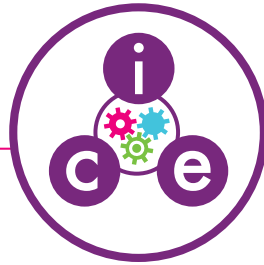
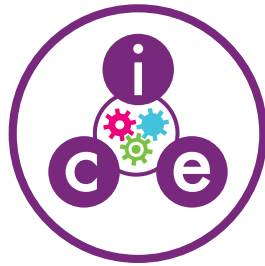


# Specialist High Skills Major

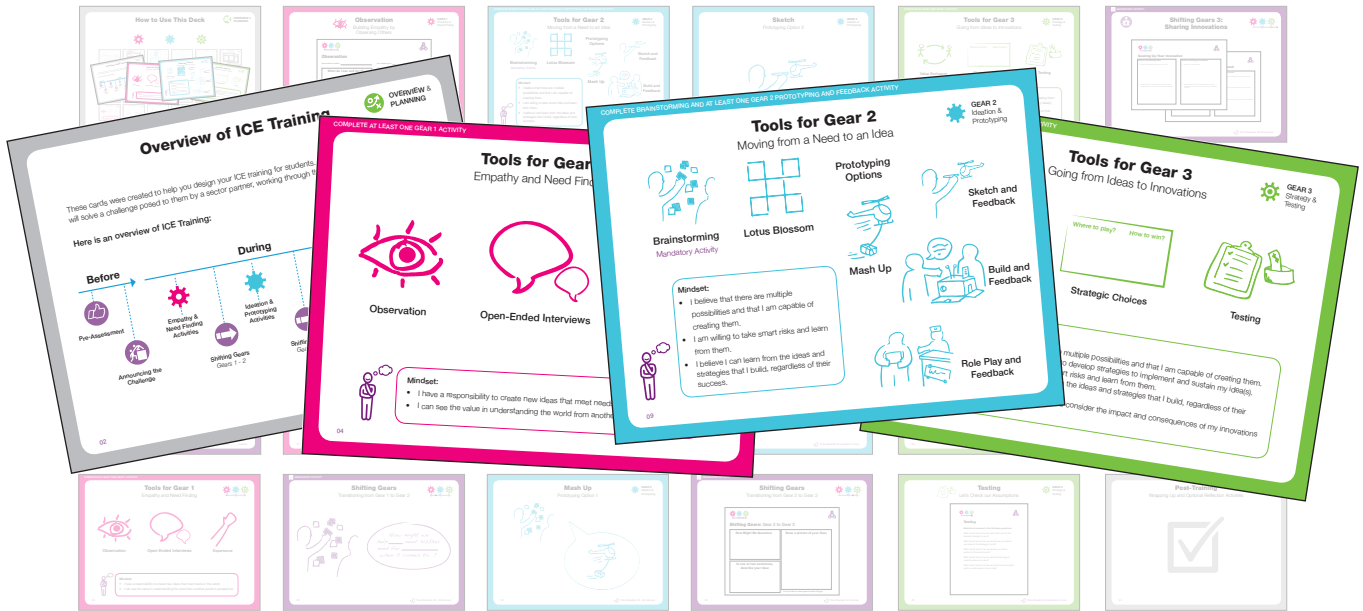
Innovation, Creativity & Entrepreneurship Training



TOOL  
DECK



# How to Use This Deck

**Overview of ICE Training**

These cards were created to help you design your ICE training for students who will solve a challenge posed to them by a sector partner, working through the ICE process.

Here is an overview of ICE Training:

**Before**

- Five Assumptions
- Announcing the Challenge

**During**

- Empathy & Needs Finding Activities
- Brainstorming
- Sketching
- Prototyping
- Building & Testing
- Sharing Innovations

**After**

- Reflection
- Feedback

---

**Tools for Gear 1**  
Completing at least one GEAR 1 activity

**Observation**

**Open-Ended Interviews**

**Mindset:**

- I have a responsibility to create new ideas that meet needs
- I can see the value in understanding the world from another perspective

---

**Tools for Gear 2**  
Completing Brainstorming AND at least one GEAR 2 Prototyping AND Feedback activity

**Moving from a Need to an Idea**

**Brainstorming**  
Mandatory Activity

**Lotus Blossom**

**Prototyping Options**

**Mash Up**

**Sketch and Feedback**

**Build and Feedback**

**Role Play and Feedback**

**Mindset:**

- I believe that there are multiple possibilities and that I am capable of creating them.
- I am willing to take smart risks and learn from them.
- I believe I can learn from the ideas and strategies that I build, regardless of their success.

---

**Tools for Gear 3**  
Completing at least one GEAR 3 Strategy & Testing activity

**Going from Ideas to Innovations**

**Strategic Choices**

**Testing**

**Mindset:**

- I consider multiple possibilities and that I am capable of creating them.
- I develop strategies to implement and sustain my ideas; the ideas and strategies that I build, regardless of their success.
- I consider the impact and consequences of my innovations.

# How to Use This Deck

## Overview

The ICE Tool Deck is primarily a planning tool to help you design an ICE training experience tailored to the specific challenge your students will be working on.

These cards have been created directly from the Specialist High Skills Major (SHSM) Innovation, Creativity and Entrepreneurship (ICE) Toolkit co-developed by the Ontario Ministry of Education with the Rotman School of Management at the University of Toronto.

## Using the Cards

Based on the Goals and Constraints of your session, use the deck of cards to develop a plan.

- Lay out all the cards on a flat surface, as shown on the reverse of this card.

