Introduction to the Scope and Sequence Document

This Scope and Sequence is adapted from the Fresno County Office of Education Recommended Digital Literacy and Technology Skills.

The skills identified for each grade level align to the Common Core State Standards (CCSS) for Mathematics and English Language Arts & Literacy in History/Social Studies, Science and Technical Subjects as well as skills required to take the Smarter Balanced Assessment Consortium's (SBAC) Computer Adaptive Assessments.

Additional skills identified in this Scope and Sequence are from the National Educational Technology Standards 2007: Creativity and Innovation; Digital Citizenship; and Technology Operations and Concepts.

Standards

Grade levels are not specified for the standards as they are indicated in the grade level columns.

English Language Arts Anchor Standards	Mathematics Standards
RL - Reading Standards for Literature;	MD - Measurement and Data
RI - Reading Standards for Informational Text;	G - Geometry
W - Writing;	EE - Expressions and Equations
SL - Speaking and Listening;	A - Algebra
L - Language.	F - Functions
	SP - Statistics and Probability
	SMP - Standards of Mathematical Practice

Mathematics standards are focused mainly in grades 6-12 as there are no technology requirements in grades K-5. Most of the SBAC Testing Skills cover the skills that students will be required to have to take the online assessment. <u>Mathematical Standards of Practice</u> (SMP) are also referenced as they encompass use of appropriate technology tools across various standards.

The scope and sequence goes from K-8 but is broken up into sections for K-5 and 6-8. Even though students in grades K, 1, and 2 are not tested for CCSS, the skills help build basic technology competencies to support the grade levels at which the students are tested.

The Scope and Sequence identifies which grade levels the skills need to be Introduced (I), Reinforced (R) and Mastered (M).

ns. windows and menus to open	I	R R R	M	M	М	M
pes, icons; click on urls, option button, e scroll bar ns, windows and menus to open d documents nt – saving and printing			М	M		
d documents nt – saving and printing	I	R			M	M
0 1 0			M	M	M	M
age-appropriate online tools and		I	R	M	М	M
cutorial, assessment, web browser)	I	R	М	M	М	M
costure and ergonomics se letter and numbers keys with left and placement use correct finger, hand for space enter and shift key ncy and speed in touch typing do online typing program with each level)	I	R	R	M 15 w p m	M 20 w p	M 25 w p m
cessing application to write, edit, print ments	I	R	R	M	M	M
/tool bar functions (e.g. /, line spacing, margins) to format, edit ument		I	R	М	M	М
illelit			I	R	М	M
opy and paste text		I	R	R	M	М
opy and paste text ste images within the document and sources			R	М	М	М
opy and paste text ste images within the document and sources ze a graphic in a document vriting conventions reflecting grade	1	R				
co as le	size a graphic in a document	writing conventions reflecting grade		ons I R R		ons I R R M M edit writing using appropriate resources

Digital Literacy	Categories	Alignment to CCSS/SBAC	Skills	К	1	2	3	4	5
		MD , SBAC testing skills	Demonstrate an understanding of the spreadsheet as a tool to record, organize and graph information.				I	R	М
	Spreadsheet	SBAC testing skills	Identify and explain terms and concepts related to spreadsheets (i.e. cell, column, row, values, labels, chart graph)				I	R	M
Demonstrate	(Tables/ Charts and	MD , SBAC testing skills	Enter/edit data in spreadsheets				I	R	M
proficiency in the use of computers and applications as well as an understanding	RI 7	Perform calculations using basic formulas (for example add, - minus, *multiply, /divide, ^exponents)				I	R	M	
		W 6	Create, edit and format text on a slide			I	R	M	М
of the concepts underlying		W 6	Create a series of slides and organize them to present research or convey an idea			I	R	M	M
hardware, software and	Multimedia and Presentation	W 6, SL 5	Copy and paste or import graphics; change their size and position on a slide			I	R	M	M
connectivity.	Tools	W 6, SL 5	Use painting and drawing tools/applications to create and edit work			I	R	M	M
		W 6, RL 7, SBAC testing skills	Watch online videos and use play, pause, rewind and forward buttons while taking notes	I	R	M	M	M	M
I – Intro	I - Introduce R - Reinforce M - Mastery (ability to teach others)								

