

Grades 9-12

H-1 Demonstrate basic operations, troubleshooting, file management, and file transfer skills in multiple operating systems, network configurations, and web-based servers.

H-2 Demonstrate proficiency in the use of word processing to produce comprehensive documents including tables and graphs and citations.

H-3 Use spreadsheets to analyze and communicate data using formulas, various number formats, with graphs or charts.

H-4 Identify, download, import, transfer and convert graphic, sound, and video files. Integrate different graphic formats where appropriate into various applications.

H-5 Create content-rich digital presentations appropriate to the target audience.

H-6 Access, evaluate and cite information from electronic sources and the Internet for the purpose of academic research.

H-7 Use online tools to access and submit files then interpret and share results as they apply to projects. Use e-mail, online and other tools and resources to submit and transfer files for academic purposes.

H-8 Demonstrate an understanding of and compliance with the district Acceptable Use Policy through the practice of legal and ethical use of information and communication technologies.

H-9 Use appropriate specialized technology tools for problem solving, decision-making, and creativity.

H-10 Use various electronic media to communicate and share project results.

About the Instructional Technology Benchmarks

These benchmarks outline the skills students need to use the basic information and communication technology tools they require to succeed as citizens of the 21st century. Meeting these benchmarks requires that while students use the tools to acquire information, they learn to think critically, creatively and cooperatively to solve problems while engaging in authentic learning reflecting core curriculum subjects.

Our schools use multiple delivery models in which Instructional Technology Specialists, Technology Assistants and subject area teachers collaborate to plan, teach, assess and modify projects that merge curriculum content with technology skills acquisition and practice.

Early implementation is via weekly labs designed by one Elementary Technology Integration Specialist, executed by Lab Assistants in grades 1-4 following a spiral curriculum. Weekly labs in grades 5 and 6 build on these early skills and are taught by 2 M.S. Technology Integration Specialists. Implementation in grades 7-12 uses a consultative model involving close collaboration between the 2 M.S. and one High School Technology Integration Specialists and Core Curriculum teachers.

Our benchmarks reflect the Mission Statement of the Chelmsford Public Schools, the Instructional Technology Standards of the Massachusetts Department of Education, and of No Child Left Behind.

<http://www.doe.mass.edu/edtech/standards/itstand.pdf> (see Appendix D)

OUR MISSION STATEMENT

The mission of the Chelmsford Public Schools is to cultivate the development of students into educated, self-confident, lifelong learners and responsible citizens who possess personal integrity and the ability to succeed in a global society.

Chelmsford Public Schools

230 North Street
Chelmsford, MA 01824

<http://www.chelmsford.k12.ma.us>

978.251.5100



INSTRUCTIONAL TECHNOLOGY BENCHMARKS Grades 1-12

September, 2010

Ms. Anne Marie Fiore
Director of Educational Technology
and Information Services

Acceptable Use Policy

Please follow this link:

<http://documents.chelmsford.k12.ma.us/dsweb/Get/Document-18003/6315.01.STUDENTS.Internet.Safety.pdf>

Grades K-2

P-1 Demonstrate basic skills for using hardware, software, network and peripherals (e.g. authenticate on the network, use the mouse and keyboard, open, close, save and retrieve documents, navigate through windows, and use correct terminology).

P-2 Demonstrate appropriate posture and use of home row keys.

P-3 Complete a writing task that includes simple formatting in a word processing application.

P-4 Complete a project that requires using a graphic organizer.

P-5 Participate in a project that includes using a spreadsheet.

P-6 Participate in a project that includes the use of painting/drawing tools, capturing and inserting clipart, photos and drawings, charts and graphs, where appropriate.

P-7 Complete a grade level exit project that includes the creation of a slide presentation.

P-8 Demonstrate appropriate computer use and etiquette. Follow classroom and CPS rules for safe and responsible use.

P-9 Participate in a project that includes using teacher-selected websites.

P-10 Participate in a project that includes programming multiple objects to appear, disappear, move, stop and change size and appearance.

Grades 3 to 5

E-1 Identify components of a computer system and their function; use appropriate terminology.

E-2 Complete a grade level exit product in a core subject using basic word processing, editing and formatting functions, saving and retrieving files and selecting a printer.

E-3 Complete a project in a content area that uses graphing (charting) tools to manipulate and analyze data.

E-4 Complete a curriculum project that includes capturing, formatting and inserting images into a word processing or presentation document with proper citation and using basic layout format.

E-5 Complete a grade level exit project that uses a slide show to represent learning in a curriculum area.

E-6 Complete a curriculum-based project that uses a Web browser to navigate a web site, capture and use research data correctly.

E-7 Use a variety of specialized tools for problem solving in areas of the elementary curriculum.

E-8 Demonstrate an understanding of and compliance with district Acceptable Use policies.

E-9 Continue to demonstrate appropriate posture, and improve keyboarding skills

E-10 Complete a research project that includes communication of results with others, using appropriate electronic tools.

Grades 6 to 8

M-1 Demonstrate the ability to organize files and folders on local and remote drives, save and print work to the desired location. Transport files to and from school utilizing available technology.

M-2 Utilize editing and formatting features to create documents that clearly communicate content and learning.

M-3 Construct, populate, and manipulate spreadsheets using formulas & charts to communicate data in a meaningful way.

M-4 Capture and format images to use in presentations, documents or web pages. Utilize draw / painting tools to create and edit images that illustrate content learning.

M-5 Create a multimedia presentation that synthesizes and communicates content learning.

M-6 Conduct efficient research with online and other resources to investigate a question or solve a problem in a curriculum area.

M-7 Demonstrate the mastery of the browser navigation, website evaluation and source citation.

M-8 Identify, understand and comply with the district's Acceptable Use Policy.

M-9 Demonstrate and use correct keyboarding skills in all applications.

M-10 Present and share project results with others communicating via appropriate electronic tools.