EDUCATION FOR INNOVATION Grades 7-12



A Resource Guide for Teachers

CanadianInnovationSpace.ca



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This resource guide includes text adapted from *Ingenious* by the Right Honourable David Johnston and Tom Jenkins, published by Signal, a Division of Penguin Random House Canada, copyright © 2017, used with permission. It also includes text and illustrations adapted from *Innovation Nation* by the Right Honourable David Johnston and Tom Jenkins and illustrated by Josh Holinaty, published by Tundra Books, an imprint of Penguin Random House Canada Young Readers, copyright © 2017, used with permission.

This resource is available for download free of charge to teachers and other facilitators to lead learning activities to develop knowledge, skills and mindsets related to innovation.

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Innovation Celebrations in schools and communities. A variety of resources, videos and testimonials from educators related to Education for Innovation are available at the site https://canadianinnovationspace.ca/.

The purpose of the *Education for Innovation (E4I)* resource is to provide a framework for educators to adapt and build on as deemed appropriate. There are several activities that educators can use to introduce the concept of innovation and to identify qualities and characteristics of past and current Canadian innovators. Learning experiences are described for educators to use and adjust according to disciplines or courses-specific topics. All of the learning experiences focus on Canadian innovations and how they have impacted the world. The Innovation Cycle is integrated into all activities in order that learners can gain a greater understanding of its importance and applications.

These learning experiences can be aligned with specific topics such as innovations in the areas of health, technology, transportation, communications, the arts, or sports as pertaining to the content of the course. The understandings developed through introductory learning experiences will facilitate the completion of the culminating Innovation Proposal and Project. Educators may integrate course expectations into the assessments and assignments suggested in this resource.

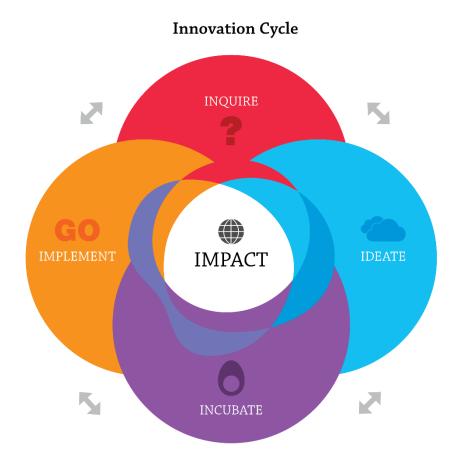


Figure 1

Background

Canada has a rich history of innovation which is described in the books co-authored by the Right Honourable David Johnston and Tom Jenkins:

- Ingenious: How Canadian Innovators made the World Smarter, Smaller, Kinder, Safer, Healthier, Wealthier, and Happier
- Innovation Nation: How Canadian Innovators made the World Smarter, Smaller, Kinder, Safer, Healthier, Wealthier, and Happier

The Canadian innovations from the *Ingenious* and *Innovation Nation* books form the basis for the *Education for Innovation (E4I)* resources; they are referenced in the teaching materials, and provide the content and context for the study of impactful Canadian innovations. The writing team of the *Education for Innovation* resources was invited to develop educational materials to accompany the books, *Ingenious* and *Innovation Nation*.

The book *Ingenious* includes approximately 300 Canadian innovations that made an impact on the world. It also includes suggestions and strategies for promoting innovation and encouraging future innovators; the charts from *Ingenious* have been included in this resource and are directly related to the processes and phases described in the Innovation Cycle.

Innovation Nation is for emergent readers, with descriptions of 50 Canadian innovations pulled from the content of *Ingenious*. The intent of these books is to highlight significant innovations throughout Canada's history and to further develop a culture of innovation in Canadian society.

The stories of Canadian innovators and innovations are an excellent catalyst for inspiring youth and can be found at https://canadianinnovationspace.ca/category/stories/. Additional stories of Canadian innovators who have received such recognition as the Governor General's Innovation Awards are available at https://canadianinnovationspace.ca/awards/.

Rationale

The term innovation is prevalent in the media, among entrepreneurs, in the realm of social and educational organizations, and most especially in relation to technology. Interestingly, innovation is integral to growth, success, and well-being across all sectors of society. It can be addressed and developed in every subject of educational curriculum. The development of innovative thinking, attitudes, and actions is central to learning in a range of educational settings.

