

**Howard County Public School System  
Educational Technology**

**Essential Curriculum  
Grade Two**

**Goal 1: Technology Systems – The students at grade two will develop foundations in the understanding and uses of technology systems**

**Systems**

Objective - The student will be able to:

- a. Understand the uses of technology systems
  1. Recognize and identify the function of the major hardware components in a computer system
  2. Understand that there are correct sitting, hand, arm, and fingering positions when keyboarding
  3. Identify and use functions represented by symbols and icons commonly found in applications

**Goal 2: Digital Citizenship – The students at grade two will demonstrate an understanding of the history of technology and its impact on society, and practice ethical, legal, and responsible use of technology to assure safety**

**Technology and Society**

Objective - The student will be able to:

- a. Explain how technology affects individuals and institutions (home, school, and community)
  1. Recognize that technologies (such as computers, calculators, television, cameras, PDAs, CD-ROM, and DVD) have influenced daily life, past and present
  2. Identify examples of how technology affects the environment past and present
  3. Identify how technology tools have been and are used to meet people's needs

**Legal and Ethical Issues**

Objective - The student will be able to:

- a. Practice responsible and appropriate use of technology systems, software, and information
  1. Understand and follow the acceptable use policy
  2. Work cooperatively and collaboratively with others when using technology in the classroom

\* Indicates the objective could be part of the problem solving and decision-making process indicated in Goal 6

3. Practice responsible use of technology systems
  4. Demonstrate proper care of equipment (such as following lab rules, handling equipment with care)
  5. Recognize the potential harm of intrusive applications (such as viruses, pop-up windows, etc.)
  6. Use safe and correct security procedures (such as protecting password and user ID)
- b. Demonstrate an understanding of current legal standards
1. Demonstrate social and ethical behaviors when using technology (such as appropriate copying and pasting, legal downloading, intellectual property recognition, and obeying copyright laws)
  2. Discuss the importance of having access to current, accurate information
  3. Discuss the importance of respecting the rights of others regarding their work
  4. Practice strategies for avoiding plagiarism
  5. Cite sources of text and digital information used (such as URL, author, title, date, and publisher when available)
- c. Understand current online safety guidelines
1. Discuss safety and privacy issues related to use of the Internet
  2. Use safe and correct security procedures when working online (such as not disclosing personal information and protecting passwords)
  3. Describe procedures for exiting an inappropriate site (such as clicking the home, turning off monitor, notifying an adult)
  4. Recognize and understand the purpose of technology protection measures including filtering systems

**Goal 3: Technology for Learning and Collaboration – The students at grade two will use a variety of technologies for learning and collaboration**

**Learning**

Objective - The student will be able to:

- a. Use and understand how technology enhances learning
  1. Use technology tools, including software and hardware, from a range of teacher-selected options to learn new content or reinforce skills
  2. Describe ways selected technology tools are being used to support learning
  3. Reflect, as an individual or as part of a larger group, on appropriateness of selected technology for the given task \*
  4. Reflect and discuss how technology tools are used to collect information \*
  5. Assess the use of the selected technology for the individual learning for the specific task \*

**Collaboration**

Objective - The student will be able to:

\* Indicates the objective could be part of the problem solving and decision-making process indicated in Goal 6

- a. Use and understand how technology encourages collaboration
  - 1. Explain how selected technology tools are being used to enhance collaboration
  - 2. Participate in a class lesson using technology tools to collect, display, and interpret data \*
  - 3. Articulate the advantages of collaboration supported by technology tools

### **Increase Productivity**

Objective - The student will be able to:

- a. Use and understand how technology increases productivity
  - 1. Describe ways the selected technology tools are being used to support learning goals and accomplish tasks
  - 2. Use templates, provided by the teacher, or create new documents to complete learning assignments
  - 3. Collect data using technology such as online surveys and digital technology \*
  - 4. Analyze, and display data and information using tools, such as calculators, spreadsheets and graphing programs \*
  - 5. Use various electronic retrieval sources to obtain information on a topic \*