Digital Literacy Categories	Alignment to CCSS/SBAC	Skills	К	1	2	3	4	5
	Digital Citizenship	Explain and demonstrate compliance with classroom, school rules (Acceptable Use Policy) regarding responsible use of computers and networks	T	R	М	M	M	М
	Digital Citizenship	Explain responsible uses of technology and digital information; describe possible consequences of inappropriate use	I	R	M	М	M	M
	Digital Citizenship	Explain Fair Use Guidelines for the use of copyrighted materials, (e.g., text, images, music, video in student projects) and giving credit to media creators		I	R	R	M	M
		Identify and explain the strategies for the safe care and efficient use of computers (e.g., passwords)	I	R	М	М	М	M
		Identify cyberbullying and describe strategies to deal with such a situation		_	R	М	M	M
		Recognize and describe the potential risks and dangers associated with various forms of online communications and networked digital environments and sharing personal information		I	R	M	M	M
I – Introduce	R - Reinforce	M – Mastery (ability to teach others)						

Digital Literacy C	ategories	Alignment to CCSS/SBAC	Skills	К	1	2	3	4	5			
		RI 5, RI 7	Locate, collect, and organize content for specific purposes, citing sources	I	R	М	M	M	M			
		RI 5, RI 7	Perform basic searches on databases to locate information.			I	R	M	M			
	Research and Gathering	Gathering	Gathering	RI 5, RI 7	Evaluate teacher-selected or self-selected Internet resources in terms of their usefulness for research		I	R	R	M	M	
Demonstrate the	Information	RI 7	Use content specific technology tools to gather and analyze data.				I	R	М			
ability to use technology for research, critical		RI 6, RI 7, RI 9	Understanding of Web 2.0 tools to gather and share information				I	R	M			
thinking, decision making, communication				n	RL 7	Identify and analyze the purpose of a media message (to inform, persuade and entertain)		I	R	M	M	M
and collaboration, creativity and	Communication and Collaboration		Work collaboratively with other students using technology under teacher supervision			I	R	M	M			
innovation.		W 6, W 10	Use a variety of age-appropriate technologies (e.g. drawing program, presentation software) to communicate and exchange ideas		I	R	M	M	M			
		W 6, W 10 SL 2, SL 5	Create projects that use text and various forms of graphics, audio, and video, (with proper citations) to communicate ideas.			I	R	M	M			
		W 6, W 10 SL 3	Use teacher developed guidelines to evaluate multimedia presentations for organization, content, design, presentation and appropriateness of citations.			I	R	М	M			
I – Intro	I – Introduce R – Reinforce M – Mastery (ability to teach others)											

Digital Literacy C	ategories	Alignment to CCSS/SBAC	Skills	6	7	8
		Technology Operations & Concepts	Identify successful troubleshooting strategies for minor hardware and software issues/problems (e.g., "frozen screen").	I	R	M
		Technology Operations & Concepts	Independently operate peripheral equipment (e.g., scanner, digital camera, camcorder), if available.	I	R	M
	Basic Operations	Technology Operations & Concepts	Identify and use a variety of storage media (e.g., CDs, DVDs, flash drives, school servers, and online storage spaces), and provide a rationale for using a certain medium for a specific purpose.	I	R	М
Demonstrate proficiency in the use of computers	W 6	Demonstrate automaticity in keyboarding skills by increasing accuracy and speed. (For students with disabilities, demonstrate alternate input techniques as appropriate.)	M wpm	M wpm	M wpm	
and applications as well as an understanding of		Creativity & Innovation	Identify and assess the capabilities and limitations of emerging technologies.	I	R	M
the concepts underlying the hardware,		W 5, W 6, W 10	Demonstrate use of intermediate features in word processing application (e.g., tabs, indents, headers and footers, end notes, bullet and numbering, tables).	I	R	M
software and connectivity.	Word Processing	W 5, W 6, W 10, SL 5	Apply advanced formatting and page layout features when appropriate (e.g., columns, templates, and styles) to improve the appearance of documents and materials.	I	R	М
	riocessing	W 5, W 6, W 10, SL 1	Use the Comment function in Review for peer editing of documents		I	R
			Use the Track Changes feature in Review for peer editing of documents		I	R
	I – Introduce R – Reinforce M – Mastery (ability to teach others)					

Digital Literacy Cate	egories	Alignment to CCSS/SBAC	Skills	6	7	8
Demonstrate			Use spreadsheets to calculate, graph, organize, and present sate in a variety of real-world setting and choose the most appropriate type to represent given	I	R	M
proficiency in the use of computers and applications as			Enter intermediate formulas and functions; use the auto-fill feature in a spreadsheet application	I	R	М
well as an understanding of the	Spreadsheet (Tables/Chart		Use functions of a spreadsheet application (e.g., sort, filter and find).	I	R	M
concepts underlying the hardware, software and	s and Graphs)		Use various number formats (e.g., scientific notations, percentages, exponents) as appropriate	I	R	M
connectivity.			Use advanced formatting features of a spreadsheet application, (e.g., reposition columns and rows, add	I	R	M
	Mathematical Applications		Use multiple sheets within a workbook.			I
			Draw two and three dimensional geometric shapes using a variety of technology tools		I	R
I – Introd	I – Introduce R – Reinforce M – Mastery (ability to teach others)					