To innovate (from innovare, meaning renew or alter) implies a deliberate change in the nature or fashion of something, precisely to make it more useful to more people. To the innovator, impact is the ultimate measure of success. Innovation has always been far more common and, until lately, far less written about than pure invention. Anyone can innovate. We're all curious. We're all creative. When we share our ideas and refine them together, we all have the power of those lone geniuses. When we refuse to act in isolation, when we move away from the presumption that great ideas are conceived in exile, together we become ingenious, which we think is a much better title for a book in our day. Innovation is the creative combination of anything that, once done, makes something better.

— *Ingenious*, Johnston & Jenkins, 2017 (Page 5)

There is a current imperative to encourage a culture of innovation in education and to integrate innovative thinking, processes, and actions in educational systems, learning expectations, curriculum resources, and pedagogical approaches (Organisation for Economic Cooperation and Development, 2016). Canadian youth are naturally inquisitive and collaborative, seeking to be agents of positive change. Curriculum expectations and teaching guidelines, across Canada and across grade levels, currently include some references specific to Canadian innovations or to the achievement of learning skills related to innovation. The Education for Innovation resource provides the framework for guiding learners in the process of innovation and for enhancing an innovator mindset in Canadian youth.

Definition of Innovation

Innovation is defined differently in various sources and often refers to innovative thinking and problem-solving. For the purposes of the *Education for Innovation (E4I)* resource, innovation will be defined as follows:

Innovation is the creation or improvement of a product or process to make an impact.

Innovation is achieved through a non-linear, cyclical, repetitive, reflective, and iterative process. An idea becomes an innovation only if it is implemented and has impact. Impact can be measured by a range of outcomes including economic, societal, educational, governmental, health, well-being, and environmental impacts. The issue of positive impact or 'Innovation for Good' is addressed throughout the Innovation Cycle and is especially explored in the learning experiences related to developing and testing an innovation.

The Learning Experiences outlined in this resource are intended to follow the phases of innovation: Inquiry, Ideation, Incubation, and Implementation. In each phase, learners will be asked to consider the Impact of innovations. The suggested activities include resources and teaching strategies related to innovation. The assessment strategies and tools have been designed to be used at the educator's discretion and adapted as necessary to meet the needs of diverse learners.

Each learning experience can be aligned with curriculum areas by selecting complementary Canadian innovations from *Innovation Nation* or *Ingenious*. Through the activities provided, educators can promote a greater understanding of innovation and encourage learners to develop their own ideas for culminating Innovation Projects. Learners will be motivated as they inquire, plan, create, test, improve, and implement innovations that they believe will make a positive impact on the world.

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Learning Experiences

	Synopsis	Resources
Defining Innovation	The definition of the term innovation is provided with an activity to differentiate innovation from invention.	Venn Diagram to explain innovations and inventions (Appendix 1A)
Exploring the Phases of the Innovation Cycle	The innovation process is defined by identifying each phase of the Innovation Cycle. The explanations are accompanied by a series of suggestions for educators and learners. Potential questions and activities are offered that educators might adapt to their instruction. Appendices include graphics, lists and charts for learners.	Innovation Cycle Graphic (Appendix 2A) Innovation Cycle with ELEMENTS Graphic (Appendix 2B) Charts from Ingenious Book (Appendix 2C) HERE'S HOW – Get Ready to Innovate Free Your Creativity Think Innovation Before Invention Build an Innovation Ecosystem Improve a Process Improve a Product Lead a Social Change Turn Your Idea into a Business Find Investors for Your Idea Write a Business Plan Launch a Start-up Control the Use of Your Idea
Implementing an Innovation Space	The Innovation Space is described and suggestions are provided for potential formats. This section identifies and provides examples of interactive Innovation Spaces that could be implemented in various learning environments.	Considerations for a Virtual or Physical Innovation Space (Appendix 3A)
Researching Canadian Innovations	This section includes sample learning experiences that can be adapted to a range of discipline(s) or courses topics. The learning experiences focus on Canadian innovations and how they have shaped Canadians' lives. Each activity incorporates the Innovation Cycle to assist learners in developing a greater understanding of how the cycle is used as well as its importance.	Chart of Ingenious Innovations Organized by Discipline (Appendix 4A) Innovation Placemat Organizer (Appendix 4B) Exit Ticket Samples (Appendix 4C)