Choose which tools you want to use based on:

- Your sector and challenge
- Your students
- Time available
- Your own comfort level with the tools

## Minimum ICE Agenda

**M** *Mandatory activities are purple*

- Pre-Assessment
- Gear 1
  - At least one activity
  - **Shifting Gears 1-2**
- Gear 1
  - **Brainstorming**
  - At least one additional activity
  - **Shifting Gears 2-3**
- Gear 3
  - At least one activity
  - **Shifting Gears 3+**
- **Sharing Innovations**
- **Post-Assessment**

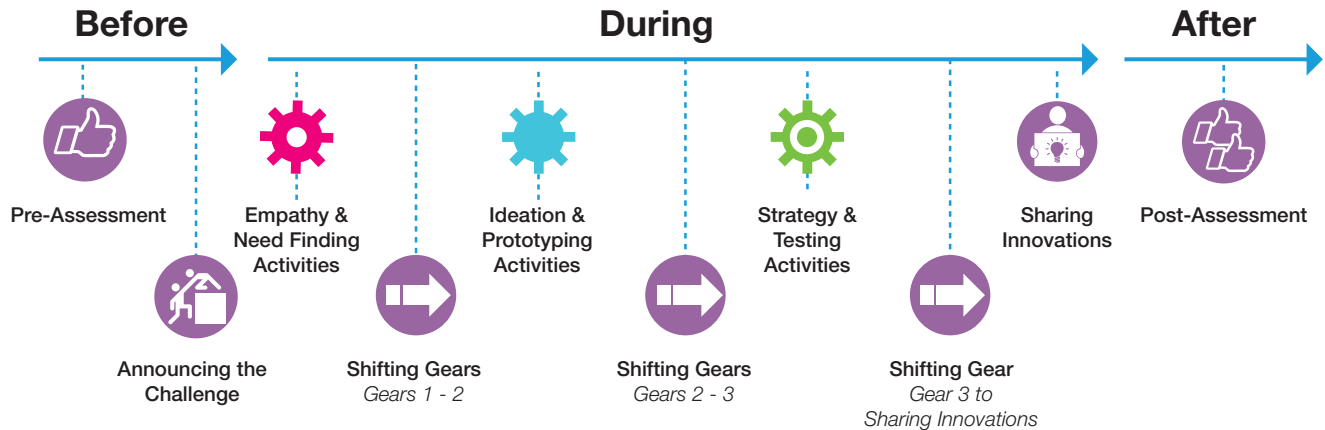
## Resources

- ICE Toolkit, pp. 35-37
  - Appendix, p.44, Checklist: Preparing for ICE Training
- Slideshow

# Overview of ICE Training

These cards were created to help you design your ICE training for students. During the training, students will solve a challenge posed to them by a sector partner, working through the 3 Gears Framework.

Here is an overview of ICE Training:



## **Before the Training**

- Select a sector partner.
- Co-design a challenge with your sector partner.
- Conduct a pre-assessment survey with students.

## **During the Training**

- Kick off the day.
- Lead students through a selected set of Gear 1, 2 and 3 activities.
- Provide students with opportunities to share their work.

## **After the Training**

- Confirm that your students have completed the post-training assessment.
- Thank your sector partners for their partnership.
- Confirm that any expenses incurred as part of training have been addressed.
- Ensure that completion of ICE training has been entered into the student management system for each participating student.
- Send a message to parents, if appropriate, informing them of the ICE training their child has received.
- If you are capturing images or video of the ICE training, ensure that the appropriate waiver forms have been signed and documented. To share what you have accomplished, consider creating a short presentation for others on the intent and results of the ICE training.

# Pre-Training Assessment

I would define **innovation** as...

By my definition of **innovation**, I would consider myself...

- |                          |                          |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Very<br>Innovative       | Moderately<br>Innovative | Somewhat<br>Innovative   | Not at all<br>Innovative | Not Sure                 |

Respond to the following statements by selecting the checkbox that corresponds to your opinion.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Sure
I can see the world from another person's perspective.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can solve problems that have not yet been solved.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am willing to take smart risks and learn from them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can learn to be innovative.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Pre-Training Assessment

## Overview of ICE Assessments

As per the Specialist High Skills Major, Policy and Implementation guide section A1.3, certification and training programs must:

- Include an assessment and evaluation component.
- Be recorded and include documentation of the number of hours involved, and the date the certification/training was completed.
- Include, wherever possible, documentation such as a certificate or other proof of completion for the student's portfolio and the student's SHSM Record.

The ICE toolkit includes a pre- and post-training student self-assessment that fulfills the mandatory assessment component for this training.

The statements for the student self-assessments have been taken directly from the mindsets that are the intended outcomes of the ICE training.

## Pre-Assessment

The pre-training assessment is a minds-on activity developed for students to self-assess their understanding of ICE concepts. Students should complete this assessment prior to any discussions related to innovation, creativity and entrepreneurship or the ICE training. This should be the student's first exposure to the mindsets and ideas related to the ICE training.

## Resources

- ICE Toolkit, p. 40
  - Appendix, pp. 107-109
- Electronic versions are available from SHSM board leads.
- Slideshow

# Tools for Gear 1

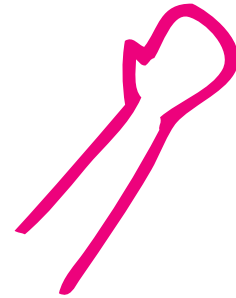
## Empathy and Need Finding



Observation



Open-Ended Interviews



Experience



### Mindset:

- I have a responsibility to create new ideas that meet needs in the world.
- I can see the value in understanding the world from another person's perspective.

## Gear 1 Overview: Empathy and Need Finding

**Empathy** is the ability to understand the thoughts and feelings of other people, as different from one's own.

**Need finding** is the ability to identify the unmet needs of others. Need finding is a key step in defining the problem or challenge to be solved.

### Choose at Least One Empathy & Need Finding Activity

It is about interpreting the information that has been gleaned from *Observation*, *Open-Ended Interviews*, and *Experience*.

### Tips for Choosing the Right Activity

**Observation** is a powerful activity when students have an opportunity to actually see the challenge.

- For example, if students are solving a challenge for a local restaurant, they might spend time in that restaurant.

**Open-ended interviews** can help students connect with industry. Students can interview anyone who might be connected to the challenge – staff, volunteers, users.

- Interviews can be done in advance or on the challenge day.

**Experience** is about doing and reflecting. Giving students an experience in the challenge can help them gain a deeper understanding of a user's needs.

- Assigning a specific activity or task that students must complete can be the gateway to a new understanding of the challenge.