Digital Literacy	Categories	Alignment to CCSS/SBAC	Skill s	6	7	8
Demonstrate proficiency in		SMP 3, SL 5	Create presentations for a variety of audiences and purposes with use of appropriate transitions and animations to add interest.	M	M	M
the use of computers and applications as well as an	Multimedia and Presentation	SMP 5, W 6	Use a variety of technology tools (e.g., dictionary, thesaurus, grammar checker, calculator/graphing calculator) to maximize the	R	M	M
understanding of the concepts	Tools	SL	Make strategic use of digital media to enhance understanding	R	М	M
underlying hardware, software and		RL 7, RI 7, SBAC	Use note-taking skills while viewing online videos and using the play, pause, rewind and stop buttons.	M	M	М
Demonstrate the responsible		Digital Citizenship	Comply with the district's Acceptable Use Policy related to ethical use, cyberbullying, privacy, plagiarism, spam, viruses, hacking, and file sharing.	M	M	M
use of technology and an		Digital Citizenship	Explain Fair Use guidelines for using copyrighted materials and possible consequences (e.g., images, music, video, text) in school projects.	M	M	M
understanding of ethics and safety issues in using	Acceptable Use, Copyright and Plagiarism	Digital Citizenship	Analyze and explain how media and technology can be used to distort, exaggerate, and misrepresent information.	I	R	M
electronic media at home, in school and in society.		Digital Citizenship	Explain the potential risks associated with the use of networked digital environments (e.g., internet, mobile phones, wireless, LANs) and sharing personal information.	М	М	М
I – I	I – Introduce R – Reinforce M – Mastery (ability to teach others)					

Digital Literacy Ca	tegories	Alignment to CCSS/SBAC	Skills	6	7	8
		RI 5, RI 7	Identify probable types and locations of Web sites by examining their domain names (e.g., edu, com, org, gov, au).	I	R	M
		RI 5, RI 7	Use effective search Engines, online directories, and web browsing for locating and retrieving electronic information.	R	M	M
Demonstrate the ability to use	for this, drop box, account, and password.	I	R	M		
technology for research, critical thinking, decision	Research (Gathering	RI 5, RI 7, SMP 3	Explain how technology can support communication and collaboration, personal and professional productivity, and lifelong learning.	I	R	М
making, communication, collaboration,	and Using Information)	RI 5, RI 7	Write correct in-text citations and reference lists for text and images gathered from electronic sources.	I	R	М
creativity and innovation.		RI 7, SMP 3	Develop and use guidelines to evaluate the content, organization, design, use of citations, and presentation of technologically enhanced projects.	I	R	М
I – Intr	I - Introduce R - Reinforce M - Mastery (ability to teach others)					

Digital Literacy	Categories	Alignment to CCSS/SBAC	Skills	6	7	8
Demonstrate		W 6, W 10, SL 5, SMP 5, RI 7	Use a variety of media to communicate information for specific purposes (e.g., reports, research papers, presentations, newsletters, Web sites, podcasts, blogs), citing sources.	R	M	M
the ability to use technology for research,		W6, W 10, SL 2, SL 5, SMP 3	Demonstrate how the use of various techniques and effect (e.g., editing, music, color, rhetorical devices) can be used to convey meaning in media.	I	R	М
thinking, decision making, communication.	decision and Collaboration	RI 6, RI 7, RI 9, SMP 3, SL 5	Use a variety of district approved Web 2.0 tools (e.g., e- mail discussion groups, blogs, etc.) to collaborate and communicate with peers, experts, and other audiences using appropriate academic language.	R	М	M
collaboration, creativity and innovation.		W 6, W 10 SL 3	Use teacher developed guidelines to evaluate multimedia presentations for organization, content, design, presentation and appropriateness of	R	M	M
		RI 6, RI 7, RI 9, SMP 3	Plan and implement a collaborative project with other students using technology tools (e.g., email, discussion forums, groupware, interactive Web sites, video- conferencing).	I	R	M
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Common Core State Standards K-12 Technology Skills Scope and Sequence