Reflecting on Qualities of Canadian Innovators	This section provides educators with a sample learning experience that can be adapted to a range of disciplines or course topics. This learning experience invites learners to learn more about innovators' qualities by examining and researching Canadian Innovators. Learners will be given the opportunity to assess their own innovator qualities and determine those they possess before and after they engage in activities to develop an innovation.	Chart of Ingenious Innovators Organized by Discipline (Appendix 5A) Innovator Exploration Sheet (Appendix 5B) Self-Assessment as an Innovator (Appendix 5C) Innovation Website Coding Lesson (Appendix 5D) Coding Lesson Solution Sheet (Appendix 5E)
Developing an Innovation Proposal and Project	This section invites a team of learners to complete an Innovation Proposal for an Innovation Project by following the phases of the Innovation Cycle. The learners' Innovation Portfolio will document the process and progress, as well as provide educators with a means for assessment. A series of suggested activities and resources have been provided and may be adapted by educators in collaboration with learners.	Innovation Proposal Templates: Innovation Proposal Outline (Appendix 6A) Innovation Proposal Checklist (Appendix 6B1 & Appendix 6B2) Innovation Proposal Brainstorming Sheet (Appendix 6C) Innovation Proposal Template: Sample 1 (Appendix 6D) Innovation Project Template: Sample 2 (Appendix 6E) Innovation Incubation Data Collection Templates: Innovation Testing Template (Appendix 6F) Sample Interview Questions (Appendix 6G) Sample Survey Questions (Appendix 6H) Innovation Assessment Tools: Innovation Proposal Rubric (Appendix 6I) Innovation Team Conversation Assessment Tool (Appendix 6J) Innovation Testing Assessment Tool (Appendix 6K! & Appendix 6K2) Innovation Proposal Assessment Tool (Appendix 6I)
Sharing Innovations and the Innovation Celebration	This section provides educators with some suggestions for potential Innovation Celebrations. Considerations for organizing celebrations are outlined along with various models which can be used in learning environments. Innovation Celebrations offer learners the opportunity to showcase and present their new learning and innovation proposals/projects to a range of audiences	Innovation Sharing Checklist (Appendix 7A) Considerations for an Innovation Celebration (Appendix 7B)

Structure & Contents

The structure of the Education for Innovation resource for educators was developed based on the Innovation Cycle (Figure 1/ Appendix 2A) to include:

Inquiry experiences that are designed to address the definition of innovation, the phases of the Innovation Cycle and an overview of the concept of an Innovation Space. Inquiry-based experiences will help learners explore: Canadian innovations and their impact on the world; Canadian innovators and their qualities; and self-assessment of learner's qualities compared to an innovator's mindset.

Ideation experiences which will introduce the challenge of developing an innovation by an Innovation Team of learners. These experiences will challenge learners to interact in a small group, integrate ideas, determine intended impact, and begin to develop an innovation that is related to the unit of study or course. (This is the beginning of the culminating activity of an Innovation Proposal or Project.)

Incubation experiences to provide educators with suggested activities for learners to test and improve their innovations based on experimentation and feedback.

Implementation activities give learners the opportunity to plan the operationalization or launch of their innovation, including developing a proposal with considerations for design, budget, resources, marketing, communications and intellectual property. Implementation may include presentations of Innovation Proposals or Innovation Projects at an Innovation Celebration. The Innovation Celebration can be held in a classroom, school, community centre or presented virtually to showcase the innovations proposed/created by the Innovation Teams. Submissions to the Innovation Celebration could be non-competitive or can be assessed by educators as deemed appropriate.

Defining Innovation

Innovation is a word that is often seen and heard in society and in the media. Yet, it may not be well understood by learners and educators. Innovation is used to describe creations and improvements implemented in every sector and discipline. Canadian innovations such as insulin, the goalie mask, the life jacket, Blue Box recycling, or the Canadarm have made significant impacts on the world.

Many objects have been as a result of innovators asking simple questions, such as:

- What would happen if...?
- How can we ...?
- What if we try ...?
- How can we make this better?

