

# PLAINVILLE PUBLIC SCHOOLS



## TECHNOLOGY SCOPE AND SEQUENCE GRADES K-6

The Technology Scope and Sequence was adapted from <http://structuredlearning.net> and was revised to support technology integration across the curriculum in the Plainville school district. This document outlines the required skills for grades K-6 based on ISTE National Standards and the Common Core Standards.

# K-6 TECHNOLOGY SCOPE AND SEQUENCE

Aligned with ISTE Standards and CCSS

Review each skill with I/W/M/C under "ISTE" as students accomplish it  
(“ISTE” refers to the ISTE Standard addressed by the skill)

<b>IS TE</b>	<b><i>I-Introduced; W-Working on; M-Mastered; C-Completed</i></b>							
	<b><i>*****Achievement Evaluation Key*****</i></b>							
	<b><i>I – Students are first introduced to the skills</i></b>							
	<b><i>W – Students grasp and apply the key skills required of the standards with support</i></b>							
	<b><i>M – Students apply the key skills required of the standards independently for specific tasks.</i></b>							
	<b><i>C – Students apply the key skills required of the standards to complete in-depth projects across the curriculum.</i></b>							
<b>I</b>	<b>Computers and Applications</b>	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
	<b><i>Students demonstrate proficiency in the use of computers and applications, as well as an understanding of the concepts underlying hardware, software and connectivity</i></b>							
	<b>Basic Operations</b>							
	Know hardware names such as desktops laptops, notebooks, and tablets	I	W	W	W	M	C	C
	Know parts of keyboard--keys, numbers, arrows and esc	I	W	W	W	M	C	C
	Know escape, period key, shift key, spacebar and tab	I	W	W	W	M	C	C
	Understand the difference between power buttons on monitor and computer	I	W	W	M	C	C	C
	Know how to use the volume button on computer	I	W	W	M	C	C	C
	<b>Operating Systems</b>							
	Know how to Log-on/Log-off and Switch User	I	W	W	W	M	C	C
	Know how to Ctr+Alt+Del		I	W	W	M	C	C
	Know how to Open/Close programs	I	W	M	C	C	C	C
	Know the difference between Save and Save As	I	W	M	C	C	C	C
	Know how to use basic pointer skills and selection with mouse (i.e. clicking and moving a mouse) and to highlight text in an on-screen environment	I	W	M	C	C	C	C
	Know how to use scroll bars to scroll vertically and horizontally within a page	I	W	M	C	C	C	C
	Know how to use highlighting tool to highlight text or images, and drag and drop in selected location	I	W	M	C	C	C	C
	Understand concepts of taskbar, start button and icons	I	W	W	W	M	C	C
	Know how to save to network file folder	I	W	W	W	W	M	C
	Know how to find a file (following the file path)		I	W	W	W	M	C
	Know how to use drop-down menus		I	W	W	W	M	C
	Understand how to create file folders				I	W	M	C
	Know how to copy-paste from one program to another				I	W	M	C
	Know how to drag-drop within a document and between folders			I	W	W	M	C
	Know how to access different drives			I	W	W	M	C
	Know how to select a printer and print a document with the appropriate page setup and orientation				I	W	M	C