### Resources

- ICE Toolkit, pp. 16-19
  - Appendix, pp. 57-64
- Slideshow



# Observation

Building Empathy by  
Observing Others



**GEAR 1**  
Empathy &  
Need Finding



## Observation

Observation location: \_\_\_\_\_

Our challenge is: \_\_\_\_\_

**What do I see and hear?**

**What do I think is going on?**

*Who is around you?  
What are they struggling with?  
What objects do you see?  
How does the space feel, smell and sound?  
How are people interacting with each other?*

**What was surprising or unexpected?**



# Observation



## Goal of This Activity

To help you solve the challenge posed, you need to gain insight into how the users experience the situation at hand.

Observation is one way to do this. Seeing something with new perspective will help you notice things you never noticed before. Simply looking for what is surprising can help you empathize with the users and understand their experience.

### Connected ICE Mindset:

- I have a responsibility to create new ideas that meet needs in the world.
- I can see the value in understanding the world from another person's perspective.



## Prep Checklist:

- Organize location(s) visit

## Materials

- Note-taking materials
- Camera (if permitted)

## Steps in the Activity

1. Create an Observation Template (see the front of card).
2. Observe. Pretend this is the first time you have seen this location. (See Appendix, p. 15 for more detail).  
*Take care to note:*
  - What was surprising or unexpected?
  - What appeared very difficult for people?
3. Reflect and ask – what do I think these observations mean about the people I saw?

## Resources

- ICE Toolkit, p. 17-19
  - Appendix, pp. 57-59
  - Reproducible template
- Slideshow



# Open-Ended Interviews

## Interviewing for Stories



GEAR 1  
Empathy &  
Need Finding



## Open-Ended Interviews

Our challenge is: \_\_\_\_\_

This interview is with: \_\_\_\_\_

**Tell me about** \_\_\_\_\_

Tell me more...

Why?

How did that make you feel?

**What I heard:**

**Things that surprised or interested me:**



Time Needed: 20 - 60 minutes



## Interviewing

### Goal of This Activity

Open-ended interviews elicit others' stories and dig deep into how people think, feel and experience a given topic or situation. Hearing others' stories can unlock interesting insights about what people need.



#### Connected ICE Mindset:

- I have a responsibility to create new ideas that meet needs in the world.
- I can see the value in understanding the world from another person's perspective.

### Time Needed

20-60 minutes.

- At least 20 minutes per interview.
- Between three and five interviews per team is ideal.

### Prep Checklist:

- Organize interviewees.
- Consider what space will be appropriate for the interviews (space, noise, etc.)

### Materials

- Note-taking template.

### Steps in the Activity

1. Ask the person you are interviewing to tell you a story about their experience with the topic of the challenge.
2. Limit your follow-up to these three “digging deeper” prompts:
  - Tell me more about that...
  - Why...
  - How did that make you feel?

### Resources

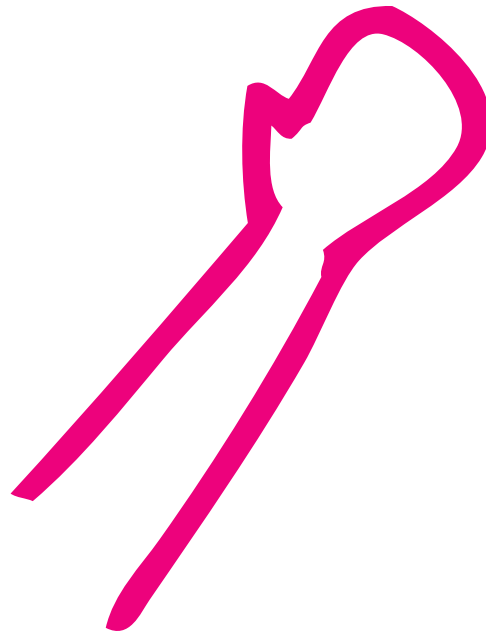
- ICE Toolkit, pp. 17-19
  - Appendix, pp. 60-62
  - Reproducible template
- Slideshow

# Experience

Understanding by Doing



**GEAR 1**  
Empathy &  
Need Finding



# Experience



## Goal of This Activity

Experiences allow you to see the world through the perspective of users and to gain deeper insight into the problem and others' needs.



### Connected ICE Mindset:

- I have a responsibility to create new ideas that meet needs in the world.
- I can see the value in understanding the world from another person's perspective.

## Prep Checklist:

- Organize location(s) visit

## Materials

- Note-taking materials
- Camera

## Steps in the Activity

1. To learn more about users we are going to spend some time in their shoes.
2. As you go through the experience, capture your thoughts on interesting or surprising moments through video, photos or journaling.
3. When you are finished the experience, reflect on two to four aspects that surprised or interested you. Did you learn something about the experience that may be useful in helping you better understand the user?

## Students are ready to move on when:

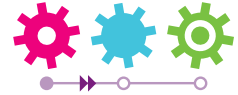
- Students have captured their experience and have identified what was interesting or surprising to them.

## Resources

- ICE Toolkit, pp. 17-19
  - Appendix, pp. 63-64
- Slideshow

# Shifting Gears

Transitioning from Gear 1 to Gear 2



How might we  
help \_\_\_\_\_ meet his/her  
need for \_\_\_\_\_  
when it comes to...?

# Shifting Gears

## Goal of This Activity

After having individual experiences in Gear 1, it is now time to report back to your teams and make connections between what each of you individually saw, experienced or heard.

- At the end of Shifting Gears, your team will generate a “How might we...?” question that will guide your work in Gear 2.



### Mindset:

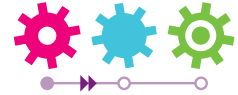
- I have a responsibility to create new ideas that meet needs in the world.

## Materials

- Chart paper
- Sticky notes
- Markers

## Steps in the Activity

1. Each member of the group briefly shares the stories they heard, their experiences and observations.



2. Listen and write down interesting things they hear on sticky notes: like strong feelings, barriers or surprises.
3. Organize sticky notes on a piece of chart paper, by clusters or themes. There are no right or wrong patterns. Name the clusters.
4. Discuss what you found interesting and what gaps you see. Make a list of the user's needs.
5. From the list, choose one unmet need - something that the user requires (or values) but isn't getting.
  - Remember needs aren't solutions.
6. Write a “How might we...?” question in the centre of a piece of chart paper:
  - How might we help \_\_\_\_\_ meet their need of \_\_\_\_\_ when it comes to \_\_\_\_\_?