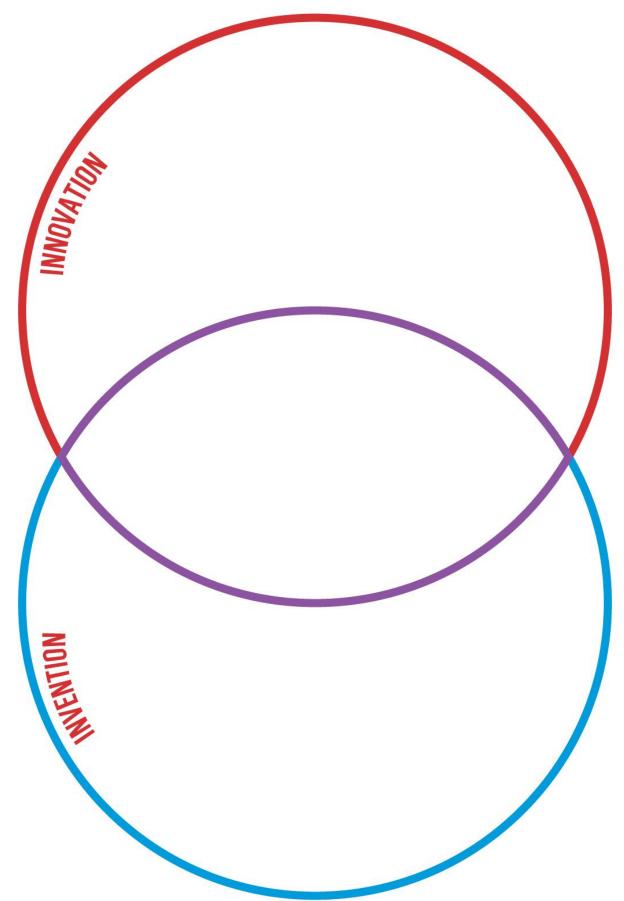
It is also important to clarify the difference between an invention and an innovation. There are many variations on the definitions of innovation and invention. However, for this resource, the following definitions will be used:

Invention is the creation of a new product.

Innovation is the creation or improvement of a product or process to make an impact.

Innovation can be the creation of a new item, but it can also be the improvement of a product or process to make an impact. For example, the cell phone has undergone numerous innovations to improve size, speed and functionality. Democracy is an example of a social innovation that has changed continually over time. Artists continue to develop new innovative processes and products that have strong impacts on our world, such as the Group of Seven or Cirque du Soleil. Innovation rarely happens only once; instead, it is a continuous process where essentially every human-made object or idea can be improved with new integrations and iterations.

- The Venn Diagram (Appendix 1A) can be used to help learners to distinguish between an invention and an innovation; the left circle is for product Inventions that may not have made an impact. The right circle signifies process Innovations that made an impact and the overlapping area signifies product Inventions and Innovations that made an impact.
- Discuss the different types of innovations and their corresponding impacts.
- Use the activities in Part 4 to provide learning experiences exploring the definition of Innovation and impacts of Canadian Innovations.
- Explore how impacts can be both positive and negative with unintended consequences



Exploring the Phases of the Innovation Cycle

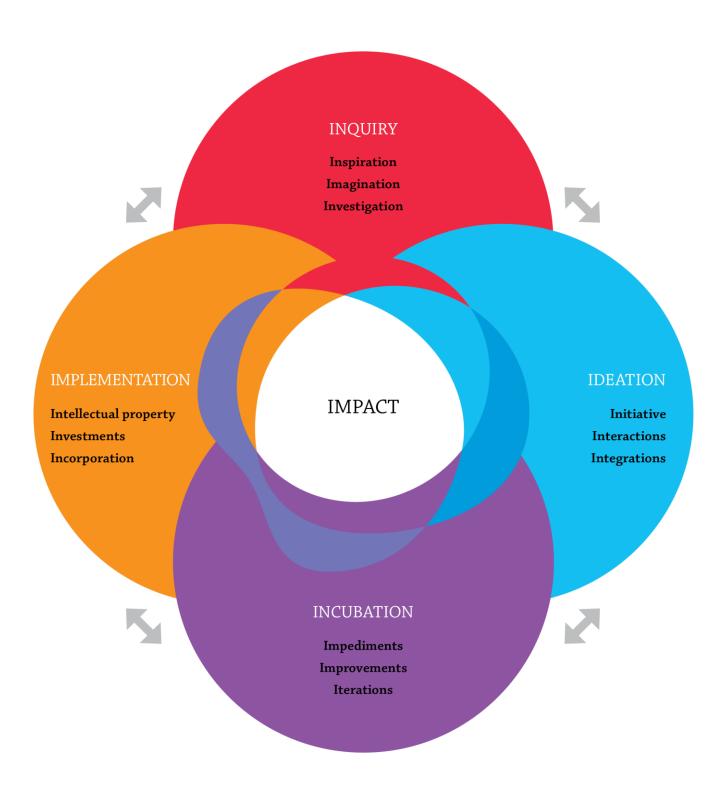
The Innovation Cycle was developed based on an analysis of the innovation process, a review of the related literature on innovation and a synthesis of the suggestions offered in the book *Ingenious*. The Innovation Cycle follows a series of phases: Inquiry, Ideation, Incubation, and Implementation. In each phase, innovators consider the critical issue of Impact which is the reason that impact is central in the cycle. Innovation is a cyclical, repetitive and iterative process with constant revisiting and revising. The Innovation Cycle is described to provide a background for educators before engaging learners in developing an Innovation Proposal or Innovation Project.

