South Carolina Computer Science and Digital Literacy Standards

Grade 2

Adopted 2017

Process Standards

1. **Foster an inclusive computing culture.**
   a. Recognize that equitable access to computing benefits society as a whole. 1.A
   b. Consider others' perspectives as well as one's own perspective when developing computational solutions. 1.B
   c. Consider the needs of a variety of end users regarding accessibility and usability. 1.C

2. **Collaborate around computing.**
   a. Select appropriate technological tools that can be used to collaborate on a project. 2.A
   b. Collaborate productively with individuals of varying perspectives, skills, and backgrounds. 2.B
   c. Set and implement equitable expectations and workloads when working in teams. 2.C
   d. Integrate constructive feedback while working in teams. 2.D

3. **Recognize, define, and analyze computational problems.**
   a. Recognize when it is appropriate to solve a problem computationally. 3.A
   b. Make sense of computational problems and persevere in solving them. 3.B
   c. Relate computational problems to prior knowledge. 3.C
   d. Recognize that there may be multiple approaches to solving a problem. 3.D
   e. Approach problem solving iteratively, using a cyclical process. 3.E

4. **Create, test, and refine computational artifacts.**
   a. Consider the purpose of computational artifacts for practical use, personal expression, and/or societal impact. 4.A
   b. Recognize when to use the same solution for multiple problems. 4.B
   c. Test computational artifacts systematically by considering multiple scenarios and using test cases. 4.C
   d. Approach troubleshooting systematically. 4.D
   e. Consider performance, reliability, usability, and accessibility when evaluating and refining computational artifacts. 4.E

5. **Communicate about computing.**
    a. Select and use appropriate technological tools to convey solutions to computing problems. 5.A
    b. Communicate about computational processes and solutions using appropriate terminology consistent with the intended audience and purpose. 5.B
    c. Articulate ideas responsibly by observing intellectual property rights and giving appropriate attribution. 5.C

Content Standards

DL. Digital Literacy 2.DL

1. Use software applications to create an authentic product. 2.DL.1
    1. Create text documents using a word processing program. 2.DL.1.1
    2. Format a text document using a word processing program (e.g., change font style, including underline, italicize, bold; change font size). 2.DL.1.2
    3. Create a multi-slide presentation with graphics or images using presentation software (e.g., create a new slide; rearrange slides). 2.DL.1.3
2. Learn the fundamentals of digital citizenship and appropriate use of digital media. 2.DL.2
    1. Demonstrate how to use appropriate behavior when sending messages online. 2.DL.2.1
    2. Recognize how to credit work found online (e.g., image, photograph). 2.DL.2.2
3. Exhibit responsibility when using connected computing devices. 2.DL.3
    1. Identify the characteristics of a strong password. 2.DL.3.1
    2. Discuss the effects of password misuse. 2.DL.3.2
4. Demonstrate effective keyboarding skills on a computing device. 2.DL.4
    1. Locate and use letter, number, and punctuation keys. 2.DL.4.1
    2. Demonstrate the use of function keys (e.g., shift, enter, backspace, delete, spacebar) 2.DL.4.2
    3. Develop proper keyboarding technique when keying letters, numbers, and symbols (e.g., use both hands; utilize proper finger placement on home row keys; use letter, number, and punctuation keys). 2.DL.4.3

CS. Computing Systems 2.CS

1. Understand that computing devices are used to perform a variety of tasks and take many forms. 2.CS.1
    1. Classify computing devices according to purpose (e.g., navigation, game, communication, all-purpose). 2.CS.1.1
    2. Recognize that computing devices have limitations (e.g., printing, screen size, mobility). 2.CS.1.2
    3. Choose the appropriate computing device to complete a given task. 2.CS.1.3
2. Explore hardware (i.e., physical components) and software of computing systems. 2.CS.2
    1. Describe the function of common computing devices and components (e.g., desktop computer, laptop computer, tablet, monitor, keyboard, mouse, printer). 2.CS.2.1
    2. Recognize software that controls computing devices (e.g., use an application to draw on the screen; use software to write a story or control robots). 2.CS.2.2
    3. Use appropriate hardware and software to complete a given task. 2.CS.2.3
3. Recognize that computing systems might not work as expected because of hardware or software problems. 2.CS.3
    1. Recognize the difference between a simple hardware problem and a simple software problem (e.g., sound problem can mean headphones are unplugged (hardware) or sound is muted (software)). 2.CS.3.1

NI. Networks and the Internet 2.NI

1. Discover that computing devices and the internet enable us to connect with other people, places, information, and ideas. 2.NI.1
    1. Gather information from the internet with supervision. 2.NI.1.1
    2. Identify email as one way to communicate digitally. 2.NI.1.2
    3. Use technology to work cooperatively and collaboratively with peers, teachers, and others. 2.NI.1.3

DA. Data and Analysis 2.DA

1. Discover how data can be stored in and retrieved from multiple locations. 2.DA.1
    1. Recognize where data is stored (i.e., on the computing device or elsewhere). 2.DA.1.1
    2. Store data (e.g., image, music) to a computing device. 2.DA.1.2
    3. Retrieve data (e.g., image, music) from a computing device. 2.DA.1.3
2. Explore how computing devices collect and display data. 2.DA.2
    1. Identify different ways and tools to collect data. 2.DA.2.1
    2. Collect, organize and display data using object graphs, picture graphs, and bar graphs. 2.DA.2.2
3. Explore how data can be displayed for communication in many ways. 2.DA.3
    1. Recognize how different data displays communicate information in different ways. 2.DA.3.1
    2. Transform data into a new representation (i.e., object graphs, picture graphs, bar graphs, charts). 2.DA.3.2
4. Understand how data can be used to make decisions. 2.DA.4
    1. Draw conclusions and make predictions from different types of graphs (i.e., scaled picture graphs, scaled bar graphs). 2.DA.4.1

IC. Impact of Computing 2.IC

1. Understand how computing devices have changed people's lives. 2.IC.1
    1. Identify the ways that computing has changed throughout society. 2.IC.1.1
    2. Demonstrate how some tasks can be completed with or without a computing device. 2.IC.1.2
2. Discover how computing devices have affected the way people communicate. 2.IC.2
    1. Explore similarities and differences between in-person and online communications. 2.IC.2.1