DLCS Curriculum Evaluation Tool Grades 3-5

Name of Reviewer: _____ **School/District:** _____ **Date:** _____

Name of Curriculum Materials: _____ **Publication Date:** _____ **Grade Level(s):** _____

Scale:

Not Found	N	The digital literacy and computer science content was not found.
Low	L	Major gaps in the digital literacy and computer science content were found.
Marginal	M	Gaps in the digital literacy and computer science content, as described in the Standards, were found and these gaps may
Acceptable	A	Few gaps in the digital literacy and computer science content, as described in the Standards, were found and these gaps
High	H	The digital literacy and computer science content was fully formed as described in the Standards.

Overaching Considerations:

To what extent do the materials:	N-L-M-A-H	Comments:
Provide a multitude of avenues to meet standards (unplugged, online, visual, auditory, kinesthetic)		
Meet accessibility standards (physically and digitally)		
Address a variety of comprehension levels (Blooms, DOK)		
Guidance for teachers in effectively teaching the standards (clear procedures are provided to assist in implementation of the materials; essential learning material such as handouts, student text, and other instructional tools provided)		
Provide varied assessment strategies that include:		
Basic response items (e.g., multiple choice, matching, true and false)		
Performance Assessments		
Reflect, over time, on what and how they have learned		
Project-based Tasks		
Provide opportunities for cross-curricular integration		
The resource provides guidance to the student regarding practicing and applying the skill using real life scenarios/ experiences		
Glossaries, bibliographies, indices, appendices, and tables of content are included, comprehensive, and easy to use		

DLCS Grade 3	Chapter, Pages, Resource	N-L-M-A-H	DLCS Grade 4	Chapter, Pages, Resource	N-L-M-A-H	DLCS Grade 5	Chapter, Pages, Resource	N-L-M-A-H
Recurring Standards			**Recurring Standards**			**Recurring Standards**		
Safety, Privacy, and Security			**Safety, Privacy, and Security**			**Safety, Privacy, and Security**		
R1. Identify, demonstrate, and apply personal safe use of digital devices.			R1. Identify, demonstrate, and apply personal safe use of digital devices.			R1. Identify, demonstrate, and apply personal safe use of digital devices.		
Legal and Ethical Behavior			**Legal and Ethical Behavior**			**Legal and Ethical Behavior**		
R2. Recognize and demonstrate age-appropriate responsible use of digital devices and resources as outlined in school/district rules.			R2. Recognize and demonstrate age-appropriate responsible use of digital devices and resources as outlined in school/district rules.			R2. Recognize and demonstrate age-appropriate responsible use of digital devices and resources as outlined in school/district rules.		
Impact of Computing			**Impact of Computing**			**Impact of Computing**		
R3. Assess the validity and identify the purpose of digital content.			R3. Assess the validity and identify the purpose of digital content.			R3. Assess the validity and identify the purpose of digital content.		
Systems			**Systems**			**Systems**		
R4. Identify and employ appropriate troubleshooting techniques used to solve computing or connectivity issues.			R4. Identify and employ appropriate troubleshooting techniques used to solve computing or connectivity issues.			R4. Identify and employ appropriate troubleshooting techniques used to solve computing or connectivity issues.		

