

Government of Newfoundland and Labrador Department of Education Programs and Services Division

Call for Submissions

Date June 7, 2023

Reference Number 2023-1

The Department of Education (Programs and Services) is conducting a call for submissions to identify resources that may be useful to support the following course:

K-6 Coding and Digital Innovation Curriculum

Vendors who have materials currently available for purchase are invited to make submissions.

Vendors MUST comply with the Resource Submission Procedures in order to be eligible for inclusion in the environmental scan.

All submissions must be received by:

4:00 PM (Newfoundland Standard Time) July 19, 2023

Resource Submission Procedures

- 1. Review the Appendices of this document. Vendors will confirm that resources submitted:
 - a) align with the intent of the course description provided, and
 - b) support the outcomes listed.
- 2. Complete all sections of the Resource Summary Form.
- 3. Email the **Resource Summary Form**

To: toddwoodland@gov.nl.ca

Subject: Resource Submission – Reference Number 2023-1

4. Ship 4 physical copies of each resource to:

Learning Resources Distribution Centre Building 909, Pleasantville St. John's, NL A1A 1R1

Clearly label the package(s)

Resource Submission - Reference Number 2023-1

5. If additional information is required, send an email request to:

Todd Woodland Manager, Curriculum Section Division of Program Development Department of Education toddwoodland@gov.nl.ca

Appendix A: Resource Requirements/Preferences

Requirements

- Evidence-based Technology Education resources that align with the curriculum outcomes that are engaging, current, and age appropriate
- Focus on Children's Literature that aligns with the curriculum outcomes
- Highlights a diversity of representations such as multicultural, Indigenous, and gender
- Suitable for Multiage classrooms
- English language and French language versions are required
- High quality translation

NOTE: An accessible digital pdf version of successful titles will be requested for alternate format materials (AEM) purposes

materials (AFM) purposes

K-6 Coding and Digital Innovation Curriculum

Introduction

This document presents the draft strands and indicators for the K-6 Coding and Digital Innovation Curriculum. The plan is that grades K-3 will be piloted in September 2023 and grades 4-6 will be piloted in September 2024. It is proposed that a collection of children's literature will be resourced to be evaluated as part of the pilot process.

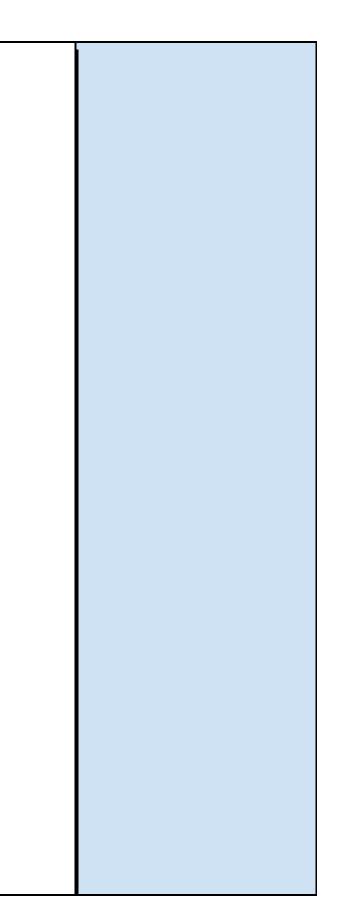
	K-6 Coding and Digital Innovation					
Grade	Digital Citizenship and Safety (DCS)	Coding and Computational Thinking (CCT)	Creating and Innovating (CI)	Communicating and Sharing (CS)	Applied Skills (AP)	
K	 K DSC 1 : Digital Access: DSC 1.1: Explore a variety of digital tools. K DSC 2 : Digital Communication and Collaboration: DSC 2.1: Develop an understanding of in person vs. online communication. DSC 2.2: Begin to understand how to be respectful and kind online. K DSC 3 : Digital Fluency: DSC 3.1: Develop and use a variety of digital skills (link to applied skills). DSC 3.2: Begin to practice good decision making when online. K DSC 4 : Digital Etiquette: DSC 4.1: Learn what you can do/access online. DSC 4.2: Demonstrate safe, responsible and respectful behavior when using digital technology. K DSC 5 : Digital Law: 	 K CCT 1: Input and output CCT 1.1: Understand that what we put "in" will affect what comes "out." K CCT 2: Sequencing CCT 2.1: Create a series of directions. CCT 2.2: Follow a series of directions in order. K CCT 3: Loops CCT 3.1: Start to recognize repeating patterns in code. K CCT 4: If/Then CCT 4.1: Start to recognize real life if/then examples. K CCT 5: Variables CCT 5.1: Start to recognize that choices can affect the end result K CCT 6: Debugging CCT 6.1: Start to recognize problems. CCT 6.2: Understand that mistakes are part of the learning process. CCT 6.3: Start to find solutions to problems. 	 K Cl 1: Create and innovate through play: Cl 1.1: Use a variety of tools and materials to bring ideas to life. K Cl 2: Apply the <u>Design Process</u>: Cl 2.1: Ask: Identify the problem/purpose Cl 2.2: Imagine Brainstorm Empathize (identify audience/user) Cl 2.3: Plan Choosing materials Choosing tools Cl 2.4: Create Creativity & expression Repurposing Cl 2.5: Test Problem solving Cl 2.6: Improve Repeat the process https://www.yes.psu.edu/about/engineerin g-design-process.aspx 	 K CS 1: Question: CS 1.1: Ask and answer questions related to and to help further the task. K CS 2: Develop New Vocabulary: CS 2.1: Start to develop a relevant vocabulary to extend learning. K CS 3: Collaborate: CS 3.1: Listen to others' opinions. CS 3.2: Ask questions. CS 3.3: Share ideas. CS 3.3: Complete responsibilities equitably. CS 3.4: Be open to suggestions and others' opinions. K CS 4: Share: CS 4.1: Decide on how to share the product. CS 4.2: Decide with whom to share the product. CS 4.3: Demonstrate a product, describing the process, providing reasoning for choices/solutions. K CS 5: Reflect 	 Develop skills through play: Access digital tools appropriate to the task Use various devices in a safe and appropriate manner Device & application literacy: Sign in/out Turn on/off device Utilize device ports Use mouse/ keyboard 	