The four phases of the Innovation Cycle are colour-coded with accompanying icons to help learners associate concepts and terms with each phase.

Two graphics are provided to assist educators and learners to become familiar with the phases of the Innovation Cycle (Appendix 2A and 2B).

- Appendix 2A includes terms associated with each phase of the Innovation Cycle.
- Appendix 2B includes a learner- friendly version of the Innovation Cycle. This version includes key words for each phase for easier recall and understanding.
- Inquiry Phase: The Question Mark signifies investigating.
- Ideation Phase: The Blue Sky symbolizes thinking big, reminiscent of expressions such as 'sky is the limit with ideas' or to 'blue sky it' meaning 'think big'.
- Incubation Phase: The Egg Incubator symbolizes testing, experimentation, growth and improvement.
- Implementation Phase: The Go symbol was chosen to symbolize the innovation being prepared for action, production, launch, or distribution.

- Analyze the graphic in Appendix 2A with learners by discussing the four phases, the related terms for each phase and the rationale for Impact being placed in the center, overlapping over each phase.
- Discuss how the overlapping circles indicate that the phases are connected and can be revisited.
- Indicate that all phases of the cycle begin with the letter I, including the aspects within each phase. This can make it easier to remember them.
- Have learners guess why the symbols are used in Appendix 2B and how they appropriately represent each phase.
- Debate if impact is always positive and how there may be unintended impacts of innovation.



Think and Act like an Innovator

Innovators determine the Impact that they wish to make to improve our world. They Inquire about past and current innovations to gain information. Then, they Ideate a new innovation by designing a model or prototype. In the next phase, innovators Incubate their innovation as they test and make improvements, continually revisiting the intended Impact. Finally, they make plans to Implement the innovation including considerations for budgets, marketing, intellectual property and distribution. Assessing the impact is an indicator of success.

INQUIRY

Research past innovations and present issues. What inpires you?

Research Canadian innovators. Who inspires you?

Determine what issue you would like to address.

What might you innovate to have a positive impact?

IMPLEMENTATION

What is your plan for implementing the innovation?

How will you share and protect the innovation idea?

Do you need investments or other resources?

How will the impact of the innovation be measured?

IMPACT

How does this innovation make a difference in our world?

What are your goals for the innovation?

How will you know your innovation

was successful?

IDEATION

Continue to brainstorm an idea for your innovation.

Who can you work with to develop your idea?

Can you make connections to other ideas?

What impact do you want your innovation to have?

INCUBATION

Does the innovation have the impact you intended?

What are some challenges or impediments to the innovation?

How will you test your innovation?

How will you improve the innovation based on the feedback that you receive?

Exploring the Phases of the Innovation Cycle (continued)

Impact

The most important purpose of innovation is to make a positive impact. This is why Impact is at the center of the Innovation Cycle and therefore it is a consideration in every phase. Initially, innovators need to determine what kind of impact they wish to make with their new innovation. Usually innovations solve a problem or address a need, but they can also create something new by integrating and improving pre-existing ideas. During each phase, innovators need to determine if the innovation is effective in making the desired impact. Unintended consequences and unexpected impacts will present challenges to innovators.

The role of Impact in each phase:

- In the **Inquiry Phase**, innovators decide the impact they wish to make and conduct research to collect information on how to achieve the impact goal.
- In the Ideation Phase, innovators think of, design and create an innovation to address the impact.
- In the Incubation Phase, innovators test and experiment with their innovation, collect feedback from users or potential clients and determine if the intended impact is being achieved. Improvements may need to be made to reach the impact goal.
- In the Implementation Phase, innovators will continually assess the intended impact and form the implementation plan to reach the impact goal. Tools and indicators can be adjusted as needed to measure success.