Collaborative Research			Collaborative Research			Collaborative Research		
R5. Locate and curate information from digital sources to answer research questions.			R5. Locate and curate information from digital sources to answer research questions.			R5. Locate and curate information from digital sources to answer research questions.		
Digital Tools			**Digital Tools**			**Digital Tools**		
R6. Produce, review, and revise authentic artifacts that include multimedia using appropriate digital tools.			R6. Produce, review, and revise authentic artifacts that include multimedia using appropriate digital tools.			R6. Produce, review, and revise authentic artifacts that include multimedia using appropriate digital tools.		
Computational Thinker			**Computational Thinker**			**Computational Thinker**		
Abstraction			**Abstraction**			**Abstraction**		
1. Use numbers or letters to represent information in another form. Examples: Secret codes/encryption, Roman numerals, or abbreviations.			1. Construct a basic system of numbers, letters, or symbols to represent information as a cipher. Examples: Combine data from multiple sources, sorting multi-level.			1. Construct a complex system of numbers or letters to represent information. Example: Student-created complex secret codes using more than one form to solve a problem or answer a question.		
2. Analyze a given list of sub-problems while addressing a larger problem. Example: Problem - making a peanut butter sandwich; sub-problem - opening jar, finding a knife, getting the bread. Problem - design and share a brochure; sub-problem - selecting font, choosing layout.			2. Formulate a list of sub-problems to consider while addressing a larger problem. Examples: Problem - a multi-step math problem; sub-problem - steps to solve. Problem - light bulb does not light; sub-problem - steps to resolve why.					
Algorithms			**Algorithms**			**Algorithms**		
3. Explain that different solutions exist for the same problem or sub-problem. Example: Multiple paths exist to get home from school; one may be a shorter distance while one may encounter less traffic.			3. Show that different solutions exist for the same problem or sub-problem.			2. Create an algorithm to solve a problem while detecting and debugging logical errors within the algorithm. Examples: Program the movement of a character, robot, or person through a maze. Define a variable that can be changed or updated.		
4. Examine logical reasoning to predict outcomes of an algorithm.			4. Detect and debug logical errors in various basic algorithms. Example: Trace the path of a set of directions to determine success or failure.			3. Create an algorithm that is defined by simple pseudocode.		
5. Create an algorithm to solve a problem as a collaborative team. Examples: Move a character/robot/person through a maze. List steps to build a sandwich.			5. Use flowcharts to create a plan or algorithm.			4. Create a simple pseudocode.		
6. Describe the function of a flowchart.			6. Define a simple pseudocode.			5. Develop and recommend solutions to a given problem and explain the process to an audience.		
Programming and Development			**Programming and Development**			**Programming and Development**		
7. Test and debug a given program in a block-based visual programming environment using arithmetic operators, conditionals, and repetition in programs, in collaboration with others. Examples: Sequencing cards for unplugged activities, online coding practice.			7. Create a working program in a block-based visual programming environment using arithmetic operators, conditionals, and repetition in programs, in collaboration with others.			6. Create a working program in a block-based visual programming environment using arithmetic operators, conditionals, and repetition in programs.		
						7. Identify variables.		
						8. Demonstrate that programs require known starting values that may need to be updated appropriately during the execution of programs. Examples: Set initial value of a variable, updating variables.		
Citizen of a Digital Culture			**Citizen of a Digital Culture**			**Citizen of a Digital Culture**		

Safety, Privacy, and Security			Safety, Privacy, and Security			Safety, Privacy, and Security		
8. Describe how to use proper ergonomics when using devices. Examples: Body position, lighting, positioning of equipment, taking breaks.			8. Demonstrate the proper use and operation of security technologies. Examples: Passwords, virus protection software, spam filters, pop-up blockers.			9. Explain the proper use and operation of security technologies. Examples: Passwords, virus protection software, spam filters, pop-up blockers, cookies.		
9. Identify the proper use and operation of security technologies. Examples: Passwords, virus protection software, spam filters, pop-up blockers.						10. Identify appropriate and inappropriate uses of communication technology and discuss the permanence of actions in the digital world.		
10. Describe ways web advertising collects personal information. Examples: Search ads, banner ads, in-game ads, email ads.								
			Legal and Ethical Behavior			**Legal and Ethical Behavior**		
			9. Identify laws and tools which help ensure that users of varying abilities can access electronic and information technology. Examples: ADA Laws			11. Explain that laws and tools exist to help ensure that people of varying abilities can access electronic and information technology. Examples: Section 508, Telecommunication Act of 1996, Braille, closed captioning, text to speech.		
			Digital Identity			**Digital Identity**		
			10. Identify the different forms of web advertising and why websites, digital resources, and artifacts may include advertisements and collect personal information. Examples: Search ads, pay-per-click ads, banner ads, targeted ads, in-game ads, email ads.			12. Explain the different forms of web advertising and why websites, digital resources, and artifacts may include advertisements that may collect personal information. Examples: personalized web experiences based on tailored web searches, maintaining search history, quicker access to relevant information.		
Impact of Computing			**Impact of Computing**			**Impact of Computing**		
11. Identify resources in the community that offer technology access. Examples: Libraries, community centers, restaurants, education programs, schools, or hardware/software donation programs.			11. Discuss the digital divide as unequal access to technology based on differences such as income, education, age, or geographic location and locate resources in the community that can give people access to technology.			13. Share knowledge of resources in the community that can give people access to technology. Example: student created print and/or digital resource to share WiFi or other connectivity opportunities within the community.		
12. Identify and discuss ways that access to technology helps empower individuals and groups. Examples: Gives access to information; provides the ability to communicate with others around the world; enables people to buy and sell things						14. Analyze the impact of social media on individuals, families, and society.		
						15. Explore and predict how advances in computing technologies affect job opportunities and/or processes now and in the future.		
Global Collaborator			**Global Collaborator**			**Global Collaborator**		
Communication			**Communication**			**Communication**		
13. Communicate key ideas and details collaboratively in a way that informs, persuades, and/or entertains, using digital tools. Example: Create a digital presentation to persuade school administrators to allow additional time for lunch.			12. Use basic features of digital tools to communicate key ideas and details in a way that informs and/or persuades.			16. Use advanced features of digital tools and media-rich resources to communicate key ideas and details in a way that informs, persuades, and/or entertains.		

