Massachusetts Technology Standards

Grades K through 2 - Technology Exploratory Skills and Expectations

In the early grades, technology should not replace the manipulatives, pencil-and-paper, and other manual methods through which children acquire basic skills. The Mathematics Curriculum Framework, for example, stresses the importance of understanding basic arithmetical operations in elementary school. Given this context, the technology literacy standards for the earliest grade span allow the teacher flexibility in deciding when students are ready to use technology. For this reason, the competencies listed for K – 2 are described as exploratory concepts and skills. These are skills that will be introduced and, in some cases, developed in elementary grades and mastered in middle and high school.

Standard 1. Demonstrate proficiency in the use of computers and applications, as well as an understanding of the concepts underlying hardware, software, and connectivity.

1.1 Basic Operations

K-2: 1.11 Demonstrate beginning steps in using available hardware and applications (e.g., turn on a computer, launch a program, use a pointing device such as a mouse).

K-2: 1.12 Explain that icons (e.g., recycle bin/trash, folder) are symbols used to signify a command, file, or application.

K-2: 1.13 Identify, locate, and use letters, numbers, and special keys (e.g., space bar, Shift, Delete), on the keyboard.

K-2: 1.14 Recognize the functions of basic file menu commands (e.g., New, Open, Close, Save, Print).

1.2 Word Processing and Desktop Publishing

K-2: 1.21 Use a word processing application to write, edit, print, and save simple assignments.

K-2: 1.22 Insert and size a graphic in a word processing document.

1.3 Database and Spreadsheet (Tables/Charts and Graphs)

K-2: 1.31 Explain that computers can store and organize information so that it can be searched.

K-2: 1.32 Use a simple computer graphing application to display data.

1.4 Internet and Multimedia

K-2: 1.41 Explain that the Internet links computers around the world, allowing people to access information and communicate.

K-2: 1.42 Demonstrate the ability to use tools in painting and/or drawing programs.

Standard 2. Demonstrate the responsible use of technology and an understanding of ethics and safety issues in using electronic media at home, in school, and in society.

2.1 Ethics

K-2: 2.11 Follow classroom rules for the responsible use of computers, peripheral devices, and resources.

K-2: 2.12 Explain the importance of giving credit to media creators when using their work in student projects.

2.2 Classroom/Society

K-2: 2.21 Explain why there are rules for using technology at home and at school.

K-2: 2.22 Identify the purpose of a media message (to inform, persuade, or entertain).
K-2: 2.23 Describe how people use many types of technologies in their daily lives.
2.3 Health and Safety
K-2: 2.31 Follow the school rules for safe and ethical Internet use. (Use of Internet in this grade span is determined by district policy.)
K-2: 2.32 Demonstrate knowledge of ergonomics and electrical safety when using computers.
K-2: 2.33 Explain that a password helps protect the privacy of information.
Standard 3. Demonstrate the ability to use technology for research, critical thinking, problem solving, decision-making, communication, collaboration, creativity and innovation.
3.1 Research (Gathering and Using Information)
K-2: 3.11 Use various age-appropriate technologies to locate, collect, and organize information.
K-2: 3.12 Review teacher-selected Internet resources and explain why each resource is or is not useful.
3.2 Problem Solving
K-2: 3.21 Use age-appropriate technologies (e.g., a simple graphing application) to gather and analyze data.
3.3 Communication & Collaboration
K-2: 3.31 Use a variety of age-appropriate technologies (e.g., drawing program, presentation software, etc.) to communicate and exchange ideas.