South Carolina Computer Science and Digital Literacy Standards

Grade 1

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 1.DL

1. Use software applications to create an authentic product. 1.DL.1
    1. Produce a simple sentence using word processing software. 1.DL.1.1
    2. Create a simple presentation with text and/or image. 1.DL.1.2
2. Learn the fundamentals of digital citizenship and appropriate use of digital media. 1.DL.2
    1. Demonstrate appropriate behaviors towards others when using a connected computing device. 1.DL.2.1
    2. Recognize and avoid harmful behaviors (e.g., sharing private information). 1.DL.2.2
3. Exhibit responsibility when using connected computing devices. 1.DL.3
    1. Demonstrate how to log in and log out from a connected computing device. 1.DL.3.1
    2. Recognize the importance of logging out from a connected computing device. 1.DL.3.2
    3. Recognize the difference between public and private information (e.g., personal information). 1.DL.3.3
4. Demonstrate effective keyboarding skills on a computing device. 1.DL.4
    1. Locate and use letter and number keys. 1.DL.4.1
    2. Demonstrate the location of the home row keys. 1.DL.4.2
    3. Develop proper keyboarding technique when keying letters and numbers (e.g., use both hands; utilize proper finger placement on home row keys; use letter and number keys). 1.DL.4.3

CS. Computing Systems 1.CS

1. Understand that computing devices are used to perform a variety of tasks and take many forms. 1.CS.1
    1. Identify tasks that can be performed with computing devices. 1.CS.1.1
    2. Recognize some computing devices (e.g., computer, smartphone) can perform a variety of tasks and some computing devices are specialized (e.g., navigation system, game controller). 1.CS.1.2
2. Explore hardware (i.e., physical components) and software of computing systems. 1.CS.2
    1. Use appropriate terminology in naming and identifying software (e.g., web browser, application). 1.CS.2.1
    2. Recognize that software acts on the input to affect the output (e.g., clicking on a mouse opens a program or application; typing on a keyboard displays letters on a screen). 1.CS.2.2
3. Recognize that computing systems might not work as expected because of hardware or software problems. 1.CS.3
    1. Identify and describe simple hardware problems. (e.g., headphones, keyboard, and/or mouse not plugged into the correct port). 1.CS.3.1
    2. Identify and describe simple software problems (e.g., volume too soft/loud). 1.CS.3.2

NI. Networks and the Internet 1.NI

1. Discover that computing devices and the internet enable us to connect with other people, places, information, and ideas. 1.NI.1
    1. Recognize that the internet can be used to gather information. 1.NI.1.1
    2. Identify ways to connect with other people (e.g., direct message, voice talk, email, video chat). 1.NI.1.2

DA. Data and Analysis 1.DA

1. Discover how data can be stored in and retrieved from multiple locations. 1.DA.1
    1. Recognize that a variety of data (e.g., music, video, images, text) can be stored and retrieved from a computing device. 1.DA.1.1
2. Explore how computing devices collect and display data. 1.DA.2
    1. Identify computing devices (e.g., digital thermometer, video game) that collect and display data. 1.DA.2.1
3. Explore how data can be displayed for communication in many ways. 1.DA.3
    1. Recognize data displayed in picture graphs, T-charts, tallies, and bar graphs. 1.DA.3.1
4. Understand how data can be used to make decisions. 1.DA.4
    1. Draw conclusions and make predictions from different types of graphs (i.e., object graphs, picture graphs, bar graphs). 1.DA.4.1

IC. Impact of Computing 1.IC

1. Understand how computing devices have changed people's lives. 1.IC.1
    1. Recognize that many different careers use computing devices. 1.IC.1.1
    2. Describe how some tasks can be completed with or without a computing device. 1.IC.1.2
2. Discover how computing devices have affected the way people communicate. 1.IC.2
    1. Describe the different ways people can communicate using computing devices. 1.IC.2.1