K-6 Technology Scope and Sequence

The following K-6 Technology Scope and Sequence was adapted from work developed by the educational technology faculty at Shorecrest Preparatory School (www.shorecrest.org).

Use this scope and sequence to identify prerequisite skills and recognize students' proficiency and progression across grade levels.

B – Beginning	D - Developing	S - Secure

Basic Operations & Concepts	K	1	2	3	4	5	6
Identify the basic components of the computer: monitor, keyboard, mouse, headphones, ports, and printers.	B	D	S	S	S	S	S
Turn on/off a computer, laptop and/or handheld device and login/logout	B	D	D	S	S	S	S
Use a mouse or trackpad to manipulate shapes, icons; click on URLs, radio buttons, check boxes; use scroll bar.	B	B	D	D	D	S	S
Use desktop icons, windows, and menus to open and close applications and documents.	B	B	D	D	D	S	S
Use shortcuts to operate the computer (Ctrl +/Windows +/Alt +)			B	B	D	D	D
Use gestures to navigate handheld devices. **[OPTIONAL]**	B	B	B	B	D	D	S
Use the print dialog box to select local printers and change settings (i.e. number of copies, color, paper size, orientation, scale, one-sided vs. two-sided).		B	B	D	D	S	S
Utilize basic troubleshooting steps to solve technical problems independently.	B	B	B	B	B	B	D
Apply prior technical knowledge and experiences to figure out how new technologies or applications work.	B	B	B	B	B	D	D

Logins/File Management	K	1	2	3	4	5	6
Use login credentials for access to network devices, accounts, and cloud services.	B	B	D	D	S	S	S
Name documents with appropriate file names and understand where files are being saved.		B	B	D	D	S	S
Create, save, edit, copy and rename files and folders to organize documents and materials		B	B	B	D	D	S
Delete files and folders; recover files and folders from the trash			B	B	B	B	D
Retrieve previous file revisions/access revision history for documents located in cloud services.				B	B	B	D
Use search tools to locate files and applications.		B	B	D	D	S	S
Can associate document extensions with appropriate file types.				B	B	D	D
Understand how cloud computing is different from using software applications.			B	B	D	D	D
Able to upload/download/retrieve files to and from the cloud.				B	D	D	D

Personal Data Management	K	1	2	3	4	5	6
Protect accounts by logging out of shared equipment.	B	B	D	D	S	S	S
Keep passwords confidential, and be proactive if they are compromised.	B	B	B	D	D	S	S
Use passcodes/passwords to secure individual devices.		B	B	D	D	S	S
Create robust passwords and effectively manage password privacy.		B	B	D	D	D	S
Find and adjust privacy settings.					B	B	D

Online Safety	K	1	2	3	4	5	6
Use technology independently and with peers responsibly and make safe choices.		B	B	D	D	D	S
Understand how to be safe online and in a digital world.	B	B	B	B	B	D	D
Understand the importance of not sharing personal information online.	B	B	B	B	B	D	D
Understand how to practice safe internet searches.	B	B	B	B	B	D	D
Evaluate whether sources/websites are safe to conduct research.			B	B	B	D	D
Understand the positive and negative effects social media sites can have on one's life.				B	B	B	B

Digital Identity	K	1	2	3	4	5	6
Recognize how overuse of technology can impact one's mental, physical and emotional health.	B	B	B	B	B	D	D
Set appropriate profile pictures and other profile content across social media, webpages, blogs, etc.				B	B	D	D
Understand that digital content is permanent and cannot be deleted.			B	B	B	D	D
Build a positive digital footprint/reputation.			B	B	B	D	D
Recognize the difference between active and passive data collection when using the Internet and social media sites.						B	B
Understand how browser settings such as cookies track personal information.						B	B

Keyboarding	K	1	2	3	4	5	6
Use keyboarding programs and games to assist in development of skills.	B	B	D	D	D	D	D
Use proper posture and ergonomics.	B	B	D	D	D	D	S
Locate and use letter and number keys with correct left and right hand placement (home row).	B	B	B	D	D	D	D
Locate and use correct finger/hand for space bar, return/enter and shift key.	B	B	D	D	D	S	S
Gain proficiency and speed in touch typing. **[2nd grade OPTIONAL during 3rd/4th quarter]**				B	D	D	D
Learn to use special characters as needed (i.e. accents, tilde).			B	B	B	B	D

Painting & Drawing Programs	K	1	2	3	4	5	6
Use basic drawing tools including pencil, paint brush, shape, line, undo, redo and eraser.	B	B	D	S	S	S	S
Use color palette/color wheel to change tool color.	B	D	S	S	S	S	S
Use selection tools to copy, paste, move and modify work.			B	D	D	S	S
Use text tool to add text features to artwork.		B	D	S	S	S	S
Use basic design principles (i.e. whitespace, color, balance, texture)				B	D	D	S