## Students are ready to move on when:

- Each group has a “How might we help...?”

## Resources

- ICE Toolkit, pp. 17-19
  - Appendix, pp. 65-67
- Slideshow

# Tools for Gear 2

Moving from a Need to an Idea

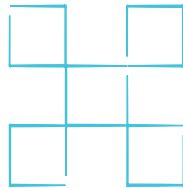


**GEAR 2**  
Ideation &  
Prototyping



## Brainstorming

Mandatory Activity



## Lotus Blossom

## Prototyping Options:



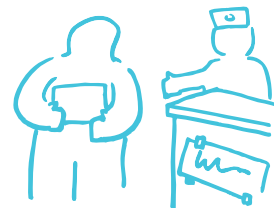
## Mash Up



## Sketch and Feedback



## Build and Feedback



## Role Play and Feedback

### Mindset:

- I believe that there are multiple possibilities and that I am capable of creating them.
- I am willing to take smart risks and learn from them.
- I believe I can learn from the ideas and strategies that I build, regardless of their success.



## Tools for Gear 2

In Gear 2 , students explore ways of successfully meeting the needs of their users. Entrepreneurial success stems in part from engagement with a creative process known as ideation and prototyping – the generation of many ideas, combined with a process for getting feedback on ideas from users.

### Choosing Your Ideation and Prototyping Activities

The activities in this gear fuel creativity and imagination. The following are some tips to keep in mind when exploring these activities.

#### Two Activities

1. **Brainstorming:** Take care to structure the brainstorming time to ensure that everyone has the space and opportunity to contribute. For example, having a mix of individual and group brainstorming allows both introverted and extroverted students to contribute ideas.

Using the Lotus Blossom to brainstorm may help students to build-out and strengthen their ideas.

2. **Prototyping and Feedback:** There is more than one way to prototype; depending on the students' ideas, some prototyping methods may be better than others.

Ensure that feedback and iteration is a part of the process. Without feedback, students don't know how to make their ideas better, which is a crucial part of innovation and entrepreneurship.

Choose one of the following:

- Mash Up
- Sketch
- Build
- Role Play

#### Resources

- ICE Toolkit, pp. 20-25
  - Appendix, pp. 68-81
- Slideshow

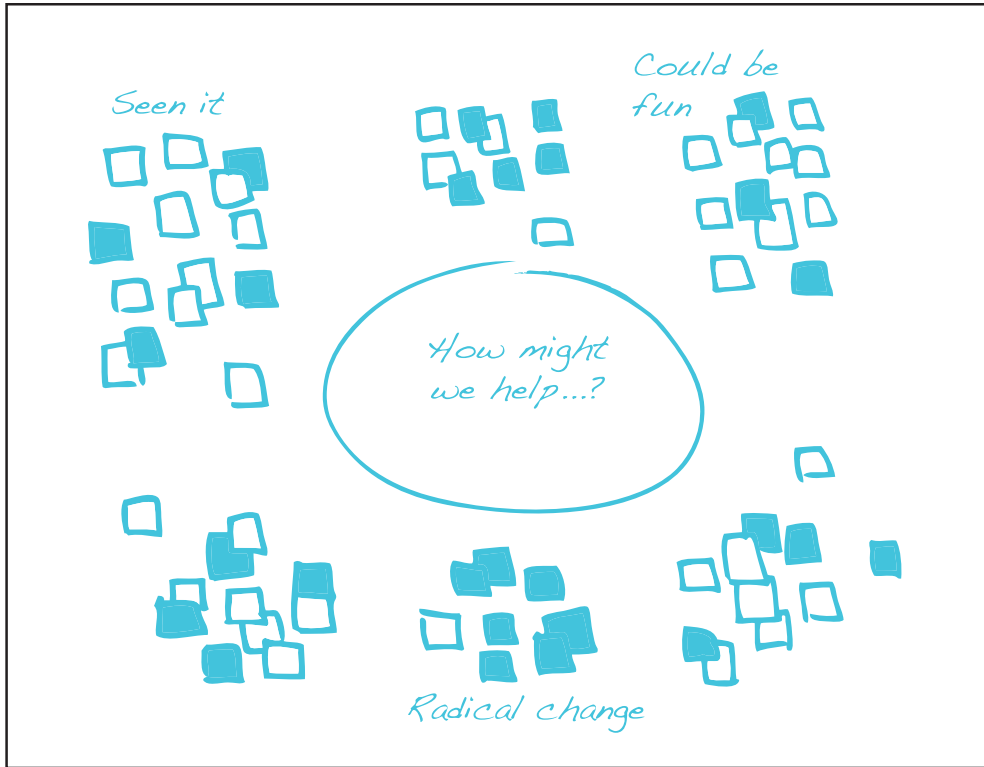


# Brainstorming

## Getting Past One Right Answer



GEAR 2  
Ideation &  
Prototyping



# Brainstorming



A good brainstorming session generates diverse and divergent ideas. By the end of this activity, you will have generated dozens of ideas and clustered them according to relevant themes. From these clusters, you will select one or two to prototype.



## Mindset:

- I believe that there are multiple possibilities and that I am capable of creating them.

## Materials

- Shifting Gears “How might we...?” question
- One sheet of chart paper (per team)
- Markers (one per student)
- Sticky notes (one pad per student)

## Steps in the Activity

1. We’re going to brainstorm. To do that, we need to remember to:

- *Defer Judgment, Go for Quantity, Build on Ideas of Others, and Move Quickly.*
2. Write your “How might we...?” question at the centre of a large piece of paper.
3. Imagine solutions to the question by capturing one idea on each sticky note. Each round of brainstorming will be 3-5 minutes long.
  - Individual (everyone brainstorms by themselves in silence)
  - Paired (brainstorm in pairs: one shouts ideas, the other captures ideas)
  - Group (everyone captures their own ideas and shares them aloud)
4. After at least two rounds of brainstorming, each team should cluster their ideas into three groups: “Seen it”, “Could be fun” and “Radical change”.
5. Select one idea or a set of ideas that fit together and that you are really excited about.