Suggested prompts for educators:

- Watch the video 'How do Innovators Innovate?' and discuss the definition of innovation,
 phases, examples and types of impact: https://canadianinnovationspace.ca/resources/what-exactly-is-innovation/
- Review the meaning of the word impact and discuss synonyms such as difference, positive effect, or success.
- Discuss different kinds of impact such as financial, safety, health, efficiency, or entertainment
- Use the activities in Part 4 of this resource to examine the impact of Canadian innovations.
- Discuss some of the impacts that learners plan to make with their innovation project.
- Ask learners to research Canadian innovations from Ingenious and discuss their impact.
- Ask learners to research recent innovations related to the current subject/course and discover the intended and unintended impacts.
- Review current events in the media and debate if the media influences perceptions of impact.
- Review the <u>Innovation for Good Declaration</u> at the end of this document to determine if the six principles address potential positive and negative effects of impact
- Reflect on current innovations that have had both a positive and negative impact.

Inquiry Phase

Asking, Questioning, and Investigating (Red)

Innovators inquire and ask questions. The Inquiry phase includes:

• Inspiration: What or who inspires innovators?

- Investigation: What can be learned from past and present innovations?
- Imagination: How can an innovation be envisioned or created?
- Impact: What are the issues or problems that need to be addressed?

The Inquiry Phase is the initial phase, engaging learners to use research and critical thinking skills to identify issues and problems. Ideally learners will be provided with flexibility when investigating their interests related to a range of topics, and have access to a variety of research tools and strategies. Inquiry processes can include gathering information about current innovations and how they address certain issues, and creating profiles of potential new innovations and the users of proposed innovations.

Data-driven decision making should be a consideration in the Inquiry Phase. Learners should consider primary and/or secondary research findings as they develop their innovation. For example, if a learner was thinking of innovating cell phones, they might collect primary data from a survey administered to cell phone users. For secondary data, they might access Statistics Canada to research business and government spending on mobile technology. The Inquiry Phase can include researching stories of past innovations and innovators to determine the skills and processes that have been impactful and successful.

Inquiry is the basis of all decision-making throughout the innovation process and this phase is revisited throughout all other phases.

Resources

- Ingenious by David Johnston and Tom Jenkins (Charts in <u>Appendix 2C</u>)
- INNOVATION: HERE'S HOW
 - o Get Ready to Innovate
 - o Free Your Creativity
 - o Think Innovation Before Invention
- Innovation Cycle Graphic(s)
- Appendix 2A and Appendix 2B

- Review the Graphic in Appendix 2A, discussing the aspects within the Inquiry Phase.
- Review the Graphic in Appendix 2B and the questions associated with the Inquiry Phase.
- Provide learners with lists from *Ingenious* such as Get Ready to Innovate and Free Your Creativity to explore suggestions for initiating an innovation (Appendix 2C).
- Provide examples of how research and inquiry determine necessary innovations that will be profitable and impactful.
- Ask learners to find a range of sources for data and information to provide a basis or rationale for an innovation.
- Use the activities in Part 4 to investigate various Canadian innovations and the qualities and characteristics of innovators.
- Encourage ongoing inquiry, research, critical thinking and problem-solving throughout the innovation process.

Ideation Phase

The sky is the limit when creating ideas (Blue)

Innovators engage in developing ideas. The Ideation Phase includes:

- Interaction: Who can innovators work with? (Mentors, peers, experts)
- Integration: How can links between various ideas be made?
- Initiative: What is the drive and motivation needed to develop an innovation?
- Impact: What are the intended goals of the innovation?

The Ideation Phase of the Innovation Cycle includes the design and creation of an innovation model. In some cases, an innovation is an actual product, and in other cases an innovation is a proposal for a new or improved process, service, or organization. Resources, materials and research tools are necessary throughout this phase.

Some resources may be accessed from the Innovation Space (described in Part 3) Professionals and members of the community are also key in providing support. Other resources may include mentors from local start-up incubators and regional small business centres. Innovations are usually created by a team of people with complementary skills. Thus, collaboration among innovators is important. Often, an innovation is the integration of various existing concepts. The innovation process takes time and might involve multiple versions of the innovation to achieve the impact goal. The development of a prototype or model is an important part of the Ideation Phase and can require numerous attempts and iterations based on testing and feedback.

