

BIG IDEAS

Design for the life cycle includes consideration of social and **environmental impacts**.

Personal design interests require the evaluation and refinement of skills.

Tools and technologies can be adapted for specific purposes.

Learning Standards

Curricular Competencies	Content
<p><i>Students are expected to be able to do the following:</i></p> <p>Applied Design <i>Understanding context</i></p> <ul style="list-style-type: none"> Engage in user-centred research and empathetic observation to determine design opportunities and barriers <p><i>Defining</i></p> <ul style="list-style-type: none"> Identify and analyze potential users or consumers for a chosen design opportunity Identify criteria for success, constraints, and possible unintended negative consequences <p><i>Ideating</i></p> <ul style="list-style-type: none"> Identify, critique, and use a variety of sources of inspiration and information Take creative risks in generating ideas and add to others' ideas in ways that enhance them Screen ideas against criteria and constraints, and prioritize them for prototyping Critically evaluate the impacts of competing social, ethical, economic, and environmental considerations on the availability of textile items locally, nationally, and globally Work with users throughout the design process <p><i>Prototyping</i></p> <ul style="list-style-type: none"> Choose an appropriate form, scale, and level of detail for prototyping Analyze the design for the life cycle and evaluate its impacts Demonstrate appropriate use of a variety of tools, materials, and processes to create and refine textile items 	<p><i>Students are expected to know the following:</i></p> <ul style="list-style-type: none"> complex textile designs relationship between fibre content, fabric type, and textile use methods for designing patterns textile manipulation techniques regulations and agencies that influence production, labelling, and distribution of textile items historical uses of textile items and their influence on modern textile use First Peoples historical and current textile knowledge and practices ethical and environmental issues in the production and marketing of textile items, including cultural appropriation forecasting practices and how they are used in the development and creation of textile items design for the life cycle future career options in textile design, production, and distribution interpersonal and consultation skills, including ways to interact with clients

Learning Standards (continued)

Curricular Competencies	Content
<p>Testing</p> <ul style="list-style-type: none"> Identify and communicate with sources of feedback Develop appropriate tests of the prototype Evaluate design according to critiques and success criteria for continuing iterations of the prototype or abandoning the design idea <p>Making</p> <ul style="list-style-type: none"> Identify appropriate tools, technologies, materials, processes, cost implications, and time needed for production Create textile items, incorporating feedback from self, others, and prototype tests Use materials in ways that minimize waste Use project management processes when working individually or collaboratively to coordinate production Share progress while creating to increase feedback, collaboration, and, if applicable, marketing exposure <p>Sharing</p> <ul style="list-style-type: none"> Decide on how and with whom to share or promote product, creativity, and, if applicable, intellectual property Critically reflect on their design thinking and processes, and identify new design goals Assess ability to work effectively, both individually and collaboratively, while implementing project management processes Identify and analyze new design possibilities, including how they or others might build on their concept <p>Applied Skills</p> <ul style="list-style-type: none"> Apply safety procedures for themselves, co-workers, and users in both physical and digital environments Identify and critically evaluate skills needed for design and production interests, and develop specific plans to learn or refine them over time Develop competency and proficiency in task-specific skills involving manual dexterity in creating textile items <p>Applied Technologies</p> <ul style="list-style-type: none"> Explore existing, new, and emerging tools, technologies, and systems to evaluate suitability for design and production interests Evaluate impacts, including unintended negative consequences, of choices made about technology use Analyze the role technologies play in societal change Examine how cultural beliefs, values, and ethical positions affect the development and use of technologies on a national and global level 	

Big Ideas – Elaborations

- **environmental impacts:** including manufacturing process, packaging, disposal, and recycling considerations

Curricular Competencies – Elaborations

- **user-centred research:** research done directly with potential users to understand how they do things and why, their physical and emotional needs, how they think about the world, and what is meaningful to them
- **empathetic observation:** aimed at understanding the values and beliefs of other cultures and the diverse motivations and needs of different people; may be informed by experiences of people involved; traditional cultural knowledge and approaches; First Peoples worldviews, perspectives, knowledge, and practices; places, including the land and its natural resources and analogous settings; experts and thought leaders
- **constraints:** limiting factors, such as available technology, expense, resources, space, materials, time, environmental impact
- **sources of inspiration:** may include personal experiences, exploration of First Peoples perspectives and knowledge, the natural environment, places, cultural influences, social media, professionals
- **information:** for example, professionals; First Nations, Métis, or Inuit community experts; secondary sources; collective pools of knowledge in communities and collaborative atmospheres
- **Prototyping:** for example, croquis, half-scale, pictorial drawings, mock-ups, technical drawings
- **impacts:** including social and environmental impacts of extraction and transportation of raw materials; manufacturing, packaging, and transportation to markets; servicing or providing replacement parts; expected usable lifetime; and reuse or recycling of component materials
- **sources of feedback:** may include peers; users; First Nations, Métis, or Inuit community experts; other experts and professionals both online and offline
- **appropriate tests:** for example, durability, washability, fit, usability
- **project management processes:** setting goals, planning, organizing, constructing, monitoring, and leading during execution
- **Share:** may include showing to others or use by others, giving away, or marketing and selling
- **intellectual property:** creations of the intellect such as works of art, invention, discoveries, or design ideas to which one has the legal rights of ownership
- **technologies:** tools that extend human capabilities

Content – Elaborations

- **methods:** for example, combining patterns, drafting flat patterns, draping, reconstructing, replicating, using computer-aided design
- **techniques:** colour, print, texturize, embellish, distress
- **regulations:** for example:
 - Textile Labelling and Advertising Regulations
 - Textile Flammability Regulations
 - safe use of hazardous materials in the workplace
 - employment regulations such as workers’ rights and minimum wage
 - differences between union and non-union work contexts
- **ethical:** for example, labour practices, fast fashion, body image, ethical consumerism
- **cultural appropriation:** using or sharing a cultural motif, theme, “voice,” image, knowledge, story, or practice without permission, without appropriate context, or in a way that may misrepresent the real experience of the people from whose culture it is drawn
- **practices:** such as use of forecasting services, coolhunting, colour forecasting, trend analysis
- **design for the life cycle:** taking into account economic costs, and social and environmental impacts of the product, from the extraction of raw materials to eventual reuse or recycling of component materials
- **interpersonal and consultation skills:** for example, professional communications, collaboration, follow-ups, courtesies, record keeping