	 DSC 5.1: Begin to understand that asking consent is necessary before using and sharing other's personal information online. K DSC 6 : Digital Health and Wellness: DSC 6.1: Begin to learn about the negative and positive effects of screen time and how it affects our lives. DSC 6.2: Begin to understand how emotions can be affected by the use of digital technology. K DSC 7: Digital Security and Privacy: DSC 7.1: Learn safe places to "go" online. K DSC 8: Rights and Responsibilities DSC 8.1: Understand the importance of checking in with a trusted adult when using digital technologies. 			 CS 5.1: Self-reflect on ability to create and contribute. CS 5.2: Provide constructive feedback to others. 	
1-3	 1-3 DSC 1 : Digital Access: DSC 1.1: Explore a variety of digital tools. DSC 1.2: Start to recognize the factors that affect digital access and equity. 1-3 DSC 2: Digital Commerce: 	 1-3 CCT 1: Input and output CCT 1.1: Understand that what we put "in" will affect what comes "out." 1-3 CCT 2: Sequencing CCT 2.1: Create a series of directions. 	 1-3 Cl 1: Create and innovate through play Cl 1.1: Use a variety of tools and materials to bring ideas to life. 1-3 Cl 2: Apply the <u>Design Process</u>: Cl 2.1: Ask: Identify the 	 1-3 CS 1: Question: CS 1.1: Ask and answer questions related to and to help further the task. 1-3 CS 2: Develop New Vocabulary: CS 1.2: Develop a relevant vocabulary to extend learning. 	 Develop skills through exploration: Access digital tools appropriate to the task Use various devices Start to learn keyboard functions Locate forms in digital platforms
	 DSC 2.1: Begin to understand the purpose of 'advertisements'. DSC 2.2: Begin to understand that some apps 	 CCT 2.2: Follow a series of directions in order. 1-3 CCT 3: Loops 	 problem/purpose CI 2.2: Imagine Brainstorm Empathize (identify audience/user) 	 1-3 CS 3: Collaborate: CS 3.1: Listen to others' opinions. CS 3.2: Ask questions. 	 Device & application literacy: Sign in/out Turn on/off device Utilize device ports Use mouse/ keyboard