### **Goal 4: Technology for Communication and Expression – The students at grade two will use technology to communicate information and express ideas using various media formats**

#### **Communication**

Objective - The student will be able to:

- a. Use and explain how technology is used for communication
  - 1. Identify technology tools that help gather information, share ideas, and respond to questions \*
  - 2. Use technology tools identified by the teacher to communicate with various audiences
  - 3. Present information, with assistance, to various audiences including school and community
- b. Use and explain the variety of media formats
  - 1. Communicate with various audiences, independently or with assistance, using different media formats
  - 2. Explain the purpose for a chosen media format

#### **Expression**

Objective - The student will be able to:

- a. Use and understand how technology can be used to express ideas
  - 1. Use multimedia tools to express original ideas with print, drawings, digital images, existing video, sounds, and/or personal recordings

\* Indicates the objective could be part of the problem solving and decision-making process indicated in Goal 6

2. Prepare writing and data for display with tools such as visual organizer, word processing, or multimedia software \*
3. Change, edit, and revise graphs, graphics, presentations, and word processing documents \*

**Goal 5: Technology for Information Use and Management: The students at grade two will use technology to locate, evaluate, gather, and organize information and data.**

### **Locate, Evaluate, and Gather Information/Data**

Objective - The student will be able to:

- a. Explore and use age-appropriate information resources available through technology
  1. Select relevant information from appropriate technology resources (such as databases, library catalogs, and electronic reference materials) \*
  2. Explain evaluation strategies when using electronic resources (such as publication date, fact vs. fiction, author, ease of use)
  3. Collect data using technology \*

### **Organize Information/Data**

Objective - The student will be able to:

- a. Use technology tools to organize information
  1. Participate, as part of a class, in organizing information using technology tools (such as graphic organizers and slide presentations) \*
  2. Use teacher-selected technology tools to organize information/collect data \*
  3. Describe how technology tools are used to organize information/collect data \*
  4. Reflect, as part of a larger group, on the appropriateness of the selected technology tool(s) for organizing information\*

**Goal 6: Technology for Problem-Solving and Decision-Making: The students at grade two will demonstrate the ability to use technology and develop strategies to solve problems and make informed decisions**

### **Components of a Problem Solving Process Supported by Technology**

- a. Investigate Problems and Propose Solutions
  1. Understand the Problem
  2. Devise a Plan
  3. Carry Out the Plan
  4. Analyze Data
  5. Communicate Conclusion
- b. Examine the Solution

\* Indicates the objective could be part of the problem solving and decision-making process indicated in Goal 6

**The components of the problem solving process are the same for all disciplines and across all grade levels. Academic rigor comes from the complexity of the problem and the technology used to solve the problem.**

### **Investigate Problems and Propose Solutions**

Objective - The student will be able to:

- a. Understand the Problem
  1. With the guidance of the teacher, students use technology to help identify the type of problem and the data needed to answer that type of problem
- b. Devise a Plan
  1. Use technology to record questions
  2. Identify sources of information, including technology resources, to gather information
- c. Carry Out the Plan
  1. Identify technology tools that help gather information
  2. Participate in a class lesson using technology tools to collect data
  3. Use electronic tools to collect data
  4. Select relevant information from appropriate technology resources
  5. Use teacher-selected technology tools to collect data
- d. Analyze Data
  1. Use various electronic information retrieval sources to obtain information on a topic
  2. Participate in a class lesson using technology tools to interpret data
  3. Use electronic tools to organize and analyze data
- e. Communicate Conclusion
  1. Participate in a class lesson using technology tools to display data
  2. Use electronic tools to display data
  3. Communicate conclusions with various audiences, independently or with assistance, using different media formats

### **Examine the Solution**

Objective - The student will be able to:

- a. Articulate the advantages of using technology tools to gather, analyze, and communicate conclusions
- b. Assess the use of the selected technology for gathering data, analyzing data, and communicating conclusions

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