

Intro to Innovation

Explorers will be introduced to the two-part process of innovation - ideation and exploration.

ACTIVITY LIBRARY TAGS

- Exploring: Engineering & Technology, Business
- iTech Exploring: Required
- Life Skills: Computer Literacy, Communication, Higher Order Thinking, Leadership, Team Building
- US Dept of Education: Information Technology, STEM

AGE APPROPRIATENESS

- Exploring Posts (14-20 years old)
- Exploring Clubs (10-14 years old)

OBJECTIVES

By the end of this session, participants will be able to:

- Identify a local, national or global need
- Understand what it means to create value
- Explain the importance of ideation and exploration
- Understand how to disprove an idea
- Practice learning to adapt quickly and efficiently
- Understanding the importance of an adaptable mindset and viewing change as growth

SUPPLIES

- **TV, Computer or Projector with internet connection** (one per class)
- **The Innovation Framework Handout** (use as a reference)
- **The Idea Validation Checklist Handout** (one per group)
- **Ideation Flashcards Handout** (one per class)
- **Exploration Flashcards Handout** (one per class)
- [Start with Why](#) YouTube video (one per class)

LEADER NOTE: Text in italics should be read aloud to participants. As you engage your unit (post or club) in activities each week, please include comments, discussions, and feedback to the group relating to **Character**, **Leadership**, and **Ethics**. These are important attributes that make a difference in the success of youth in the workplace and in life.

ACTIVITIES

Activity 1 | First Day Survey

Explorers and leaders should complete their corresponding First Day Surveys online (links below) to understand their interests and skill level prior to starting the iTech post.

NOTE: There is also a Last Day Survey that should be submitted online after the completion of the IDC.

[Explorer First Day Survey](#)

[Leader First Day Survey](#)

Activity 2 | Start With Why

Explorers will receive an introduction to the process of Innovation. In this approach, a team of individuals works together to identify opportunities for creating value (ideas), and works together to evaluate which, if any, of those ideas hold potential to create benefit for society. Teams will find that their original ideas are a starting point and allow them to further explore potential ideas. By exploring their ideas in more detail, Explorers will finalize an idea that makes sense to pursue.

Say: What does it mean to create value for your community? How do we know that an idea will solve a problem?

Discuss what value means with Explorers. We often think of creating value as solving a problem. We should evaluate the value of an idea based on its ability to create social or economic value. This means that we consider the costs and benefits of a proposed idea for solving the problem. It's also important to think about the other options for solving the same problem.

Watch the short video "[Start with Why](#)" by Simon Sinek. If you don't have access to YouTube or a projector, Explorers can watch individually on their smartphone.

Say: Think about a problem in your life that you would like to solve. Discuss with a partner and brainstorm some solutions. How can you use the process in the video to generate stronger solutions?

Activity 3 | Ideation and Exploration

LEADER NOTE

To prepare for this activity print and cut both the **Ideation Flashcards** and **Exploration Flashcards** handouts.

Say: Innovation requires three distinct steps: Ideation, Exploration and Implementation. Which two of the three steps make up innovation? And which of the two innovation steps occurs first?

Say: Only ideation and exploration are part of the innovation process, and ideation occurs before exploration. We will only cover these two steps today.

Reference the **Innovation Framework** chart for more detail.

Ask for six Explorers to volunteer to hold each flashcard and stand in front of the class. These are the three steps to ideation and the three steps to exploration. Do not tell the Explorers which step comes first. Have the group arrange the six volunteers in the correct order before the leader gives the correct answer (see below).

Ideation involves three steps:

1. Identify an idea (e.g. what might we do?)
2. Determine if the idea has the potential to create meaningful value
3. Identify what would have to be true for the idea to create that value (i.e. assumptions).

Exploration involves three steps:

1. Identify opportunities to disprove the idea (called 'challenges')
2. Rank the challenges to determine which challenge creates the most value
3. Execute and research the challenges.

Say: What does 'Ideation' mean? How do you think you will use 'Exploration' to solve a problem?

Activity 4 | Ideate and Explore Your Idea

Say: With a partner, go through the three steps of Ideation. Identify an idea that solves a social problem and determine if it will create meaningful value.

Say: What assumptions are you making about your solution?

During Exploration, you will research each challenge until one proves that the idea is unworkable. When a challenge proves the idea is unworkable, the team can discard the idea and move onto the next idea or modify their idea. Explorers are learning to adapt through this process and quickly move to a successful idea.

