

BIG IDEAS

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

Personal design choices require self-exploration, evaluation, and the refinement of skills.

Tools and technologies can influence people's lives.

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-centered research and empathetic observation Participate in reciprocal relationships throughout the design process <p><i>Defining</i></p> <ul style="list-style-type: none"> Establish a point of view for a chosen design opportunity Identify potential users, intended impact, and possible unintended negative consequences Make inferences about premises and constraints that define the design space <p><i>Ideating</i></p> <ul style="list-style-type: none"> Identify gaps to explore a design space Generate ideas and add to others' ideas to create possibilities, and prioritize them for prototyping Critically analyze how competing social, ethical, and community factors may impact design Work with users throughout the design process <p><i>Prototyping</i></p> <ul style="list-style-type: none"> Identify and apply sources of inspiration and information Choose an appropriate form and level of detail for prototyping, and plan procedures for prototyping multiple ideas 	<p><i>Students are expected to know the following:</i></p> <ul style="list-style-type: none"> design opportunities media technologies for image development and design elements of design principles of design ethical, moral, and legal considerations associated with using media arts technology for image, video, and sound development, including cultural appropriation image-development strategies personal interpretation of and preferences for selected media artworks values, traditions, and the characteristics of various artists, movements, and periods balance of aesthetic design with logical reasoning and practical application technical, stylistic, symbolic, and cultural influences media production through various stages of project development to enhance or change the project standards-compliant technology

Learning Standards (continued)

Curricular Competencies	Content
<ul style="list-style-type: none"> • Analyze the design for the life cycle and evaluate its impacts • Record iterations of prototyping <p>Testing</p> <ul style="list-style-type: none"> • Identify and communicate with sources of feedback • Develop an appropriate test of the prototype • Apply critiques and evaluate design and make changes • Iterate the prototype or abandon the design idea <p>Making</p> <ul style="list-style-type: none"> • Identify appropriate tools, technologies, materials, processes, and time needed for production • Use project management processes when working individually or collaboratively to coordinate production <p>Sharing</p> <ul style="list-style-type: none"> • Share progress while creating to increase opportunities for feedback • Decide on how and with whom to share or promote product creativity, and, if applicable, intellectual property • Consider how others might build upon the design concept • Critically reflect on their design thinking and processes, and identify new design goals • Assess ability to work effectively both as individuals and collaboratively while implementing project management processes <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 assess skills needed for design interests, and develop specific plans to learn or refine them over time 	<ul style="list-style-type: none"> • key characteristics and artistic styling in media artworks to explore multiple viewpoints and to explore the First Peoples perspectives in Canada • design for the life cycle • design presentation skills for potential clients • appropriate use of technology, including digital citizenship, etiquette, and literacy

Learning Standards (continued)

Curricular Competencies	Content
<p>Applied Technologies</p> <ul style="list-style-type: none"> • Explore existing, new, and emerging tools, technologies, and systems to evaluate suitability for their design 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 	

Big Ideas – Elaborations

- **environmental impacts:** including manufacturing, 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:** 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
- **reciprocal relationships:** communicate with knowledge keepers for greater understanding of perspectives and history within the community, such as seniors, Elders, chiefs, First Nations tribal or band councils, and later career professionals
- **constraints:** limiting factors, such as available technology, expense, environmental impact, copyright
- **sources of inspiration:** may include aesthetic experiences; exploration of First Peoples perspectives and knowledge; the natural environment and places, including the land, its natural resources, and analogous settings; people, including users, experts, and thought leaders
- **information:** may include media design professionals; First Nations, Métis, or Inuit community experts; secondary sources; collective pools of knowledge in communities and collaborative atmospheres both online and offline
- **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
- **iterations:** repetitions of a process with the aim of approaching a desired result
- **sources of feedback:** may include peers; users; First Nations, Métis, or Inuit community experts; other experts and professionals both online and offline
- **appropriate test:** includes evaluating the degree of authenticity required for the setting of the test, deciding on an appropriate type and number of trials, and collecting and compiling data
- **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, design ideas to which one has the legal rights of ownership
- **technologies:** tools that extend human capabilities

Content – Elaborations

- **media technologies:** for example, video production, layout and design, graphics and images, photography (digital and traditional), new emerging media processes (e.g., sound design, network art, kinetic design, biotechnical design, robotic design)
- **elements of design:** for example, colour, form, line, shape, space, texture, tone, value
- **principles of design:** for example, balance, contrast, emphasis, harmony, movement, pattern, repetition, rhythm, unity
- **ethical, moral, and legal considerations:** for example, regulatory issues relating to responsibility for duplication, copyright, appropriation of imagery, sound, and video
- **cultural appropriation:** using or sharing a cultural motif, theme, “voice,” image, knowledge, story, song, or drama 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
- **image-development strategies:** for example, abstraction, compression, distortion, elaboration, exaggeration, gesture, figuration, fragmentation, free association, juxtaposition, magnification, metamorphosis, minification, multiplication, point of view, reversal, rotation, simplification, stylization, thumbnail sketch
- **personal interpretation:** ability to respond to works with awareness of personal viewpoints; understanding how our personal views affect how we perceive and respond to media design
- **technical, stylistic, symbolic, and cultural influences:** for example, visual elements and principles of art and design that recognize the cultural precepts influencing an audience’s understanding of them
- **media production:** pre-production, production, and post-production
- **standards-compliant:** for example, layout conventions, mark-up language, current web standards, or other digital media compliance requirements
- **perspectives:** will vary depending on the traditions and practices of local First Peoples and individual’s views
- **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