

# **Applied Design, Skills and Technologies**

## **Entrepreneurship and Marketing 9**

The ability to design and make, acquire skills as needed, and apply technologies is important in the world today and a key aspect of educating citizens for the future. The curriculum is an experiential, hands-on program of learning through design and creation.

### **Course Content**

- risks and benefits of entrepreneurship
- the role of social entrepreneurship in First Nations communities
- ways of decreasing production costs through training and technological advancement
- flow of goods and services from producers to consumers
- identification of a good or service that ensures brand recognition
- marketing strategies using the 4 Ps: product, price, promotion, and placement
- market segmentation by demographic, geographic, psychographic, and purchasing pattern
- evolving consumer needs and wants
- role of online technologies in expanding access to goods and services
- sources of financing for a new venture or start-up business
- measurement of financial success and failure

### **Curricular Competencies**

#### **Applied Design: Understanding context**

- Engage in a period of research and empathetic observation in order to understand design opportunities Applied Design: Defining
- Choose a design opportunity
- Identify potential users and relevant contextual factors
- Identify criteria for success, intended impact, and any constraints

#### **Applied Design: 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, including social, ethical, and sustainability considerations, to meet community needs for preferred futures
- Choose an idea to pursue, keeping other potentially viable ideas open

## **Applied Design: Prototyping**

- Identify and use sources of inspiration and information
- Choose a form for prototyping 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
- Prototype, making changes to tools, materials, and procedures as needed
- Record iterations of prototyping

## **Applied Design: Testing**

- Identify sources of feedback
- Develop an appropriate test of the prototype
- Conduct the test, collect and compile data, evaluate data, and decide on changes
- Iterate the prototype or abandon the design idea

## **Applied Design: 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

## **Applied Design: Sharing**

- Decide on how and with whom to share their product and processes
- Demonstrate their product to potential users, providing a rationale for the selected solution, modifications, and procedures, using appropriate terminology
- Critically evaluate the success of their product, and explain how their design ideas contribute to the individual, family, community, and/or environment
- Critically reflect on their design thinking and processes, and evaluate their ability to work effectively both as individuals and collaboratively in a group, including their ability to share and maintain an efficient co-operative work space
- Identify new design issues

## **Applied Skills**

- Demonstrate an awareness of precautionary and emergency safety procedures in both physical and digital environments
- Identify the skills and skill levels needed, individually or as a group, in relation to specific projects, and develop and refine them as needed
- Choose, adapt, and if necessary, learn about appropriate tools and technologies to use for tasks
- Evaluate the personal, social, and environmental impacts, including unintended negative consequences of the choices they make about technology use
- Evaluate how the land, natural resources, and culture influence the development and use of tools and technologies

## **Expectations**

- Respect Yourself and Others
- Always demonstrate respectful behavior
- Respect Effort and Learning
- Respect your Community and the Environment
- Attend class on time
- Attend tutorials to complete work
- Always put forth your best effort
- Listen to the teacher and to your work-partners
- Absolutely no food or drink in the computer labs
- Be careful not to damage school equipment. Don't unplug any of the computer cabling without the direction of the teacher