

BIG IDEAS

The **design cycle** is an ongoing reflective process.

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

Design and content can influence the lives of others.

Learning Standards

Curricular Competencies	Content
<p><i>Students are expected to be able to do the following:</i></p> <p>Applied Design</p> <p><i>Understanding context</i></p> <ul style="list-style-type: none"> • Conduct user-centred research to determine design opportunities and barriers <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 decisions 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 • Prioritize ideas for prototyping • Work with users throughout the design process 	<p><i>Students are expected to know the following:</i></p> <ul style="list-style-type: none"> • design opportunities • design cycle • 2D, 3D, audio, and video digital media editing tools, including paid, freeware, open source, and cloud-based solutions • principles of 2D graphic design • tools and techniques for image manipulation • methods and principles of 3D graphic design • methods for digital animation • methods for 3D modelling • digital sound and audio data compression • computer-assisted versus computer-generated • principles of desktop video production • principles of user-centred design • appropriate use of technology, including digital citizenship, etiquette, and literacy • ethics of cultural appropriation • interpersonal skills, including ways to interact with clients

Learning Standards (continued)

Curricular Competencies	Content
<p>Prototyping</p> <ul style="list-style-type: none"> • Identify and apply sources of inspiration and information • Choose an appropriate form, scale, and level of detail for prototyping, and plan procedures for prototyping multiple ideas • Analyze the design for the life cycle and evaluate its impacts • Construct prototypes, making changes to tools, materials, and procedures as needed • 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 to design or processes throughout • 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 critique, collaboration, and, if applicable, marketing • Decide on how and with whom to share or promote their 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 	



Learning Standards (continued)

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