Either way, the processes starts from the beginning. The process ends when all challenges for an idea are reviewed and the idea still seems to make sense. This is an adaptable mindset and leads to success!

Say: Why should we view change as a positive thing? What do we learning from adapting quickly?

Say: With your partner, create a list of challenges to your idea. What challenges will disprove your idea? What will prevent your idea from being successful?

Say: Rank your challenges based on the most likely to disprove their idea to least likely.

After Explorers have ranked their challenges, they will reference the **Idea Validation Checklist** and answer the questions. This guide will help Explorers to determine if their idea is worth pursuing. If they are unsure of the answer, they should spend time researching or brainstorming.

If Explorers still have difficulty in answering the questions, they should choose a new idea and repeat the Exploration process.

Once Explorers finalize an idea, they should write 2 – 3 sentences explaining their idea in more detail.

LEADER NOTE

Some sample questions are below. They are designed to help the participants apply what they have learned to their own interests. You are welcome to use these questions or develop your own questions that relate to your unit or specific focus area.

REFLECTION

- *What does it mean to create value for your community (local, national or global)?*
- *Why is it important to go through the steps in Ideation and Exploration?*
- *What did you learn during the Exploration process? How did your ideas change during the Exploration phase?*
- *Choose a current product or service available today on the market. How does it provide value to you and/or your community?*
- *What does it mean to have an adaptable mindset? What do you think would happen to your idea if you didn't adjust and change frequently?*

Content for this session provided by John Evans and Kiwi Compute (www.kiwicompute.com).

Links to other websites are provided for your convenience and information only. When you click on a link to another website, you will be leaving this website. The fact that we provide links to other websites does not mean that we endorse, authorize, or sponsor the linked website, or that we are affiliated with that website's owners or sponsors. Unless otherwise indicated, the linked sites are not under our control and we are not responsible for and assume no liability for the content or presentation of any linked site or any link contained in a linked site, or any changes or updates to such sites. Your use of a linked site and its content is at your sole risk and may be subject to restrictions and/or limitations. Always take care to abide by the linked site's terms of use, including any permission requirements/guidelines.

Identify an idea
(what might we do?)

**Does the idea
have potential to
create value?**

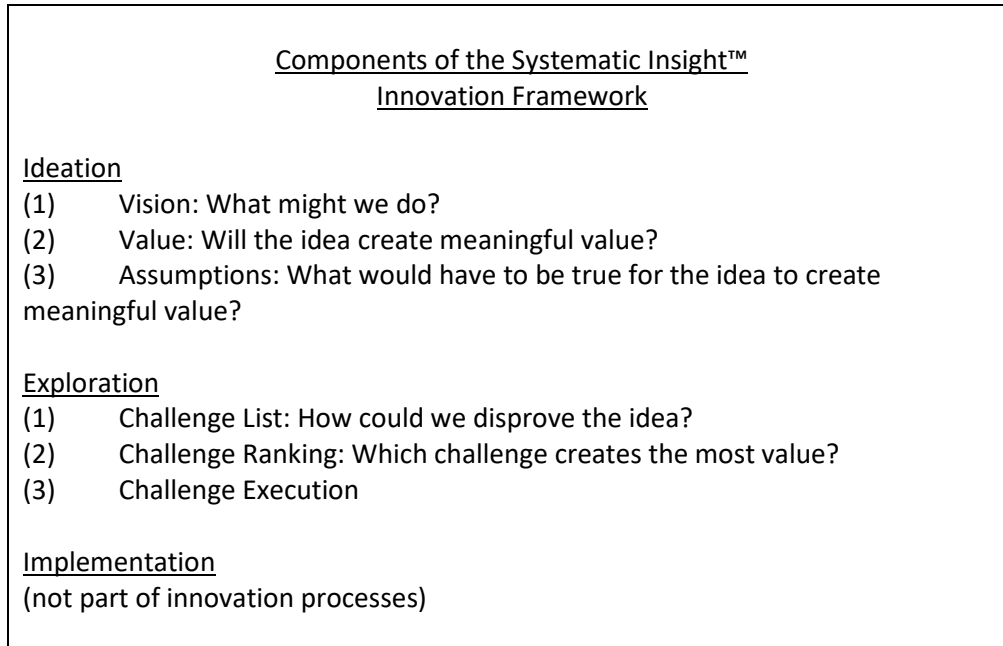
**What assumptions
must be true for the
idea to create value?**

