

# MBUSD 4th Grade Technology Standards Implementation Guide

January, 2019

Technology Standard	Subtopic	What the Students Will Do	Apps and Lesson Resources
<b>Creativity and Innovation:</b> Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.	Digital Books	Create a writing project using an online or app based digital book that includes text and text features (CCSS W6, W10, SL2, SL5)	<a href="#">Creative Book Builder</a> , for Mission <a href="#">Information Writing</a> , <a href="#">Storybird.com</a> , <a href="#">Educreations</a> , <a href="#">ShowMe</a> , <a href="#">Explain Everything</a>
	Digital Art	Create a digital image and add it to another application to show knowledge about a concept	<a href="#">Doodle Buddy</a> , <a href="#">Typic</a> , <a href="#">Strip Design</a> , <a href="#">Google Drawing</a>
	Video & Audio Editing	<ul style="list-style-type: none"> <li>Collaboratively create a themed video on a topic using student created audio, video, and photo images. Examples: <a href="#">Reader's Theater movies</a>, <a href="#">Mission Reflection Movies</a> (CCSS SL.4.5)</li> <li>Energy: Generate and compare multiple solutions that use patterns to transfer information (NGSS 4-PS4-3)</li> </ul>	<a href="#">Adobe Spark Video</a> , <a href="#">Story Kit</a> , <a href="#">Shadow Puppet</a> , <a href="#">Camera</a> , <a href="#">iMovie</a> , <a href="#">Voice Recorder</a> , <a href="#">Educreations</a> , <a href="#">ChatterPix Kids</a> , <a href="#">Stop Motion Movie</a>
	Publishing	Create a digital document to publish a writing project, adding images and text features to enhance the text (CCSS W4.2.2)	<a href="#">Keynote</a> , <a href="#">Pages</a> , <a href="#">Google Docs</a> , <a href="#">Google Site</a> , <a href="#">Creative Book Builder</a>
<b>Communication and Collaboration:</b> Students use digital media to communicate and work collaboratively, supporting individual learning and contributing to the learning of others.	Web and IOS	Collaborate with one or more students on a document	<a href="#">Google Docs</a> , <a href="#">Padlet</a> , <a href="#">FlipGrid</a> , <a href="#">FlipGrid Tutorials</a> , <a href="#">FlipGrid Integration</a>
	Blogging	Regularly communicate and share ideas with others using a teacher created and monitored blog (CCSS W6)	<a href="#">Kid Blog</a> , <a href="#">Blog w/Paper</a> , <a href="#">Kid Blog Post</a>
	Presentation Tools	Create a presentation to share content and knowledge. Examples: <a href="#">Trails to California Timelines</a>	<a href="#">Keynote</a> , <a href="#">Google Slides</a> , <a href="#">Popplet Lite</a> , <a href="#">Popplet Lite Post</a> , <a href="#">Adobe Spark</a> , <a href="#">Canva</a>
	Cloud Collaboration	<ul style="list-style-type: none"> <li>Use technology, including the internet, to interact and collaborate with others to plan, produce, edit, and revise writing (CCSS W6)</li> <li>Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence (NGSS 3-5-ETS1-3)</li> </ul>	Google Docs, Padlet Example: <a href="#">Whispers Along the Mission Trail</a> <a href="#">Google Slides Jigsaw</a> , <a href="#">Google Drive</a> , <a href="#">Tutorial: Using Google Slides for Collaboration</a>
<b>Research and Information Fluency:</b> Students apply digital tools to gather, evaluate, and use information.	Digital Research Skills	<ul style="list-style-type: none"> <li>Use websites, databases, digital images, videos, and eBooks to research topics of interest</li> <li>Consult digital reference materials to find meanings of key phrases and words</li> <li>Obtain and combine information from books and other reliable media to explain phenomena (NGSS 4-ESS3-1)</li> </ul>	<a href="#">Dictionary</a> , <a href="#">Thesaurus</a> , <a href="#">iBooks</a> , <a href="#">LiveBinder</a> , <a href="#">Quizlet</a> , <a href="#">YouTube</a> , <a href="#">Discovery Education</a> , <a href="#">BrainPop</a> , <a href="#">Google</a>
	Evaluate Internet	<ul style="list-style-type: none"> <li>Complete Common Sense Media lessons on safe and</li> </ul>	<i>Media Digital Literacy &amp; Citizenship</i>