Resources

- Ingenious by David Johnston and Tom Jenkins (Chart in Appendix 2C)
- INNOVATION: HERE'S HOW Build an Innovation Ecosystem
- Innovation Cycle Graphic
- Appendix 2A and Appendix 2B

- Review Appendix 2A and discuss the elements of the Ideation Phase.
- Review Appendix 2B and discuss the questions associated with the Ideation Phase.
- Review the chart in Appendix 2C and discuss how to build an innovation ecosystem.
- Ask learners to reflect on the innovation process and how ideas are based on an intended impact or an attempt to meet a need.
- Ask learners to determine the resources required to create, design or make an innovation.
- Discuss how an idea for innovation can be developed and designed to meet a desired impact, such as the example of the need to reduce waste led to the blue box recycling program.
- Encourage learners to reflect on some innovations result from the integration or improvement of past innovations and inventions such as the Blackberry was the integration of a pager and a cell phone.

Incubation Phase

Testing, improving, and growing (Orange)

Innovators need time to test and modify ideas. The Incubation phase includes:

- Impediments: What are possible challenges or obstacles?
- Improvements: How can the innovation be enhanced or improved based on testing and feedback?
- Iterations: What different versions of the innovation might work better?
- Impact: Is the innovation meeting the intended impact goal(s)?

The Incubation Phase occurs once learners have completed the design of the innovation and developed a prototype or proposal. It is the time to test and improve the innovation. Learners should think about their innovation and ask others to provide feedback. The presence and support of mentors and experts is useful in this phase. Learners may wish to interview others about their innovation to obtain perceptions about usage, cost and target audience. Formal and informal data is collected about the innovation to determine if it is meeting the intended goal(s) and. The innovation is sometimes included in experiments to assess its effectiveness under varied conditions and with a range of participants. Learners should continue to inquire during this phase, as they gain understandings about the impediments and challenges they will face in the Implementation Phase. Iterations and improvements of innovations may be necessary to achieve the desired impact. Start-up businesses and social innovations are often located in accelerator centres or community incubators for testing and improvement before full implementation.

Resources

- Ingenious by David Johnston and Tom Jenkins (Charts in Appendix 2C)
- INNOVATION: HERE'S HOW
 - o Improve a Process
 - Improve a Product
- Innovation Cycle Graphic
- Appendix 2A and Appendix 2B

Suggested prompts for educators:

- Review Appendix 2A and discuss the steps within the Incubation Phase.
- Review Appendix 2B and discuss the questions associated with the Incubation Phase.
- Review and discuss the charts from *Ingenious* (Appendix 2C).
- Ask learners to brainstorm various methods for data collection to test and improve an innovation.

Implementation Phase

Planning for action and sharing (Orange)

Innovators need to put their ideas into action. In the implementation phase, innovators develop a project proposal which may include the final design of the innovation, marketing, tasks, materials, budget, responsibilities and timelines. The fourth phase includes consideration of:

- Intellectual Property: How is the concept protected?
- Investment: Is there a need for fiscal resources or investors to support the innovation?
- Incorporation: Should the innovation be registered as a business or organization?

• Impact: What are the indicators of impact? How is success measured and has the innovation achieved the intended goal(s)?

The Implementation Phase involves plans for preparing the innovation for a launching or operationalization. Elements of this phase include determining the final design or model, the marketing plan, advertising and budgeting. Depending on the subject, curriculum or discipline being explored, educators may find these components are critical elements of the innovation assignment. In other cases, or courses, this implementation phase may involve elements that are beyond the subject expectations. Ideally, learners should explore various aspects of implementation based on the nature and parameters of the course material.

Resources

- Ingenious by David Johnston and Tom Jenkins (Charts in Appendix 2C)
- INNOVATION: HERE'S HOW
 - Lead a Social Change
 - o Turn Your Idea into a Business
 - o Find Investors for Your Idea
 - o Write a Business Plan
 - o Launch a Start-up
 - o Control the Use of Your Idea
- Innovation Cycle Graphic
- Appendix 2A and Appendix 2B

- Review Appendix 2A and discuss the steps in the Implementation Phase.
- Review Appendix 2B and discuss the questions associated with the Implementation Phase.
- Use the Charts in Appendix 2C to introduce and review processes of innovation.
- Determine possible tasks and roles for developing an implementation plan.
- Debate the issue of intellectual property and how ideas are protected.
- Reflect on implementing a social innovation versus a business innovation.
- Discuss the merits of having investors and responsibilities to the investors.