<b>Mouse Skills</b>		<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
	<i>Know how to click, hold, and drag</i>	I	W	M	C	C	C	C
	<i>Know how to double click</i>	I	W	M	C	C	C	C
	<i>Know how to hover</i>	I	W	M	C	C	C	C
	<i>Understand the difference between left-click and right-click buttons</i>				I	W	M	C
<b>Keyboarding Skills</b>								
	<i>Practice touch typing; type with hands on their own side of keyboard</i>			I	W	W	M	C
	Keyboard goal is grade-appropriate (refer to keyboarding standards for Grades 3-6 ) For students with disabilities, demonstrate alternate input techniques as appropriate.)							
	Grade 3 - Demonstrate keyboarding skills between 10-15 wpm				W	W	M	C
	Grade 4 - Demonstrate keyboarding skills between 15-25 wpm. with a minimum of one page in a single sitting				W	W	M	C
	Grade 5 - Demonstrate keyboarding skills between 15-25 wpm. with a minimum of two pages in a single sitting.				W	W	M	C
	Grade 6 - Demonstrate keyboarding skills between 25-30 wpm. (fewer than 5 errors).				W	W	M	C
<b>Word Processing</b>								
	<i>Know the basics of word processing</i>	I	W	W	M	C	C	C
	<i>Know how to use online word processing programs</i>	I	W	W	M	C	C	C
	<i>Know how to use classroom principles of grammar, spelling when word processing on computer</i>	I	W	W	M	C	C	C
	<i>Know basic page layout--heading, title, body and footer</i>			I	W	M	C	C
	<i>Know how to format a document (i.e. font size, bold, italic, underline, bullet, number)</i>			I	W	M	C	C
	<i>Know how word-wrap works</i>			I	W	M	C	C
	<i>Know how to highlight a word, sentence and line</i>			I	W	M	C	C
	<i>Know how to select and de-select</i>			I	W	M	C	C
	<i>Know how to double space</i>			I	W	M	C	C
	<i>Know how to add a bullet list</i>			I	W	M	C	C
	<i>Know correct spacing after sentences and paragraphs</i>		I	W	M	C	C	C
	<i>Know how to use grade-appropriate heading on all Word docs</i>		I	W	M	C	C	C
	<i>Know how to use the thesaurus</i>			I	W	W	M	C
	<i>Know how to insert header and footer</i>			I	W	M	C	C
	<i>Know how to insert a border</i>			I	W	M	C	C
	<i>Know how to insert a table</i>			I	W	M	C	C
	<i>Know how to use background/text to alter background and text color when needed</i>			I	W	M	C	C
	<i>Know to put cursor in specific location, ie, for graphic</i>			I	W	M	C	C
	<i>Know how to insert pictures</i>	I	W	W	W	M	C	C
	<i>Know how to use online video and audio players to access multimedia content</i>			I	W	M	C	C
	<i>Know how to use embedded link (Ctrl+click)</i>				I	W	M	C
<b>Desktop Publishing</b>								
	<i>Know when to use Publisher to share information(i.e. create a flyer, newsletter, cards)</i>			I	W	W	W	W
	<i>Know how to plan a publication</i>			I	W	W	M	C
	<i>Know how to insert a picture, blank page, text box, footer, border</i>			I	W	W	W	W
	<i>Know how to work with font and color schemes</i>			I	W	W	M	C

<b>Presentations</b>		<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
	<i>Know when to use PowerPoint</i>			I	W	W	M	C
	<i>Understand how to deliver a professional presentation</i>			I	W	W	M	C
	<i>Know how to add/rearrange slides and auto-advance</i>			I	W	W	M	C
	<i>Know how to add a variety of backgrounds, animations/movies, effects and transitions</i>			I	W	W	M	C
	<i>Know how to insert and resize pictures from file, internet, clip-art and position on slide</i>			I	W	W	M	C
	<i>Know how to insert text boxes</i>			I	W	W	M	C
<b>Spreadsheets</b>								
	<i>Know how to add rows &amp; columns, header &amp; footer, and use basic formatting of data</i>			I	W	W	W	M
	<i>Know how to add text, graphics, data, color</i>			I	W	W	M	C
	<i>Know how to use shade/fill color and apply border to the cells</i>			I	W	W	M	C
	<i>Know how to add and subtract formulas</i>				I	W	M	C
	<i>Know how to label x and y axis on graphs</i>			I	W	W	M	C
	<i>Know how to name a chart</i>			I	W	W	M	C
	<i>Know how to recolor tabs; rename worksheets</i>			I	W	W	M	C
	<i>Know how to sort data alphabetically</i>			I	W	W	M	C
<b>Internet</b>								
	<i>Know elements of a web address (i.e. web browser, url, www, domain name, search engine, links)</i>		I	W	W	W	M	C
	<i>Know how to open a browser and bookmark a webpage or save to Favorites</i>	I	W	W	M	C	C	C
	<i>Know how to use a website—Home and Back button, links, scroll bars, toggle pages, and search in Favorites</i>	I	W	W	M	C	C	C
	<i>Know how to identify reliable resources (i.e. factual sources)</i>				I	W	W	W
<b>Digital Storytelling</b>								
	<i>Know how to compose short stories in online tools</i>	I	W	M	C	C	C	C
	<i>Know how to collaborate and share stories in an online tool</i>		I	W	M	C	C	C
	<i>Know how to use select digital tools to collaborate and publish with peers employing a variety of digital environments and media</i>	I	W	M	C	C	C	C
	<i>Know how to use drawing software and web-based tools efficiently</i>	I	W	M	C	C	C	C
	<i>Know how to insert images/clipart</i>	I	W	W	W	M	C	C
	<i>Know how to import/upload a file</i>			I	W	M	C	C
	<i>Know how to resize/move/crop/wrap an image/clipart</i>	I	W	W	W	M	C	C
	<i>Know how to mix text and pictures to convey unique message</i>	I	W	W	W	W	M	C
<b>2</b>	<b>Responsible Use of Technology</b>	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>Demonstrate the responsible use of technology and an understanding of ethics and safety issues in using electronic media at home, in school and in society</b>								
<b>Computers and Society</b>								
	<i>Know how to use safe, responsible and ethical behaviors on the internet.</i>			I	W	M	C	C
	<i>Recognize irresponsible and unsafe practices on the internet</i>				I	W	M	C
	<i>Know how to introduce the concept of 'cyber-bullying' and how to avoid it</i>				I	W	M	C
	<i>Understand plagiarism and how to cite sources</i>				I	W	M	C
	<i>Understand various forms of copyright rules and guidelines</i>		I	W	W	W	W	M
	<i>Demonstrate personal responsibility for lifelong learning (i.e. respectfulness)</i>	I	W	M	C	C	C	C