## Resources

- ICE Toolkit, pp. 20-25
  - Appendix, pp. 69-72
- Slideshow

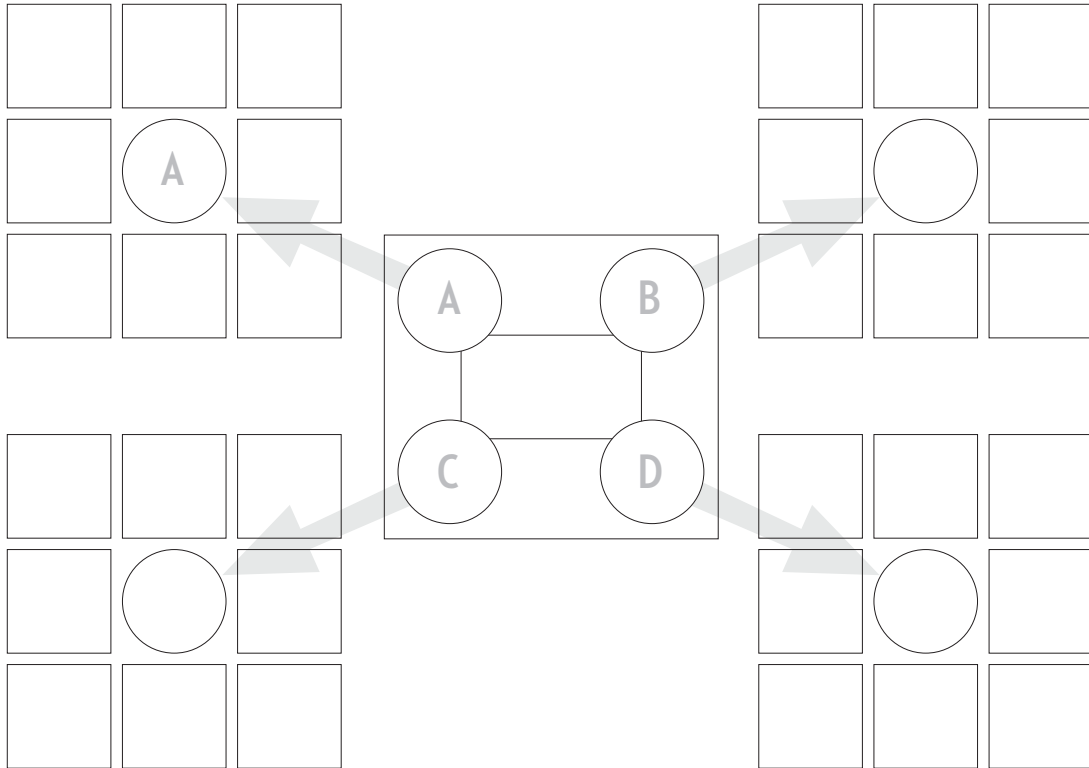


# Lotus Blossom Diagram

Structured Brainstorming



**GEAR 2**  
Ideation &  
Prototyping





# Lotus Blossom Diagram

## Goal of the Activity

A more structured variant of *brainstorming*, a Lotus Blossom begins with your “How might we...?” question, and then “blossoms” outwards.

It can help students build out ideas that are too general or conceptual, making them more concrete and tactical.



### Mindset:

- I believe that there are multiple possibilities and that I am capable of creating them.

## Materials

- Lotus Blossom Template
- Chart Paper
- Writing Materials
- Sticky Notes

## Steps in the Activity

1. Print a Lotus Blossom for each team or have them use chart paper to create one.
2. Write your “How might we...?” question from Shifting Gears 1-2 in the centre of the Lotus Blossom.
3. Do an initial brainstorm, filling the area immediately around the centre of the Lotus Blossom with ideas.
4. Choose the top 4 ideas from the brainstorm (A, B, C, D), and move them to the four outer blossoms.
5. Use the idea in the centre of each blossom as the catalyst for a new brainstorm, focused on building out that idea.

## Resources

- Lotus Blossom Template
- Slideshow

# Mash Up

## Prototyping Option 1



GEAR 2  
Ideation &  
Prototyping



# Mash Up



## Goal of this Activity

This activity is meant to help you build a better idea to move forward with. Sketch a chosen idea individually from the brainstorm and combine multiple ideas to make a new one.

### Mindset:

- I believe that there are multiple possibilities and that I am capable of creating them.
- I am willing to take smart risks and learn from them.
- I believe I can learn from the ideas and strategies that I build, regardless of their success.



## Materials

- Sketching paper
- Markers
- Idea(s) from brainstorming activity

## Steps in the Activity

1. Each person in the team will sketch a different idea from the brainstorm.
2. Share your idea sketch with your team.
3. Tell each other the features or intentions that you like from your teammates' ideas.
4. Build a new idea out of all the well-liked features and intentions of the different ideas into a new idea.
5. Together, sketch the new idea.

## Resources

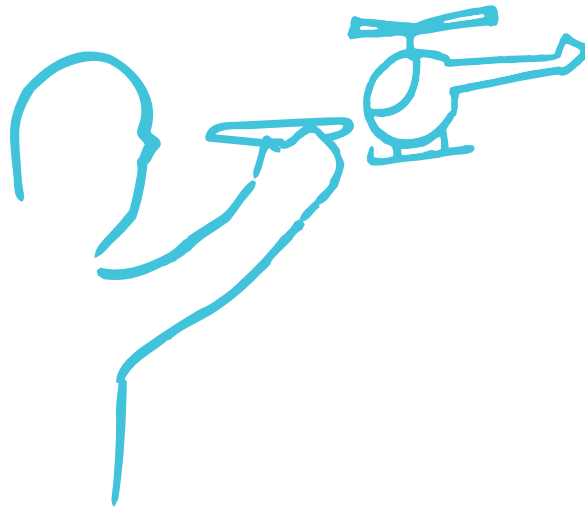
- ICE Toolkit, pp. 20-25
  - Appendix, pp. 73-74
- Slideshow

# Sketch

## Prototyping Option 2



**GEAR 2**  
Ideation &  
Prototyping





## Sketch and Feedback

### Goal of this Activity

Sketch the idea to receive feedback from others. Use this feedback to iterate and improve the idea.



