Computer Literacy Knowledge and Skill Development Continuum

The following resource is intended to support districts to ensure students receive developmentally appropriate opportunities to gain computer literacy skills at each grade level. The continuum of computer literacy skills for K-12 was created by a working group convened by ISBE.

Beginning with the 2022-23 school year, all school districts shall ensure that students receive developmentally appropriate opportunities to gain computer literacy skills at each grade level K-12. Additionally, students entering ninth grade in the 2022-23 school year and each school year thereafter must participate in one year of a course that includes intensive instruction in computer literacy, which may be English, social studies, or any other subject and that may be counted toward the fulfillment of other graduation requirements.

Basic Operations, Concepts, and Keyboarding

Students understand the fundamental concepts of operations and the various technology devices. They also leverage technology to set and demonstrate competency in their learning goals.

Students will be able to build their fine motor skills, along with increasing hand-eye coordination, as they begin to demonstrate the ability to use basic keyboard functions and touchscreen devices.

Beginning — Concept or skill is introduced by the teacher. With guidance and support, the student will practice or apply the skill or concept.
Developing — With minimal support, the student can apply the skill or concept.
Secured — Without support, the student can independently apply the skill or concept.

B=Beginning   D=Developing   S=Secured

Basic Operations, Concepts, and Keyboarding (BOCK)	K	1	2	3	4	5	6	7	8	9	10	11	12
CL.BOCK.1 Identify the basic components of the computing device, whether a computer, laptop, or hand-held device (e.g., monitor/screen, keyboard, mouse/trackpad, ports, power source).	B	D	S	S	S	S	S	S	S	S	S	S	S
CL.BOCK.2 Turn on/off a computing device and follow appropriate procedures to access the device.	B	D	S	S	S	S	S	S	S	S	S	S	S
CL.BOCK.3 Use a mouse or trackpad to manipulate shapes and icons; navigate within applications (e.g., click on hyperlinks, radio buttons, check boxes, use scroll bars).	B	D	S	S	S	S	S	S	S	S	S	S	S
CL.BOCK.4 Use desktop icons, windows, and menus to open, minimize, and close applications or files.			B	B	D	S	S	S	S	S	S	S	S
CL.BOCK.5 Use shortcuts and command functions to operate the computer or applications (e.g., Command-P, Command-C, Command-V, Command-Z, Ctrl-Alt-Delete, etc.).			B	B	D	D	D	S	S	S	S	S	S
CL.BOCK.6 Use gestures to navigate hand-held devices (e.g., swipe-left, swipe-right, pinch, etc.).	B	B	D	D	D	S	S	S	S	S	S	S	S
CL.BOCK.7 Locate and utilize accessibility features.		B	B	D	D	D	D	D	S	S	S	S	S
CL.BOCK.8 Use application help functions and online resources to solve basic operational issues (e.g., connecting to Bluetooth devices, finding a printer, internet connectivity) independently.				B	B	B	D	S	S	S	S	S	S
CL.BOCK.9 Use proper posture and ergonomics while using a computing device, including hand-held devices.	B	D	S	S	S	S	S	S	S	S	S	S	S
CL.BOCK.10 Locate and use the correct finger/hand for the space bar, return/enter, and shift key.	B	D	S	S	S	S	S	S	S	S	S	S	S
CL.BOCK.11 Locate and use letter and number keys with correct left and right hand placement (home row).	B	D	S	S	S	S	S	S	S	S	S	S	S
CL.BOCK.12. Learn to use special characters as needed (e.g., accents, tilde).			B	B	D	D	S	S	S	S	S	S	S

Basic Operations, Concepts, and Keyboarding (BOCK)	K	1	2	3	4	5	6	7	8	9	10	11	12
CL.BOCK.13 Use a calendar, task manager, or other tools to organize oneself as well as manage projects.			B				D				S		
CL.BOCK.14 Use graphic organizers, brainstorming applications, or other digital tools to gather and organize information (e.g., a Jamboard, online drawing tool, online slides).	B			D					S				
CL.BOCK.15 Understand all rules and guidelines in the school's Acceptable Use Policy.		B					D					S	
CL.BOCK.16 Understand Fair Use guidelines and their application to all forms of work.				B				D				S	
CL.BOCK.17 Demonstrate understanding of the difference between cloud computing vs. software applications for file storage/management.			B		D			S					
CL.BOCK.18 Use login credentials to access network devices, accounts, file servers, and cloud services.			B		D			S					
CL.BOCK.19 Name files with appropriate file names and understand where files are being saved.			B			D			S				
CL.BOCK.20 Create, save, edit, copy, and rename files and folders to organize files and materials.			B				D		S				
CL.BOCK.21 Delete and recover deleted files and folders and permanently delete files.			B				D		S				
CL.BOCK.22 Retrieve previous file versions/access revision history for files located in cloud services.				B			D		S				
CL.BOCK.23 Download, upload, attach files/folders via the web, email, or cloud services.				B			D		S				
CL.BOCK.24 Compress files and folders via the web, email, or cloud services.					B		D		S				
CL.BOCK.25 Use search tools to locate files and applications.		B		D					S				
CL.BOCK.26 Associate document extensions with appropriate file types.				B		D			S				

Data Management and Security

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

Students will be able to plan, implement, and monitor cyber security measures to ensure system and account protection.

