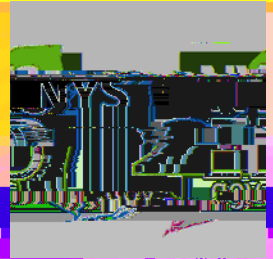


# K-12 Computer Science and Digital Fluency Learning Standards



## Grades K-1

New York State  
Education  
Department

# K-12 Computer Science and Digital Fluency Learning Standards

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## IMPACTS OF COMPUTING

<b>Society</b>	<p><b>K-1.IC.1</b> Identify and discuss how tasks are accomplished with and without computing technology.</p>	<p><b>Clarifying Statement</b> Common tasks include sending a letter by email vs. post, taking a picture with a smart phone vs. camera, buying something with an app vs. with cash at a store.</p>
	<p><b>K-1.IC.2</b> Identify and explain classroom and home rules related to computing technologies and digital information.</p>	<p><b>Clarifying Statement</b> Rules could include when it's okay to use a device, what programs or apps are okay to use, how to treat the equipment, etc.</p>
<b>Ethics</b>	<p><b>K-1.IC.3</b> Identify computing technologies in the classroom, home and community.</p>	<p><b>Clarifying Statement</b> The focus should be on recognizing familiar computing technologies that we use in our lives.</p>
	<p><b>K-1.IC.4</b> Identify public and private spaces in our daily lives.</p>	<p><b>Clarifying Statement</b> T.04 2 &gt;&gt;BDC Q (T.0802 Tc 10.02 -0 OEMC /0.</p>

## COMPUTATIONAL THINKING

Modeling and Simulation	<p><b>K-1.CT.1</b> Identify and describe one or more patterns (found in nature or designed) and examine the patterns to find similarities and make predictions.</p>	<p><b>Clarifying Statement</b> The emphasis is on identifying patterns and then making predictions based on the pattern.</p>
Data Analysis and Visualization	<p><b>K-1.CT.2</b> Identify different kinds of data that can be collected from everyday life.</p>	<p><b>Clarifying Statement</b> The emphasis is on understanding what is data and identifying different types of data, while exploring how data can be collected and sorted.</p>
	<p><b>K-1.CT.3</b> Identify ways to visualize data, and collaboratively create a visualization of data.</p>	<p><b>Clarifying Statement</b> Ways to visualize data include tables, graphs, and charts.</p>
Abstraction and Decomposition	<p><b>K-1.CT.4</b> Identify a problem or task and discuss ways to break it into multiple smaller steps.</p>	<p><b>Clarifying Statement</b> The focus is on identifying a complex (for the age group) task or problem to break apart into smaller steps. The focus should be on understanding why this process is helpful.</p>
	<p><b>K-1.CT.5</b> Recognize that the same task can be described at different levels of detail.</p>	<p><b>Clarifying Statement</b> Instructions to perform a task can be given with more or less detail but still achieve the same result.</p>
Algorithms And Programming	<p><b>K-1.CT.6</b> Follow an algorithm to complete a task.</p>	<p><b>Clarifying Statement</b> The task can be a familiar, daily activity or more abstract. Algorithms at this stage may be short, containing at least three steps, asrcyd.8( )6f.2(s )0.TO 1 Tf .</p>





## DIGITAL LITERACY

<b>Digital Use</b>	<p><b>K-1.DL.1</b> Identify and explore the keys on a keyboard.</p>	<p><b>Clarifying Statement</b> The focus is on exploring physical and/or touchscreen keyboards, and for students to be able to identify specific keys such as arrow keys, enter, space bar, backspace.</p>
	<p><b>K-1.DL.2</b> Communicate and work with others using digital tools.</p>	<p><b>Clarifying Statement</b> The focus should be on teaching students that people use digital tools to share ideas and work together. Communication and collaboration should be with teacher guidance.</p>
	<p><b>K-1.DL.3</b> Conduct a basic search based on a provided keyword.</p>	<p><b>Clarifying Statement</b> The teacher will provide the keyword to help students conduct basic searches using appropriate tools.</p>
	<p><b>K-1.DL.4</b> Use a least one digital tool to create a</p>	

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