John C. Page School
694 Main Street
West Newbury, MA 01985
Tel: 978-363-2671/Fax: 978-363-2234
Grades Pre K-6

Pentucket Regional Middle School
20 Main Street
West Newbury, MA 01985
Tel: 978-363-2957/Fax: 978-363-2720
Grades 7-8

Pentucket Regional High School
24 Main Street
West Newbury, MA 01985
Tel: 978-363-5507/Fax: 978-363-2730
Grades 9-12

Central Services
Office of the Superintendent
Office of the School Committee
22 Main Street
West Newbury, MA 01985
Tel: 978-363-2280/Fax: 978-363-1165

Visit us @ www.prsd.org



INSTRUCTIONAL TECHNOLOGY - COMPUTER CURRICULUM GRADES K-12



PENTUCKET REGIONAL SCHOOL DISTRICT

Groveland
Merrimac
West Newbury

Pentucket ... a culture of continuous learning

ROLE OF TECHNOLOGY IN PENTUCKET PUBLIC SCHOOLS



The role of technology in Pentucket Regional School District is to create a high quality, cost-effective technology enhanced learning environment that informs, inspires and empowers students. These surroundings will encourage every learner to discover and develop his/her unique talents and foster his/her unlimited potential.

In fulfilling our mission, we offer availability and accessibility for all students and teachers so they can create a community that cultivates intellectual curiosity, critical thinking, ethical behavior, and power over their own teaching and learning. Technology will be used to form a deeper contribution and connection to our local and global society.

INSTRUCTIONAL TECHNOLOGY

Instructional technology will be integrated into the curriculum consistent with the Massachusetts Curriculum Frameworks. Through ongoing collaboration with teachers, students will participate in technology-enriched learning experiences, while developing the technology skills they need to meet the challenges of the 21st century. Instructional Technology Specialists are guided by the following three standards:

Standard 1

- Demonstrate *proficiency in the use of computers and applications*, as well as an understanding of concepts underlying hardware, software, and connectivity.

Standard 2

- Demonstrate responsible use of technology and an understanding of *ethics and safety issues* in using electronic media.

Standard 3

- Demonstrate ability to *use technology for research, problem-solving, and communication*. Students locate, evaluate, collect, and process information from a variety of electronic sources. Students use telecommunications and other media to interact or collaborate with peers, experts, and other audiences.

INSTRUCTIONAL TECHNOLOGY GRADES K-4

Students will:

- Review basic information literacy skills from prior grade

Standard 1

- Develop basic skills for using hardware and applications (e.g., open/close a file, navigate using scroll bars, arrow keys, special keys, and mouse)
- Use correct terminology for basic components of a computer system (e.g., monitor, keyboard, disk, printer, mouse), and develop an understanding of their basic functions
- Explore and develop keyboarding skills
- Explore basic formatting features of a word processing program
- Explore and understand the basic function and purpose of a spreadsheet
- Collaborate with classmates to use teacher-selected web sites
- Collaborate with classmates and teacher to create a slide presentation
- Explore the use of drawing and painting applications for class projects

Standard 2

- Follow classroom rules for responsible use of computers
- Develop an understanding of the school's rules for safe and ethical Internet use
- Explore strategies for evaluating web sites
- Develop an understanding of computers as a tool for learning

Standard 3

- Develop an understanding of how to gather information from a variety of electronic sources (e.g., teacher-selected web sites, and an automated card catalog)
- Explore the use of application programs (e.g., word processing, spreadsheet) for organizing information into charts, tables, and diagrams
- Explore the use of content-specific tools to enhance understanding of curriculum content, such as simulation software
- Collaborate with classmates in creating a multimedia presentation to communicate learning with others



INSTRUCTIONAL TECHNOLOGY GRADES 5-8

Students will:

- Review basic information literacy skills from prior grade



Standard 1

- Identify components of a computer system, understand their functions, and use appropriate terminology
- Identify and use basic features of a computer operating system
- Save a file to the desktop, the hard drive, and external storage spaces
- Select a printer and print a document with appropriate page setup and orientation
- Operate peripheral equipment
- Develop efficient keyboarding technique
- Identify and use editing and formatting features of a word processing program
- Insert images from other files into a word-processed document
- Describe structure and function of a database
- Describe structure and function of a spreadsheet
- Identify and use the features of a browser
- Identify basic elements of a web site
- Create a slide presentation using appropriate applications
- Identify and use drawing and painting applications as appropriate for class projects

Standard 2

- Explain and demonstrate an understanding of classroom rules regarding responsible use of computers
- Explain and demonstrate ethical and legal behavior in copying files, applications, and media
- Explain potential problem of computer viruses
- Explain safe practices for sharing personal information via the Internet
- Describe and demonstrate knowledge of the school's Acceptable Use Policy and the consequences of violating that policy
- Validate a web site for authenticity
- Write correct citations for text and images gathered from electronic sources
- Understand that use of materials is limited by the fair use rule of copyright law

INSTRUCTIONAL TECHNOLOGY GRADES 5-8 (continued)

Students will:

Standard 3

- Identify electronic sources of information
- Use search engines effectively to find relevant, unbiased, and current information on a subject
- Organize information that is collected using a variety of tools
- Communicate results of research and learning with others using the most appropriate tools
- Manipulate data using charting tools and graphic organizers to connect ideas and organize information

INSTRUCTIONAL TECHNOLOGY GRADES 9-12

Students will:



Standard 1

- Demonstrate file management skills (e.g., install new software, compress and expand files as needed, download files as appropriate)
- Resolve commonly occurring error messages and resolve simple hardware and software problems as they occur (e.g., frozen screen, disk error, printing problems)
- Identify and use methods for transferring, downloading, and converting graphic, sound, and video files. Use different graphic file formats where appropriate (e.g., PICT, TIFF, JPEG)
- Save (also retrieve, load, and import) a word processed document in different file formats (e.g., RTF, HTML)
- Import/export and link data between Word processed document and other applications
- Use formulas in a spreadsheet application
- Import/export data between a spreadsheet and other applications
- Customize formatting of charts or graphs created in spreadsheet
- Define and use functions of a spreadsheet such as sort, filter, find
- Organize bookmarks into folders for further reference
- Know how to select and use search engines and understand the differences in search engines