 and websites require payment. DSC 2.3: Begin to understand that the buying and selling of goods can be done electronically. 	 CCT 3.1: Recognize and create repeating patterns in code. 1-3 CCT 4: If/Then CCT 4.1: Recognize and create real life if/then examples. 	 Cl 2.3: Plan Choosing materials Choosing tools Cl 2.4: Create Creativity & expression Repurposing Cl 2.5: Test 	 CS 3.3: Share ideas. CS 3.4: Complete responsibilities equitably CS 3.5: Be open to sugg and others' opinions. 1-3 CS 4: Share:
 and Collaboration: DSC 3.1: Understand how tone and intention are important when communicating online. DSC 3.2: Understand how to be respectful and kind online. DSC 3.3: Understand how to 	 1-3 CCT 5: Variables CCT 5.1: Recognize that different inputs can affect the end result. CCT 5.2: Begin to understand that variables can be measured or counted and can change. Tynker - Variables ScratchGarden - Variables 1-3 CCT 6: Debugging CCT 6.1: Identify and recognize problems in code. CCT 6.2: Understand that mistakes are part of the learning process. CCT 6 Find solutions to problems. 	 Problem solving Cl 2.6: Improve Repeat the process https://www.yes.psu.edu/about/engineering-design-process.aspx 	 CS 4.1: Decide on how the product. CS 4.2: Decide with who share the product. CS 4.3: Demonstrate a product.
 1-3 DSC 5: Digital Etiquette: DSC 5.1: Demonstrate safe, responsible and respectful behavior when using digital technologies. DSC 5.2: Understand that there are rules, rights and responsibilities created for technology use and why they should be followed. 1-3 DSC 6: Digital Law: 			

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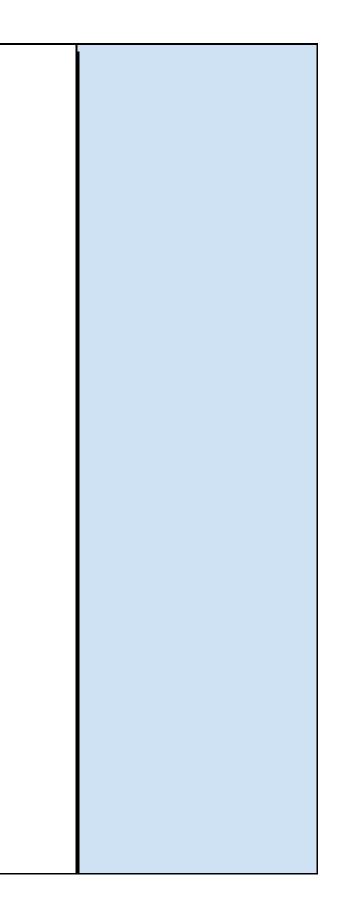
 DSC 6.1: Understand that asking consent is necessary before using and sharing other's personal information online. DSC 6.2: Begin to understand what it means to be aware of Terms and Conditions to various apps and websites when creating new accounts/profiles. 		
 1-3 DSC 7: Digital Health and Wellness: DSC 7.1: Learn about the negative and positive effects of screen time and how it affects our lives. DSC 7.2: Understand how emotions can be affected by the use of digital technologies. 		
 1-3 DSC 8: Digital Security and Privacy: DSC 8.1: Learn to create secure usernames and passwords and how to keep this information safe. (Common Sense). DSC 8.2: Begin to understand that people and situations online aren't always as they seem. DSC 8.3: Learn to recognize "just right" apps and websites (Common Sense). 		
 1-3 DSC 9: Digital Rights and Responsibilities: DSC 9.1: Understand the importance of checking in 		