#### Mindset:

- I believe that there are multiple possibilities and that I am capable of creating them.
- I am willing to take smart risks and learn from them.
- I believe I can learn from the ideas and strategies that I build, regardless of their success.

### Prep Checklist

Organize users to give students feedback on their idea.

Ideal users are:

- The people students interviewed
- The people who will use the idea
- Students in other teams

### Materials

- Colourful markers or paints
- Chart and/or mural paper
- Idea(s) from brainstorming activity

### Steps in the Activity

1. Sketch.
2. Get feedback: Tell the users the story of your idea with your sketch.
3. Iterate: Create a new sketch (or choose another prototyping activity) incorporating the feedback.

### Resources

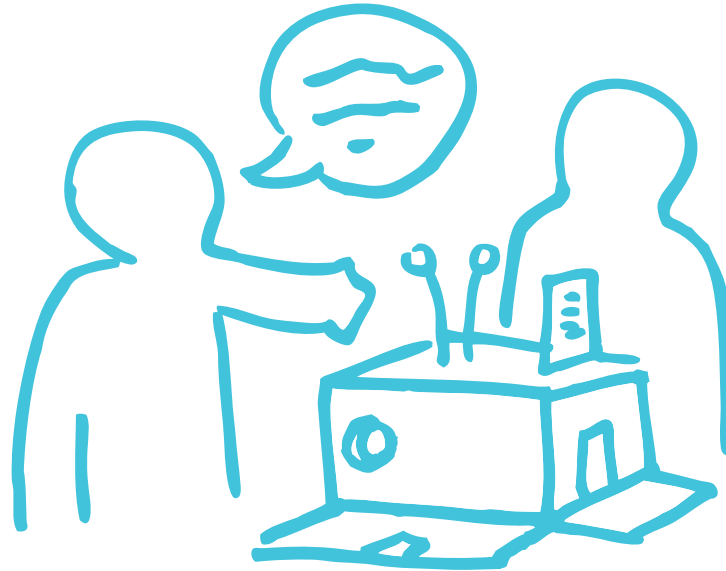
- ICE Toolkit, pp. 20-25
  - Appendix, pp. 75-76
- Slideshow

# Build

## Prototyping Option 3



**GEAR 2**  
Ideation &  
Prototyping



## Build and Feedback

### Goal of this Activity

Build out the team's idea from brainstorming with low-resolution, 3-D prototypes. Based on feedback, iterate and improve the idea.



#### Mindset:

- I believe that there are multiple possibilities and that I am capable of creating them.
- I am willing to take smart risks and learn from them.
- I believe I can learn from the ideas and strategies that I build, regardless of their success.

### Prep Checklist

Organize users to give students feedback on their idea.

Ideal users are:

- The people students interviewed

- The people who will use the idea
- Students in other teams



### Materials

- Markers, chart paper, construction paper
- Idea(s) from brainstorming activity

### Steps in the Activity

1. Prototyping: Build a physical prototype of your idea using the materials on your table. Each creation should help answer the following questions:
  - What does the idea look like?
  - How does it work?
2. Getting feedback: Show your prototype to users and explain how it works, ask them:
  - What do you like and why?
  - What would you change and why?
  - What questions do you have?
3. Iterate: Use the feedback to improve the prototype.

### Resources

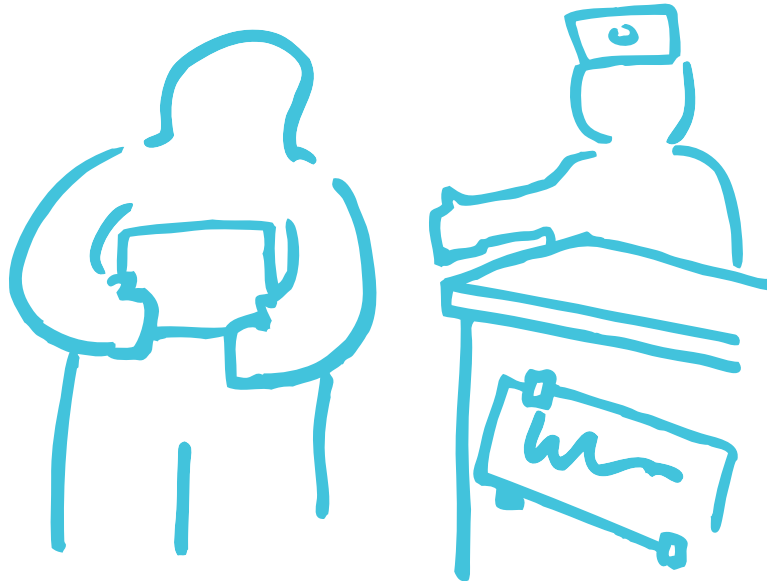
- ICE Toolkit, pp. 20-25
  - Appendix, pp. 77-78
- Slideshow

# Role Play

## Prototyping Option 4



GEAR 2  
Ideation &  
Prototyping



# Role Play and Feedback



## Goal of this Activity

Prototype through role play to express how users may interact with the key idea in an experience. Get feedback to improve the idea.

### Mindset:

- I believe that there are multiple possibilities and that I am capable of creating them.
- I am willing to take smart risks and learn from them.
- I believe I can learn from the ideas and strategies that I build, regardless of their success.



## Prep Checklist

Organize users to give students feedback on their idea.

Ideal users are:

- The people students interviewed

- The people who will use the idea
- Students in other teams

## Steps in the Activity

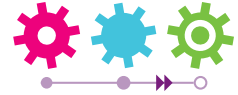
1. Develop the role play:
  - Create a scene.
  - Practice the role play twice.
  - Notice how the process of practicing changes or refines the idea.
  - In the second round of practice, change a variable.
  - After two practice rounds, move on to get feedback.
2. Get feedback:
  - Role play the idea for a feedback group.
3. Iterate:
  - Use the feedback to iterate the experience to better meet the unmet need discovered in Gear 1.