Data Management and Security (DMS)	K	1	2	3	4	5	6	7	8	9	10	11	12
CL.DMS.1 Protect accounts by logging out of applications on shared computing devices.		B			D					S			
CL.DMS.2 Use passwords/passphrases to secure individual devices.		B			D				S				
CL.DMS.3 Create robust passwords/passphrases and effectively manage password privacy.			B		D			S					
CL.DMS.4 Keep passwords confidential and follow appropriate procedures if a password is compromised.		B			D			S					
CL.DMS.5 Adjust privacy settings on all social media accounts, online services, devices, and browsers.					B			D			S		
CL.DMS.6 Apply appropriate login credential security and privacy principles to demonstrate effective and safe use of online and mobile applications to make payments.			B			D				S			

Data Management and Security (DMS)	K	1	2	3	4	5	6	7	8	9	10	11	12
CL.DMS.7 Identify when sensitive personal data that may include email, phone, and online banking/credit or debit card information has been compromised and follow appropriate procedures to secure.					B	D	D	D	D	S	S	S	S
CL.DMS.8 Effectively apply and use multi-factor authentication services and applications to secure sensitive information and files.								B	B	D	S	S	S
CL.DMS.9 Understand the difference between public and private data and the considerations when determining privacy settings to apply for specific applications.				B	B	D	D	D	D	S	S	S	S
CL.DMS.10 Use digital tools to follow appropriate procedures for identifying one's own digital footprint and demonstrate an understanding of managing the digital footprint.	B	B	B	D	D	D	D	D	D	S	S	S	S
CL.DMS.11 Distinguish between safe and unsafe practices when using online applications (e.g., gaming platforms, social media, virtual discussion platforms).	B	B	B	D	D	D	D	D	D	D	D	S	S

Internet Searching and Online Databases

Students will use media literacy skills, civic-developed skills, and strategies to evaluate digital tools and resources to research a topic, organize information, and share their findings with others.

Internet Searching and Online Databases (ISOD)	K	1	2	3	4	5	6	7	8	9	10	11	12
CL.ISOD.1 Use refresh, forward, and back buttons to navigate a web browser.	B	D	S	S	S	S	S	S	S	S	S	S	S
CL.ISOD.2 Use tab browsing to navigate multiple pages.	B	D	S	S	S	S	S	S	S	S	S	S	S
CL.ISOD.3 Create favorites/bookmarks and add frequently used sites to the favorites/bookmark bar.			B	D	D	S	S	S	S	S	S	S	S
CL.ISOD.4 Locate the URL of a website and identify the characteristics of different domains (e.g., .org, .com, .edu, .net, .gov, international domains).		B	B	D	D	S	S	S	S	S	S	S	S
CL.ISOD.5 Use browser search tools and advanced search features to find information (e.g., search terms, compound operators, quotation marks around search query).		B	B	D	S	S	S	S	S	S	S	S	S
CL.ISOD.6 Use a browser's History feature to locate previously visited sites.				B	D	D	S	S	S	S	S	S	S
CL.ISOD.7 Exercise click restraint (scan results before clicking on first or early search results).				B	D	D	S	S	S	S	S	S	S
CL.ISOD.8 Use digital tools or platforms to organize, display, annotate, and/or share a curated collection.							B	B	D	D	D	S	S
CL.ISOD.9 Conduct an image search. (e.g., the Google Reverse Image tool, TinEye, geolocating, Google Street view).								B	B	D	D	S	S
CL.ISOD.10 Use digital tools, search engines, and video sites [e.g., YouTube] to determine how to perform an unfamiliar or unknown task.	B	B	D	D	D	S	S	S	S	S	S	S	S

Multimedia, Software Applications, and Collaboration Tools

Students demonstrate creative thinking and problem-solving within a design process to create original works as a means of personal or group expression.

Students use digital tools to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

Multimedia, Software Applications, and Collaboration Tools (MSACT)	K	1	2	3	4	5	6	7	8	9	10	11	12
CL.MSACT.1 Use digital devices to capture multimedia (e.g., audio, video, and photo).	B		D	S									
CL.MSACT.2 Use multimedia-editing tools to edit multimedia files (e.g., add effects, trim, splice).			B			D			S				
CL.MSACT.3 Identify the differences among multimedia file types and save multimedia files (e.g., video, audio, photo) in multiple formats.					B		D		S				
CL.MSACT.4 Use application features to copy/paste or insert/import and format text and graphics within documents and multimedia presentation files.		B		D				S					
CL.MSACT.5 Copy/paste, import, and embed songs, videos, hyperlinks, or other media on a multimedia presentation or document.			B		D			S					
CL.MSACT.6 Use basic drawing tools, including pencil, paint brush, shape, line, undo, redo, and eraser.		B	D				S						
CL.MSACT.7 Use color palette/color wheel to change tool color.	B	D				S							
CL.MSACT.8 Use advanced color editing tools, such as RGB, HEX codes, and eyedropper, to change to a color.					B		D		S				
CL.MSACT.9 Use selection tools to copy, paste, move, and modify work.			B		D			S					
CL.MSACT.10 Use text tools to add text features to artwork.	B	D				S							
CL.MSACT.11 Use email, messaging, and other interactive tools and apps to share information through text and communicate in writing.			B	D			S						
CL.MSACT.12 Set up, share, and utilize collaborative workspaces, files, or other digital tools for asynchronous and synchronous collaboration.			B	D			S						
CL.MSACT.13 Use synchronous audio and visual collaboration tools, such as virtual/video conferencing, interactive television, and Voice over Internet Protocol, to connect with others.		B		D			S						
CL.MSAC.14 Create and maintain a digital portfolio or collection of works related to one's learning.		B			D					S			