**Identify
opportunities to
challenge the idea**

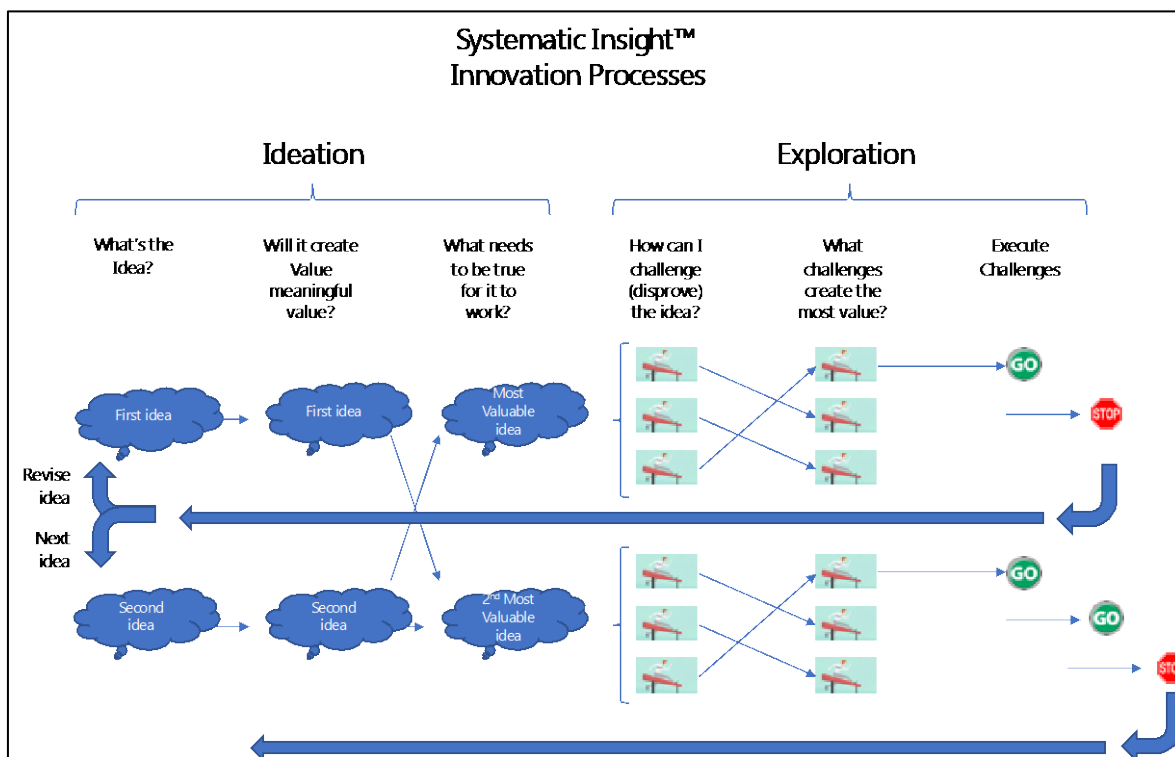
**Rank challenges to
determine which
create the most
value**

**Execute and research
the challenges.**

Activity 3 – The Innovation Framework



Implementation is not part of the innovation processes. It serves to ‘capture’ value, not ‘create’ value. If you have an idea that is fully developed and that you know it will work, then the value from that idea is created. To get the value, you could sell your knowledge about the idea to someone or you could implement the idea. You are deciding how to receive the value. However, once the uncertainty surrounding the idea is eliminated (the goal of Exploration), the value of the idea is created.



Activity 4 – The Idea Validation Checklist

Answer the below questions. You may need to research some of the questions online. If you still struggle to answer any of the questions, you may need to go back to the Ideation phase.

- (1) Does this idea already exist in the marketplace?

- (2) What competitors currently exist? Are there any? If yes, how is your idea different and better?

- (3) Does this idea meet a need or solve a problem?

- (4) Does this idea take advantage of a new opportunity? What makes this ideal unique?

- (5) What is the biggest limitation to your idea?

- (6) How will this idea make money?

- (7) Who will buy this product?

- (8) Do you have experience in this area? What makes you the right person to tackle this idea?