## Resources

- ICE Toolkit, pp. 20-25
  - Appendix, pp. 79-81
- Slideshow

# Shifting Gears

Transitioning from Gear 2 to Gear 3



## Shifting Gears: Gear 2 to Gear 3

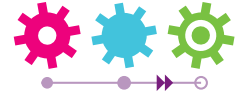
**How Might We Question:**

**Draw a picture of your idea:**

**In one to two sentences,  
describe your idea:**

• Put your idea on chart paper to make it bigger

## Shifting Gears 2-3



### Goal of This Activity

State and visualize the idea from Gear 2 to bring into Gear 3. This is meant to help quickly revisit the need and idea as you work through Gear 3 - Strategy & Testing.



#### Mindset:

- I have a responsibility to create new ideas that meet needs in the world.

### Materials

- Chart paper
- Markers
- Prototypes/sketches from previous activity

### Steps in the Activity

1. Synthesize your thinking so far on one piece of chart paper:
  - The user need.
  - One sentence that describes the idea to meet that need.
  - A visualization of the idea.

### Students are ready to move on when:

- Students have completed their synthesis sheet.

### Resources

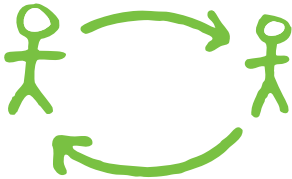
- ICE Toolkit, pp. 20-25
  - Appendix, pp. 82-84
- Slideshow

# Tools for Gear 3

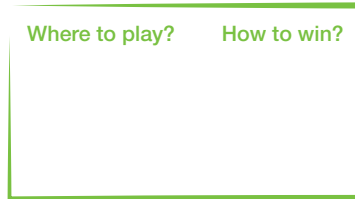
## Going from Ideas to Innovations



**GEAR 3**  
Strategy &  
Testing



**Value Exchange**



**Strategic Choices**



**Testing**

### Mindset:

- I believe that there are multiple possibilities and that I am capable of creating them.
- I have the confidence to develop strategies to implement and sustain my idea(s).
- I am willing to take smart risks and learn from them.
- I believe I can learn from the ideas and strategies that I build, regardless of their success.
- I seek to understand and consider the impact and consequences of my innovations on the world.



## Tools for Gear 3

Innovation only truly happens when an idea is actually put to use. The process of moving from idea to enterprise is all about making choices and building a strategy for sustainability. Gear 3 provides the roadmap to make and test those choices.

### Choosing your Strategy and Testing Activities

The activities in Gear 3 help students think strategically about how to make their idea come to life. In this gear, students will make choices to create a sustainable innovation that meets a need in the world. Doing more than one of the activities can help students further develop their innovations.

### Three Activities

Choose at least one. Doing more than one of the activities can help students further develop their innovations.



### Making Strategic Choices

It is important for students to make clear choices about who they will serve and what they will offer so they can really meet the needs of their user.

### Value Exchange

Students explore all the possible benefits of their ideas by considering the impact on all the stakeholders.

### Testing

Every new strategy has assumptions embedded within it. If those assumptions are bad, the strategy will fail. So, we design and run experiments to test assumptions and control risk.

### Resources

- ICE Toolkit, pp. 26-30
  - Appendix, pp. 85-98
- Slideshow



# Value Exchange

A Fair Give and Take



GEAR 3  
Strategy &  
Testing



## Value Exchange

Who is involved?	What does each person offer?	What does each person receive?



## Tools for Gear 3

In entrepreneurship, the word value is often associated with money but there are other dimensions of value such as: knowledge, brand, company reputation, good will, and environmental and social impact.

To create a successful company, it's important to ensure that the important players involved (i.e., the customer, the company and the community) are getting value. The Value Exchange exercise helps you be explicit about this.



### Mindset:

- I have the confidence to develop strategies to implement and sustain my idea(s).
- I seek to understand and consider the impact and consequences of my innovations on the world.



## Materials

- Chart paper
- Markers
- Value Exchange Template

## Steps in the Activity

1. Practice how value is exchanged at a lemonade stand.
2. Practice how value is exchanged at Goodwill Industries.
3. Think about what a value exchange looks like for your innovation.
  - *Who is involved in the idea?*
  - *What does each person offer?*
  - *What does each person receive?*
4. Visualize the exchange on a new piece of chart paper.

## Resources

- ICE Toolkit, pp. 26-30
- Appendix, pp. 85-89
- Value Chain Template
- Slideshow

Where to play? How to win?

# Making Strategic Choices

Putting the Customer First



GEAR 3  
Strategy &  
Testing



## Making Strategic Choices

### Where to Play?

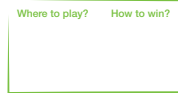
What is your product/service?

Who is your customer?

### How to Win?

Why will customers choose you over the competition?

# Making Strategic Choices



At the heart of strategy are two key choices:

- Where to play: Determines the target customer and the product or services.
- How to win: States why a customer would choose a product or service over competitive offerings.

## Mindset:

- I have the confidence to develop strategies to implement and sustain my idea(s).
- I am willing to take smart risks and learn from them.
- I believe I can learn from the ideas and strategies that I build, regardless of their success.
- I seek to understand and consider the impact and consequences of my innovations on the world.



## Materials

- Chart paper
- Markers
- Sticky Notes
- Making Strategic Choices Template

## Steps in the Activity

### Introduction to Making Strategic Choices:

- Reflect on two known organizations: MacDonaldd's and Subway (p.47, ICE Guide)

### Teams Make Strategic Choices:

Have teams recreate the template on the front of the card.

#### 1. Where to Play

- Describe the product or service.
- Brainstorm interested customers.
- Choose which customer group might benefit most.

#### 2. How to Win

- Brainstorm why customers would choose them over the competition.
- Cluster into three categories: “strong reasons,” “okay reasons” and “weak reasons”.

## Resources

- ICE Toolkit, pp. 26-30
  - Appendix, pp. 90-94
- Strategic Choices Template
- Slideshow



# Testing

Let's Check our Assumptions



**GEAR 3**  
Strategy &  
Testing



## Testing

**Brainstorm answers to the following questions:**

What would have to be true about the user for the idea and strategy to work?

What would have to be true about how you deliver your idea for the strategy to work?

What would have to be true about your sector partner for the idea to work?