	Understand netiquette expected on digital citizens	I	W	M	C	C	C	C
	Know when to keep out of others' files and folders unless permitted	I	W	M	C	C	C	C
<b>Ethics and Society</b>								
	Follow classroom rules for the responsible use of computers peripheral devices, and resources	I	W	W	M	C	C	C
	Explain the importance of giving credit to media creators when using their work in student projects.	I	W	W	M	C	C	C
	Explain and follow school rules for safe and ethical Internet use	I	W	W	M	C	C	C
	Explain that a password helps protect the privacy of information	I	W	W	M	C	C	C
<b>3</b>	<b>Communication and Collaboration</b>	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>Students use digital media and environments to communicate/ work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.</b>								
	Know how to interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media			I	W	M	C	C
	Understand how to communicate information and ideas effectively to multiple audiences using a variety of media and formats	I	W	M	C	C	C	C
	Develop cultural understanding and global awareness by engaging with learners of other cultures	I	W	W	W	M	C	C
	Know how to compare and contrast documents across varied digital media	I	W	W	W	M	C	C
	Know how to use technology to produce and publish writing, and interact/collaborate with others	I	W	W	W	M	C	C
	Explore digital tools to produce and publish writing	I	W	W	W	M	C	C
	Explore digital tools to collaborate with peers	I	W	W	W	M	C	C
	Know how to use multimedia to aid comprehension	I	W	W	W	M	C	C
	Know how to ask and answer questions from information presented from various media	I	W	W	W	M	C	C
	Know how to include audio recordings and multimedia displays to enhance main ideas	I	W	W	W	M	C	C
	Know how to use multimedia to organize ideas, concepts, info to aid comprehension	I	W	W	W	M	C	C
	Know how to interact, collaborate, and publish with peers employing of digital media			I	W	W	W	W
	Know how to contribute to project team to produce original work or solve project		I	W	W	W	W	W
<b>4</b>	<b>Research and Information Literacy</b>	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>Students apply digital tools to gather, evaluate, and use information</b>								
	Know how to locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media		I	W	W	W	W	W
	Evaluate and select information sources and digital tools based on task			I	W	M	C	C
	Understand how to read search results before clicking link			I	W	M	C	C
	Know how to copy-paste from internet for a project with correct citation			I	W	M	C	C
	Know how to gather relevant information from multiple digital sources			I	W	W	W	W
	Assess credibility of digital sources used for research			I	W	W	W	W
	Integrate and evaluate information from diverse media			I	W	W	W	W
	Know how to use age-appropriate digital media to express information			I	W	W	W	W
	Know how to draw on information from multiple digital sources, demonstrating the ability to locate an answer or solve a problem and integrate it into research			I	W	W	W	W
	Know how to gather information from digital sources, summarize in notes, and provide sources			I	W	W	W	W

<b>5</b>	<b>Critical thinking, Problem solving and Decision making</b>	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b><i>Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources</i></b>								
	<i>Know when to use appropriate programs: Word Processing, Excel, Publisher and PowerPoint</i>			I	W	M	C	C
	<i>Plan and manage activities to develop a solution or complete a project that coordinates with classroom units</i>		I	W	W	W	W	M
	<i>Know how to use web-based calculators, data analysis tools and rulers</i>			I	W	W	M	C
<b>Critical thinking &amp; Problem solving</b>								
	<i>Understand how to identify, define authentic problems and questions</i>	I	W	W	W	W	W	W
	<i>Know why a particular digital tool is suited to a specific need</i>		I	W	M	C	C	C