Communication & Collaboration Tools	K	1	2	3	4	5	6
Is polite and respectful in all communications and collaborations using technological tools, using appropriate language at all times.	B	B	D	D	D	S	S
Access calendar and student pages on school website as needed.			B	B	D	D	D
Use audience response tools and apps to participate in class discussions.			B	B	B	D	D
Set up, share and utilize collaborative workspaces, documents, or other digital tools for asynchronous and synchronous collaboration.				B	D	D	D
Create and maintain a digital portfolio or collection of works related to one's learning.			B	B	D	D	D

Word Processing	K	1	2	3	4	5	6
Use a word processing application to write, edit, print and save assignments. **[Kinder OPTIONAL]**		B	B	D	D	S	S
Use the menu/tool bar functions to format, edit and print a document. **[Kinder OPTIONAL]**		B	D	D	D	D	D
Highlight, copy and paste text within a document or from an outside source.	B	B	D	D	S	S	S
Insert and resize images within a document.			B	B	D	D	S
Copy, paste and resize images found from outside sources.			B	B	D	D	S
Use the menu/toolbar functions to format a paper using MLA, APA or other appropriate style.					B	B	B
Proofread and edit writing using built-in resources (i.e. dictionary, spell checker, thesaurus, grammar check).		B	B	D	D	D	D

Problem Solving & Computational Thinking	K	1	2	3	4	5	6
Use technology resources and tools to solve age appropriate computing problems or for independent learning.	B	B	B	D	D	D	D
Define an algorithm as a sequence of instructions and use the basic steps of algorithmic thinking to solve problems and design solutions.	B	B	B	D	D	D	D
Use a block based visual programming interface to build a game, tell a story, or solve a problem.	B	B	B	B	B	D	D
Use 2D design tools to create prototypes, models and simulations to demonstrate solutions and ideas. **[OPTIONAL]**	B	B	D	D	D	D	D
Use 3D design tools to create prototypes, models and simulations to demonstrate solutions and ideas. **[OPTIONAL]**	B	B	B	B	B	B	D

Spreadsheets & Databases	K	1	2	3	4	5	6
Understand that spreadsheets, databases, and other specialized data tools are used to collect, manage, analyze and visualize data.			B	B	B	D	D
Identify and explain terms and concepts related to spreadsheets (i.e. cell, column, row, values, labels, chart, graph)				B	B	B	D
Enter/edit data and text into a spreadsheet and format spreadsheet to accommodate data.				B	B	B	D
Calculate numerical equations using spreadsheet formulas and functions.					B	B	B
Designate the format of a cell to accommodate different kinds of text and numerical data.					B	B	D
Utilize spreadsheet data to create tables, charts and graphs.					B	B	D
Use spreadsheets or databases to make predictions, solve problems and draw conclusions.						B	B

Multimedia & Presentation Tools	K	1	2	3	4	5	6

	K	1	2	3	4	5	6
Use a digital camera, video camera, or camera on handheld devices to take pictures and videos. **[OPTIONAL]**	B	B	D	S	S	S	S
Use photo and video editing tools to adjust images and add effects.			B	B	D	D	D
Save images in multiple formats.					B	B	D
Use recording and editing equipment to record, edit and publish audio.		B	B	B	D	D	D
Create, edit and format text, visuals and audio within a multimedia presentation.			B	B	D	D	S
Create a series of slides and organize them to present research or convey an idea.		B	B	D	D	S	S
Copy/paste or import images within a multimedia presentation. Be able to change their size and position on a slide.			B	B	D	D	S
Insert songs, videos or other media on slides.			B	B	D	D	S
Add a working hyperlink to a multimedia presentation.			B	B	D	D	S

Internet Searching & Databases	K	1	2	3	4	5	6
Use refresh, forward and back buttons to navigate a web browser.	B	B	D	D	S	S	S
Use tab browsing to navigate multiple pages.	B	B	D	D	S	S	S
Create bookmarks and add frequently used sites to the bookmark bar.			B	B	D	D	D
Locate the URL of a website and make a distinction between the suffixes .org, .com, .edu, .net, .gov and international domains.	B	B	B	D	D	D	D
Use age-appropriate search engines to find information.	B	B	B	B	D	D	D
Use browser search tools and advanced search features to find information.		B	B	B	D	D	D
Use a browser's History feature to locate previously visited sites.			B	B	D	D	D
Identify and use hyperlinks within web pages or documents.	B	B	D	D	S	S	S
Use digital tools or platforms to organize, display, annotate and/or share a curated collection.					B	B	B
Access online catalogs and databases for research.			B	B	B	B	D

Acceptable Use, Copyright & Plagiarism	K	1	2	3	4	5	6
Locate required citation information on webpages and other digital resources and cite in the appropriate style.		B	B	B	D	D	D
Use age-appropriate guidelines to evaluate websites and other resources for accuracy, perspective, credibility and relevance.			B	B	D	D	D
Transfer the information learned from online sources into your own words.			B	B	D	D	D
Understand all rules and guidelines in the school's Responsible Use Policy.	B	B	B	D	D	D	D
Understand Fair Use guidelines and its application to all forms of work.			B	B	B	B	D