Technology

Grade K – 2

ABSTRACT

An education in technology is an essential component of a curriculum for the development of 21st century skills. The benefits of collaboration, problem solving, critical thinking, and creativity inherent in a technology education program are crucial to prepare students to function in school and society. Students in grades K-2 are introduced to basic computer functions and 21st century skills for use in school. Students build upon technology skills each school year beginning in kindergarten. By the end of grade 2, students will have been exposed to the qwerty keyboard and introduced to word processing applications. Each grade level provides developmental practice in each of the curricular areas of Technology Operations and Concepts and Digital Citizenship. Benchmark assessments are employed to track individual student progress.

Adopted by the Somerville Board of Education on August 21, 2012
# SOMERVILLE PUBLIC SCHOOLS

## Technology

**Grades K – 2**

<table>
<thead>
<tr>
<th>Month/Marking Period</th>
<th>Kindergarten</th>
<th>Grade 1</th>
<th>Grade 2</th>
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</table>

**Essential Question:** How can I use a computer? How can technology be useful in learning? How can saved files be revised?

**Content:**

- **Foundations**
  - **Technology Operations and Concepts**
    - practice proper posture at the computer
    - discuss proper computer and computer room etiquette
    - locate the monitor, keyboard, mouse, and touch interfaces (e.g., iPad)
    - state technology vocabulary
    - locate letter keys, space bar, enter, and backspace
    - locate computer icons and apps
    - input grade-appropriate text
    - use graphic organizers to sort information
    - access specific teacher-directed files and websites stored in grade-level folders
    - operate interactive games or activities
    - locate information using the Internet

- **Digital Citizenship**
  - describe computer etiquette and Internet safety
  - discuss the Somerville Board of Education’s Computer Use and Internet Contract

- **Using the Computer**
  - practice proper posture at the computer
  - describe proper computer and computer room etiquette
  - practice proper log-on procedures
  - identify and demonstrate use of the monitor, keyboard, mouse, printer, and touch interfaces (e.g., iPad)
  - use technology vocabulary
  - use letter keys, space bar, shift key, number keys, enter, delete, and backspace to input text and data
  - type text using correct spacing
  - use font style, font size, and color
  - locate the number keys on the number pad
  - use specific set of number keys for the task
  - access specific teacher-directed apps
  - demonstrate launching, switching, and closing apps
  - use computer icons and apps
  - save to the network drive
  - access specific teacher-directed files and websites stored in grade-level folders
  - create and produce a grade-appropriate *PowerPoint* slide

- **Developing Use of the Computer**
  - practice computer etiquette and Internet safety
  - identify and locate home keys
  - type text using correct spacing
  - use font style, font size, and color
  - locate the number keys on the number pad
  - use the appropriate set of number keys for the task
  - access specific teacher-directed apps
  - demonstrate launching, switching, and closing apps
  - use computer icons and apps
  - find and open files
  - save to the network drive
  - access specific teacher-directed files and websites stored in grade-level folders
  - create and produce a grade-appropriate *PowerPoint* slide
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<tbody>
<tr>
<td>Skills and Topics:</td>
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<tr>
<td></td>
<td>• demonstrate an awareness of the Somerville Board of Education’s Computer Use and Internet Contract</td>
<td>• Digital Citizenship</td>
<td>• practice computer etiquette and Internet safety</td>
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<tr>
<td></td>
<td></td>
<td>• review Somerville Board of Education’s Computer Use and Internet Contract</td>
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<tr>
<td></td>
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<td>• explain the purpose of an acceptable use policy for technology</td>
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<td>• describe appropriate language and behavior when using electronic communications</td>
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<td>• use digital tools and online resources to explore a problem or issue affecting children, discuss possible solutions, and create a VoiceThread or podcast of the solution</td>
<td>• use Internet tools to plan and choose alternate routes to and from various locations</td>
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<tr>
<td>Integration of Technology:</td>
<td>Internet, Web Quests, computer laboratory, SMART Boards, VoiceThread, search engine, MacBooks, iPads, PCs, video streaming, podcasting</td>
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<td>Writing:</td>
<td>Pictorial representations, use of graphic organizers for pre-write planning</td>
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<td>Formative Assessments:</td>
<td>Warm-up activities, exploratory activities, teacher observations, class participation</td>
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<td>Summative Assessments:</td>
<td>Projects</td>
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<td>Performance Assessments:</td>
<td>Interdisciplinary projects</td>
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| **Interdisciplinary Connections:** | *ELA: R.I.K-2.1-10  
Science: 5.1.P.A.1, 5.1.P.B.3, 5.1.P.C.1, 5.1.P.D.1  
Arts: 1.3.P.A.4  
Health/PE: 2.1.P.A.1, 2.5.P.A.1, 2.6.P.A.2  
World Language: 7.1.A.L.A.3  
Social Studies: Interdisciplinary projects are selected from topics studied in the classroom.** | | |
| **21st Century Themes:** | ☑ Global Awareness ☑ Civic Literacy | | |
| | ☑ Financial, Economic, Business, and Entrepreneurial Literacy ☑ Health Literacy | | |
| **21st Century Skills:** | ☑ Creativity and Innovation ☑ Critical Thinking and Problem Solving | ☑ Media Literacy ☑ Communication and Collaboration | ☑ Information and Communication Technologies Literacy ☑ Information Literacy |
| **Resources:** | www.timeforkidsonline.com, SMART Response System, i-safe curriculum, Type to Learn, Kidspiration, apps, VoiceThread, Somerville Public Schools’ Computer Use and Internet Contract | | |
| **Careers:** | Applicable career options are discussed as they arise throughout the technology program. Career options include, but are not limited to, the following career clusters: Arts, A/V Technology, and Communications Career Cluster; Business, Management, and Administration Career Cluster; Education and Training Career Cluster; Government and Public Administration Career Cluster; Health Science Career Cluster, Hospitality and Tourism Career Cluster; Human Services Career Cluster; Information Technology Career Cluster; Law, Public Safety, Correction, and Security Career Cluster; Manufacturing Career Cluster; Marketing Career Cluster; Science, Technology, Engineering and Mathematics Career Cluster; Transportation, Distribution, and Logistics Career Cluster. | | |

*2010 Common Core Content Standards:

- RL: Reading Literature  
- RI: Reading Informational Text  
- W: Writing  
- SL: Speaking and Listening  
- L: Language  
- CC: Counting and Cardinality  
- OA: Operations and Algebraic Thinking  
- F: Functions  
- G: Geometry  
- S: Statistics and Probability  
- MD: Measurement and Data