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	Resources	effective internet searching and utilize internet search criteria when researching	<a href="#">iBook</a> --Unit 2, How to Cite a Site <a href="#">iBook TE</a>
	Citation Formats	Provide a list of print and digital sources used to take notes and categorize information (CCSS W.4.8)	<i>Common Sense Media Digital Literacy &amp; Citizenship: <a href="#">How to Cite a Site</a> Lesson, <a href="#">Research Building Blocks: "Cite Those Sources!" Lesson Plan</a></i>
	Content Specific Technology Skills	Interpret information presented visually, orally, or quantitatively via charts, graphs, animations, or interactive Web pages and explain how the information contributes to an understanding of the text (CCSS RI 4.7)  Use Virtual Manipulatives to solve math problems	<a href="#">Google Forms</a> , Google Drawing, Google Docs, Google Sheets, Numbers  <a href="#">Houghton-Mifflin Player</a> , <a href="#">Schoolkit</a> , <a href="#">Virtual Manipulatives App (ABCYA.com)</a>
	Data Analysis	Analyse and interpret data from maps to describe patterns of Earth's features (NGSS 4-ESS2-2)	Excel, Google Sheets, Numbers
<b>Critical Thinking, Problem Solving, and Decision Making:</b> Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.	Organizational Tools	Organize ideas for an information report using a mind mapping Web or iPad application	<a href="#">Lucidchart</a> , <a href="#">Ideament (formally IdeaSketch)</a> , <a href="#">Popplet</a>
	Design Cycle & Project Management	Complete a <a href="#">Project Based Learning</a> /Genius Hour activity, identifying problem or idea, brainstorming solution or process, evaluating reasonableness, and present solution or information  <b>Input/Output: Computer Systems (PLTW)</b> – students make analogies between the parts of the human body and parts that make up a computer.	Notability, Keynote, Creative Book Builder, Google Docs, Idea Sketch  Autodesk Inventor, 123D, Popplet, Mindomo, iMovie, Tynker
	Coding & Robotics	<ul style="list-style-type: none"> <li>• Create a product using a coding platform</li> <li>• Develop a simple robot or use code to command a robot</li> </ul>	<a href="#">Scratch</a> , <a href="#">Scratch Jr.</a> , Codecademy, Khan Academy, Blockly, <a href="#">Dash &amp; Dot</a> , <a href="#">Code</a>
<b>Digital Citizenship:</b> Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.	Personal Security Online & Digital Rights and Responsibilities	<ul style="list-style-type: none"> <li>• Create secure passwords to protect private information and online accounts</li> <li>• Collaborate to build common expectations for building a strong digital citizenship community</li> <li>• Sign a <i>We the Digital Citizens Pledge</i></li> <li>• Learn what spam is and identify strategies for dealing with it</li> </ul>	<i>Common Sense Media Digital Literacy &amp; Citizenship: <a href="#">Strong Password</a> and <a href="#">You've Won a Prize</a> Lessons</i>
	Bullying	Understand and practice classroom anti-cyberbullying procedures.	<i>Common Sense Media Digital Literacy &amp; Citizenship: <a href="#">Super Digital Citizen</a> Lesson</i>

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	Copyright and Fair Use & Ethical Use Policy	<ul style="list-style-type: none"> <li>Understand copyright and free use policies</li> <li>Explore digital image alteration, creative upsides and power to distort perceptions</li> </ul>	<i>Common Sense Media Digital Literacy &amp; Citizenship</i> : <a href="#">Picture Perfect</a> and <a href="#">Selling Stereotypes</a> Lessons
<b>Technology Operation and Concepts:</b> Students demonstrate a sound understanding of technology concepts, systems, and operations.	Navigating in a Virtual Environment	Navigate around and paraphrase information presented in digital media and formats (CCSS SL 4.2)	<a href="#">Code Studio: Course 4</a> Scholastic News and Time for Kids Digital Resources, <a href="#">TweenTribune</a>
	Internet Usage	Safely and effectively navigate through websites to locate information	<a href="#">Online Searching Video</a> ; <a href="#">Doing Internet Research at the Elementary Level</a> ; <a href="#">Google Search Education Lesson Plans</a>
	Apps for Education & Cloud Storage	Access GAFE account using username and password. <ul style="list-style-type: none"> <li>Navigate in Google Drive and Docs. Share documents with teacher and collaborate with classmates using the comments feature.</li> <li>Open Keynote and Pages documents to save in Google Drive; Upload photos and/or videos to Drive</li> </ul>	<a href="#">Google Docs</a> , <a href="#">Alice Keeler Teacher Tech</a> with resources to Google apps in the classroom, <a href="#">Google Classroom</a> , <a href="#">Classroom Tutorial</a>
	Keyboarding	Increase speed and accuracy. Type a minimum of one page in a single sitting (W 4.6)	<a href="#">Teaching keyboarding</a> , Recommended keyboarding program: <a href="#">Typing.com</a>
	Word Processing	<ul style="list-style-type: none"> <li>Produce, revise, edit, and publish writing using digital resources (CCSS W 5, 6, 10 &amp; L 4)</li> </ul>	Word, Pages, <a href="#">Google Docs</a>
	Spreadsheets and Graphing	<ul style="list-style-type: none"> <li>Use a spreadsheet to collect and analyse data from experiments and research (CCSS RI 4.7, NGSS 4-ESS2-2)</li> <li>Record measurement equivalents in a two column table (4.MD.1)</li> </ul>	Numbers, Excel, Google Sheets

## Support 2015-2016 Minimal Technology Expectations

**Authors:** Paula Noda, TOSA--Instructional Technology, Gretchen Gabreski, TOSA--21st Century Teaching and Learning, Jason Marshall, TOSA--Instructional Technology, Christina Lee, Educational Technologist, Jeanne Reed, Educational Technology Consultant