

BIG IDEAS

Designs grow out of natural curiosity.

Skills can be developed through play.

Technologies are tools that extend human capabilities.

Learning Standards

Curricular Competencies	Content
<p><i>Students are expected to be able to do the following:</i></p> <p>Applied Design</p> <p>Ideating</p> <ul style="list-style-type: none"> • Identify needs and opportunities for designing, through exploration • Generate ideas from their experiences and interests • Add to others' ideas • Choose an idea to pursue <p>Making</p> <ul style="list-style-type: none"> • Choose tools and materials • Make a product using known procedures or through modelling of others • Use trial and error to make changes, solve problems, or incorporate new ideas from self or others <p>Sharing</p> <ul style="list-style-type: none"> • Decide on how and with whom to share their product • 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 personal preferences to evaluate the success of their design solutions • Reflect on their ability to work effectively both as individuals and collaboratively in a group <p>Applied Skills</p> <ul style="list-style-type: none"> • 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 <p>Applied Technologies</p> <ul style="list-style-type: none"> • Explore the use of simple, available tools and technologies to extend their capabilities 	<p><i>Students are expected to use the learning standards for Curricular Competencies from Applied Design, Skills, and Technologies K–3 in combination with grade-level content from other areas of learning in cross-curricular activities to develop foundational mindsets and skills in design thinking and making.</i></p>

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Designs can be improved with prototyping and testing.

Skills are developed through practice, effort, and action.

The choice of technology and tools depends on the task.

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"> • Gather information about or from potential users <p>Defining</p> <ul style="list-style-type: none"> • Choose a design opportunity • Identify key features or user requirements • Identify the main objective for the design and any constraints <p>Ideating</p> <ul style="list-style-type: none"> • Generate potential ideas and add to others' ideas • Screen ideas against the objective and constraints • Choose an idea to pursue <p>Prototyping</p> <ul style="list-style-type: none"> • Outline a general plan, identifying tools and materials • Construct a first version of the product, making changes to tools, materials, and procedures as needed • Record iterations of prototyping <p>Testing</p> <ul style="list-style-type: none"> • Test the product • Gather peer feedback and inspiration • Make changes and test again, repeating until satisfied with the product 	<p><i>Students are expected to use the learning standards for Curricular Competencies from Applied Design, Skills, and Technologies 4–5 in combination with grade-level content from other areas of learning in cross-curricular activities to develop foundational mindsets and skills in design thinking and making.</i></p>

Learning Standards (continued)

Curricular Competencies	Content
<p><i>Making</i></p> <ul style="list-style-type: none"> • Construct the final product, incorporating planned changes <p><i>Sharing</i></p> <ul style="list-style-type: none"> • Decide on how and with whom to share their product • Demonstrate their product and describe their process • Determine whether their product meets the objective and contributes to the individual, family, community, and/or environment • Reflect on their design thinking and processes, and their ability to work effectively both as individuals and collaboratively in a group, including their ability to share and maintain a co-operative work space • Identify new design issues <p>Applied Skills</p> <ul style="list-style-type: none"> • Use materials, tools, and technologies in a safe manner, and with an awareness of the safety of others, in both physical and digital environments • Identify the skills required for a task and develop those skills as needed <p>Applied Technologies</p> <ul style="list-style-type: none"> • Use familiar tools and technologies to extend their capabilities when completing a task • Choose appropriate technologies to use for specific tasks • Demonstrate a willingness to learn new technologies as needed 	