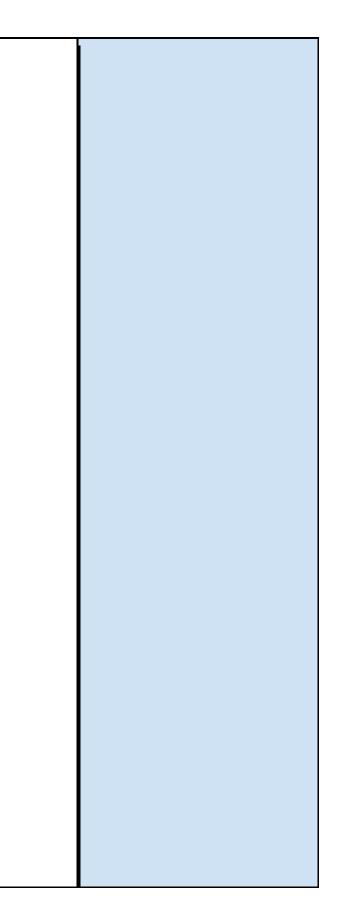
with a trusted adult when using digital technologies.			
 4-6 4-6 DSC 1 : Digital Access: DSC 1.1: Explore a variety digital tools. DSC 1.2: Recognize the factors that affect digital access and equity and their implications. 4-6 DSC 2: Digital Commerce: DSC 2.1: Understand the purpose of 'advertisements DSC 2.2: Understand how interact with advertisements appropriately. DSC 2.3: Understand the types of advertisements an how they target their audiences in the digital world. DSC 2.4: Understand that some apps and websites require payment. DSC 2.5: Understand that the buying and selling of goods can be done electronically. DSC 2.6: Understand how is be effective consumers in a digital economy. DSC 2.7: Explore a variety career pathways in technology. 	 applied knowledge that what we put "in" will affect what comes "out." 4-6 CCT 2: Sequencing CCT 2.1: Create a series of specific directions in order. CCT 2.2: Follow a series of directions in order. 4-6 CCT 3: Loops CCT 3.1: Recognize and create repeating patterns in code. CCT 3.2: Using loops to make things more efficient. 4-6 CCT 4: If/Then CCT 4.1: Recognize and create real life if/then examples. 4-6 CCT 5: Variables CCT 5.1: Recognize that different inputs can affect the end result. 0 CCT 5.2: Begin to understand that variables can be measured 	 4-6 Cl 1: Create and innovate through play: Cl 1.1: Use a variety of tools and materials to bring ideas to life. 4-6 Cl 2: Apply the <u>Design Process</u>: Cl 2.1: Ask: Identify the problem/purpose Cl 2.2: Imagine Brainstorm Empathize (identify audience/user) Cl 2.3: Plan Choosing materials Choosing tools Cl 2.4: Create Creativity & expression Repurposing Cl 2.5: Test Problem solving Cl 2.6: Improve Repeat the process 	 4-6 CS 1: Question: Ask and answer question related to and to help furtistic. 4-6 CS 2: Develop New Vocable Develop a relevant vocal extend learning. 4-6 CS 3: Collaborate: Listen to others' opinions Ask questions. Share ideas. Complete responsibilities equitably. Be open to suggestions a others' opinions. Encourage others' streng 4-6 CS 4: Share: Decide on how to share the product. Decide with whom to share the product. Decide with whom to share the product. Demonstrate a product, describing the process, preasoning for choices/sol 4-6 CS 5: Reflect Self-reflect on ability to chand contribute. Provide constructive feed others.

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 4-6 DSC 3: Digital Communication & Collaboration: DSC 3.1: Explore a variety of ways to communicate and exchange information online. DSC 3.2: Understand how tone and intention are important when communicating online. DSC 3.3: Express thoughts and feelings appropriately in a way that others can understand. DSC 3.4: Demonstrate respectful and kind behavior online. 	 CCT 6.1: Identify and recognize problems in code. CCT 6.2: Understand that mistakes are part of the learning process. CCT 6.3: Find solutions to problems. 	
 4-6 DSC 4: Digital Fluency DSC 4.1: Develop and use a variety of digital skills (applied skills). DSC 4.2: Understand the power and importance of the social aspect of technology and its use. DSC 4.3: Practice good decision making when supporting your and others' on-line learning and collaboration. DSC 4.4: Discern between credible sources versus "fake news" through media literacy. 		
 4-6 DSC 5: Digital Etiquette: DSC 5.1: Demonstrate safe, responsible and respectful behavior when using digital technoligy. DSC 5.2: Demonstrate a knowledge of rules, rights 		



and responsibil	lities when		
navigating a dig			
4-6 DSC 6: Digital Lav	w:		
• DSC 6.1: Unde	rstand that		
stealing or caus	sing damage		
to other people	's work,		
identity, or prop	perty online is		
a crime.			
• DSC 6.2: Unde			
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DSC 6.3: Unde			
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4-6 DSC 7: Digital He	alth &		
Wellness:			
DSC 7.1: Learn	about the		
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• DSC 7.2: Unde	rstand how		
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the use of digita	al		
technologies.			
• DSC 7.3: Mode			
understanding			
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of technology.			
4-6 DSC 8: Digital Sec Privacy:			
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DSC 8.2: Learn			
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 digital media (emails, ads, etc.). DSC 8.3: Understand that people and situations online aren't always as they seem 		
and to be aware of misrepresentations.		
DSC 8.4: Learn to recognize		
"just right" apps and websites (<u>Common Sense</u>).		
DSC 8.5: Understand and be		
aware of digital attack risks like viruses or worms and		
their implications.		
4-6 DSC 9: Digital Rights and		
Responsibilities:		
DSC 9.1: Understand the		
importance of checking in		
with a trusted adult when		
using digital technologies.DSC 9.2: Learn to navigate		
the digital world		
appropriately and safely.		

