BRITISH
COLUMBIA
Ministry of Education

BIG IDEAS

Social, ethical, and sustainability considerations impact design and decision making.	Ethical marketing contributes to a healthier global marketplace.	Different technologies and tools are required at different stages of creation and communication.

Learning Standards

Curricular Competencies	Content
Students are expected to be able to do the following:	*Students are expected to know the following:*
Applied Design *Understanding context* • Engage in a period of **research** and **empathetic observation** *Defining* • Identify potential users for a chosen entrepreneurship and/or design opportunity • Identify criteria for success, intended impact, and any **constraints** *Ideating* • Take creative risks in generating ideas and add to others' ideas in ways that enhance them • Screen ideas against criteria and constraints • Critically analyze and prioritize competing **factors** to meet community needs for preferred futures • Maintain an open mind about potentially viable ideas *Prototyping* • Identify and use **sources of inspiration** and information • Choose a form and develop a **plan** that includes key stages and resources • Evaluate a variety of materials for effective use and potential for reuse, recycling, and biodegradability • Make changes to tools, materials, and procedures as needed • Record **iterations** of prototyping	• entrepreneurship opportunities • **characteristics** of entrepreneurs • creative ways to add value to an existing idea or product • ethics of **cultural appropriation** • differences between **invention** and **innovation** • barriers that **diverse groups** of entrepreneurs face and factors that can contribute to their success • life cycle of a product from invention/innovation to the marketplace • **ethical marketing** strategies • **forms of marketing** • **online marketing concepts** • customer needs, wants, and demands

Learning Standards (continued)

Curricular Competencies	Content
Testing • Identify **sources of feedback** • Evaluate choices and decisions • Recreate or abandon the idea *Making* • Identify and use appropriate tools, **technologies**, materials, and processes for production • Make a step-by-step plan for production and carry it out, making changes as needed • Use materials in ways that minimize waste *Sharing* • Decide on how and with whom to **share product** and processes • Demonstrate product providing a rationale for the selected solution, modifications, and procedures • Use appropriate terminology • Critically evaluate the success of the product, and explain how it makes a contribution to people and/or the environment • Critically reflect on their design thinking and processes • Assess their ability to work effectively both as individuals and collaboratively in a group, including ability to share and maintain an efficient co-operative workspace • Identify new goals that result from feedback **Applied Skills** • Demonstrate an awareness of precautionary and emergency safety procedures in both physical and digital environments • Identify the skills needed in relation to specific projects, and develop and refine them	

Learning Standards (continued)

Curricular Competencies	Content
Applied Technologies • Choose, adapt, and if necessary learn more about appropriate tools and technologies to use for tasks • Evaluate **impacts**, including unintended negative consequences, of choices made about technology use • Evaluate the influences of land, natural resources, and culture on the development and use of tools and technologies	

- **research:** may include knowledge from other people as experts, secondary sources, and collective pools of knowledge in communities and collaborative atmospheres both online and offline
- **empathetic observation:** may include experiences; traditional cultural knowledge and approaches; First Peoples worldviews, perspectives, knowledge, and practices; places, including the land and its natural resources and analogous settings; users, experts, and thought leaders
- **constraints:** limiting factors such as task or user requirements, materials, expense, environmental impact
- **factors:** social, ethical, and sustainable
- **sources of inspiration:** may include personal experiences, exploration of First Peoples perspectives and knowledge, the natural environment, places, cultural influences, social media, users and experts
- **plan:** for example, goals, sketches, checklists
- **iterations:** repetitions of a process with the aim of approaching a desired result
- **sources of feedback:** may include First Nations, Métis, or Inuit community experts; keepers of other traditional cultural knowledge and approaches; peers, users, and other experts
- **technologies:** tools that extend human capabilities
- **share:** may include showing to others, use by others, giving away, or marketing and selling
- **product:** for example, a physical object, a process, a system, a service, or a designed environment
- **impacts:** personal, social, and environmental

- **characteristics:** creative, flexible, tenacious; critical thinkers, communicators, collaborators, risk takers
- **cultural appropriation:** use of a cultural motif, theme, "voice", image, knowledge, story, song, or drama, shared without permission or without appropriate context or in a way that may misrepresent the real experience of the people from whose culture it is drawn
- **invention:** an original idea
- **innovation:** changing an existing idea, product, or service into something new
- **diverse groups:** for example, First Peoples, women, new immigrants; people with diverse abilities
- **ethical marketing:** for example, socially responsible and culturally sensitive
- **forms of marketing:** responsive, anticipative, and shaped to address customer needs
- **online marketing concepts:** social media, viral marketing