			13. Synthesize complex information from multiple sources in different ways to make it more useful and/or relevant.		17. Publish organized information in different ways to make it more useful or relevant. Examples: Infographic, student created website.

Digital Tools | | | **Digital Tools** | | | **Digital Tools**

Digital Tools			Digital Tools			Digital Tools		
14. Type 15 words per minute with 95% accuracy using appropriate keyboarding techniques.			14. Type 20 words per minute with 95% accuracy using appropriate keyboarding techniques.			18. Type 25 words per minute with 95% accuracy using appropriate keyboarding techniques.		
15. Describe local, networked, and online or cloud environments.								

Collaborative Research			Collaborative Research			Collaborative Research		
16. Conduct basic keyword searches to produce valid, appropriate results, and evaluate results for accuracy, relevance, and appropriateness. Examples: Use search techniques, check for credibility and validity.			15. Conduct complex keyword searches to produce valid, appropriate results and evaluate results for accuracy, relevance, and appropriateness. Examples: Search techniques, check for credibility and validity.			19. Conduct advanced keyword searches to produce valid, appropriate results and evaluate results for accuracy, relevance, and appropriateness. Examples: Search techniques, check for credibility and validity.		
						Social Interaction		
						20. Collaborate locally and globally using online digital tools under teacher supervision.		

Computing Analyst			**Computing Analyst**			**Computing Analyst**		
Data			**Data**			**Data**		
17. Describe examples of data sets or databases from everyday life. Examples: Library catalogs, school records, telephone directories, or contact lists.			16. Gather and organize data to answer a question using a variety of computing and data visualization methods. Examples: Sorting, totaling, averaging, charts, and graphs.			21. Manipulate data to answer a question using a variety of computing methods and tools to collect, organize, graph, analyze, and publish the resulting information.		
Systems			**Systems**			**Systems**		
18. Identify a broad range of digital devices, the services they provide, and appropriate uses for them. Examples: Computers, smartphones, tablets, robots, e-textiles, driving directions apps that access remote map services, digital personal assistants that access remote information services.			17. Demonstrate an appropriate level of proficiency in performing tasks using a range of digital devices. Examples: Collect and record data, print, use send command, connect to Internet, or search; use probes, sensors, printers, robots, or computers.			22. Identify computing services that may be initially turned on by default. Examples: Geolocations, geotagging.		
19. Describe the differences between hardware and software.						23. Identify the key components of a network. Examples: Links, nodes, networking devices.		
						24. Describe the need for authentication of users and devices as it relates to access permissions, privacy, and security. Examples: Logging in at school, logging personal devices to public networks.		
			Modeling and Simulation			**Modeling and Simulations**		
			18. Create a simple digital model of a system, individually and collaboratively, and explain what the model shows and does not show. Examples: Create a model of the water cycle and indicate that it shows how precipitation forms but does not indicate how pesticides get into rivers.			25. Analyze the concepts, features, and behaviors illustrated by a simulation. Examples: Object motion, weather, ecosystem, predator/prey.		
			19. Use data from a simulation to answer a question collaboratively.			26. Connect data from a simulation to real-life events.		
Innovative Designer			**Innovative Designer**			**Innovative Designer**		
Human/Computer Partnerships			**Human/Computer Partnerships**			**Human/Computer Partnerships**		

20. Compare and contrast human and computer performance on similar tasks to understand which is better suited to the task. Examples: Sorting alphabetically, finding a path across a cluttered room.			20. Explain how hardware and applications can enable everyone, including people with disabilities, to do things they could not do otherwise. Examples: Global Positioning System [GPS] to navigate, text-to-speech feature to read aloud from a digital resource, translate a digital resource to a different language.			27. Define social engineering and discuss possible defenses. Examples: Phishing, impersonating	
21. Explain advantages and limitations of technology. Example: A spell-checker can check thousands of words faster than a human could look them up; however, a spell-checker might not know whether underserved is correct or if the author's intent was to type undeserved.							
Design Thinking			**Design Thinking**			**Design Thinking**	
22. Discuss the design process and use digital tools to illustrate potential solutions.			21. Develop, test, and refine prototypes as part of a cyclical design process to solve a simple problem.			28. Develop, test, and refine prototypes as part of a cyclical design process to solve a complex problem. Examples: Design backpack for a specific user's needs; design a method to collect and transport water without the benefit of faucets; design boats that need to hold as much payload as possible before sinking; design models of chairs based on specific user needs.	
23. Implement the design process to solve a simple problem. Examples: Uneven table leg, noise in the cafeteria, tallying the collection of food drive donations.							
Overall Impressions:			**Comments:**				
What are your overall impressions of the curriculum							
What are the strengths and weaknesses of the materials							
Have you identified gaps within this domain? What are							