ONLINE PROGRAM CURRICULAR CONNECTIONS

Let's Design a Cleaner City

(Grades 3-6)

Let's Design a Cleaner City is an online program that empowers students to solve real world problems. In this program, students expand their knowledge of urban challenges by learning about major sources of urban and industrial pollution. Students will then use the design thinking process to imagine and create a cleaner city.

Grade	Subject	Curricular Area	Features
3	Applied Design, Skills and Technologies	Big Ideas	• Designs grow out of natural curiosity. • Skills can be developed through play. • Technologies are tools that extend human capabilities.
		Curricular Competencies	• Identify needs and opportunities for designing, through exploration • Use trial and error to make changes, solve problems, or incorporate new ideas from self or others • Demonstrate their product, tell the story of designing and making their product, and explain how their product contributes to the individual, family, community, and/or environment • Use materials, tools, and technologies in a safe manner in both physical and digital environments • Develop their skills and add new ones through play and collaborative work • Explore the use of simple, available tools and technologies to extend their capabilities
	Science	Curricular Competencies	• Contribute to care for self, others, school, and neighbourhood through personal or collaborative approaches • Transfer and apply learning to new situations • Generate and introduce new or refined ideas when problem solving
4	Applied Design, Skills and Technologies	Big Ideas	• Designs can be improved with prototyping and testing. • Skills are developed through practice, effort, and action.
		Curricular Competencies	• Understanding context • Generate potential ideas and add to others' ideas • Screen ideas against the objective and constraints

Fraser River DISCOVERY CENTRE

			• Construct a first version of the product, making changes to tools, materials, and procedures as needed • Gather peer feedback and inspiration • Make changes and test again, repeating until satisfied with the product • Demonstrate their product and describe their process • Use materials, tools, and technologies in a safe manner, and with an awareness of the safety of others, in both physical and digital environments
	Science	Curricular Competencies	• Contribute to care for self, others, school, and neighbourhood through individual or collaborative approaches • Co-operatively design projects • Transfer and apply learning to new situations • Generate and introduce new or refined ideas when problem solving
5	Applied Design, Skills and Technologies	Big Ideas	• Designs can be improved with prototyping and testing. • Skills are developed through practice, effort, and action.
		Curricular Competencies	• Understanding context • Identify key features or user requirements • Identify the main objective for the design and any constraints • Generate potential ideas and add to others' ideas • Screen ideas against the objective and constraints • Construct a first version of the product, making changes to tools, materials, and procedures as needed • Gather peer feedback and inspiration • Determine whether their product meets the objective and contributes to the individual, family, community, and/or environment
	Science	Curricular Competencies	• Contribute to care for self, others, and community through personal or collaborative approaches • Co-operatively design projects • Transfer and apply learning to new situations • Generate and introduce new or refined ideas when problem solving
6	Applied Design, Skills	Big Ideas	• Design can be responsive to identified needs.
		Curricular Competencies	• Empathize with potential users to find issues and uncover needs and potential design opportunities

	and Technologies		• Identify key features or potential users and their requirements • Generate potential ideas and add to others' ideas • Screen ideas against criteria and constraints • Construct a first version of the product or a prototype, as appropriate, making changes to tools, materials, and procedures as needed • Evaluate their product against their criteria and explain how it contributes to the individual, family, community, and/or environment
			• the nature of sustainable practices around BC's resources
	Science	Curricular Competencies	• Contribute to care for self, others, and community through personal or collaborative approaches • Co-operatively design projects • Transfer and apply learning to new situations • Generate and introduce new or refined ideas when problem solving