What would have to be true about technology to make the idea come alive?

What would have to be true about the environmental and/or social impacts of your idea?



# Testing

Every new strategy has assumptions embedded in it. If our assumptions are wrong, then our strategy could fail.

Testing helps students explore the assumptions at the root of their idea and strategy.



## Mindset:

- I have the confidence to develop strategies to implement and sustain my idea(s).
- I am willing to take smart risks and learn from them.
- I believe I can learn from the ideas and strategies that I build, regardless of their success.
- I seek to understand and consider the impact and consequences of my innovations on the world.

## Materials

- Chart paper with “What would have to be true?” written on it
- Markers



- Testing Template

## Steps in the Activity

1. **Teams write “What would have to be true?” on the top of a chart.**
2. **Identify Assumptions.**
  - Brainstorm answers to the questions on the Testing Template.
  - *See the front of this card.*

**The answer to each questions starts with: “It would have to be true that...”**
3. **Choose an assumption to test.**
  - Have teams pick the answer that is most likely to make or break their strategy.
4. **Design an experiment.**

Teams design simple experiments, identifying:

  - What assumption the experiment is testing
  - How the information will be used.

## Resources

- ICE Toolkit, pp. 26-30
  - Appendix, pp. 95-98
- Testing Template
- Slideshow



## Shifting Gear 3: Transitioning from Gear 3 to Sharing Innovations

At the end of the 3 Gears, students should share the stories of their innovation with others. The *Strategic Plan* helps students teams “answer the right questions” when planning to enlist stakeholders or sharing their innovations.



### Mindset:

- I have the confidence to develop strategies to implement and sustain my idea(s)

### Materials

- Strategic Plan Template
- Writing Materials
- Sticky Notes (optional)

### Steps in the Activity

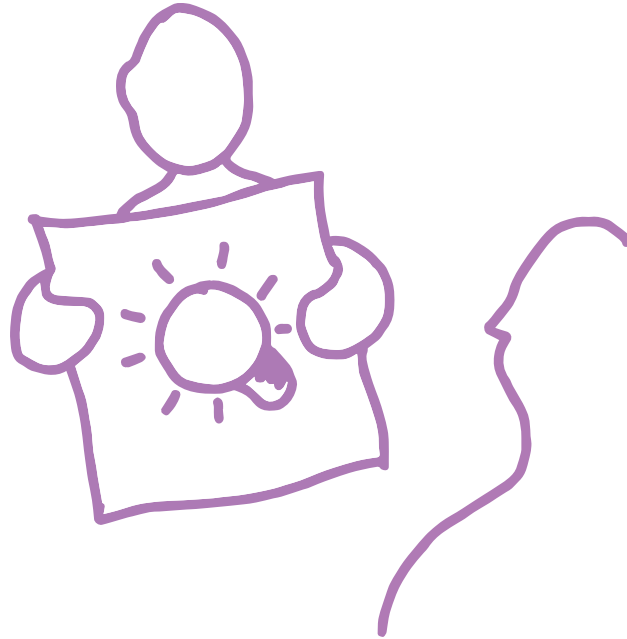
- Work through the steps outlined on the Strategic Plan template - see front of card.
1. Identify the challenge.
  2. Describe the idea/solution.
  3. Identify the customer and their need.
  4. Describe how the idea solves the challenge and meets the customer’s need.
  5. Outline the value exchange.
  6. Identify assumptions.
  7. How can we test the idea.

### Resources

- ICE Toolkit,
  - Appendix, pp. 99-101
- Strategic Plan Template
- Slideshow

# Sharing Innovations

Making the Pitch



## Sharing Innovations

At the end of the 3 Gears, students should share the stories of their innovation with others. This could take multiple forms but the most important thing is that they are able to share their learning. There are four components of sharing to consider.



### Mindset:

- I have the confidence to develop strategies to implement and sustain my idea(s)

### Content

Have students share:

- About what they created.
- About what they learned.

Remember: Students can use their *Strategic Plan* (Card #21) to help them structure their sharing.

## Visualization

Encourage students to use sketches and visualizations to communicate their ideas.



### Format

Explore the possibility of:

- Pitch-style presentations
- Co-creation session
- Gallery walk
- Strategic Plan

### Audience

People you might want to invite to the sharing session include:

- The sector partner who posed the challenge.
- People who gave the students feedback.
- Parents.
- Guests from local post-secondary institutions.
- Local businesses or non-profit organizations.
- Members of your SHSM advisory committee.

### Resources

- ICE Toolkit,
  - Appendix, pp. 102-103
- Strategic Plan Template
- Slideshow

# Post-Training Assessment

## Wrapping Up

I would define **innovation** as...

By my definition of **innovation**, I would consider myself...

Very  
Innovative

Moderately  
Innovative

Somewhat  
Innovative

Not at all  
Innovative

Not Sure

I would define **creativity** as...

By my definition of **creativity**, I would consider myself...

Very  
Innovative

Moderately  
Innovative

Somewhat  
Innovative

Not at all  
Innovative

Not Sure

# Post-Training Assessment

## Overview of ICE Assessments

As per the Specialist High Skills Major, Policy and Implementation guide section A1.3, certification and training programs must:

- Include an assessment and evaluation component.
- Be recorded and include documentation of the number of hours involved, and the date the certification/training was completed.
- Include, wherever possible, documentation such as a certificate or other proof of completion for the student's portfolio and the student's SHSM Record.

The ICE toolkit includes a pre- and post-training student self-assessment that fulfills the mandatory assessment component for this training.

The statements for the student self-assessments have been taken directly from the mindsets that are the intended outcomes of the ICE training.

## Post-Assessment

The post-training assessment is the final required component of the ICE training. The intention of this assessment is to provide an opportunity for the students to reflect upon the mindsets and skills they have acquired through the training.

## Resources

- ICE Toolkit, p. 40
  - Appendix, pp. 110-111
- Electronic versions are available from SHSM board leads.
- Slideshow

## Optional Reflection Activities

Additional optional student and teacher reflection activities are also included in the Appendix on pages 112-117.

# Post-Training

Wrapping Up and Optional Reflection Activities



## Post-Training

After the training, there are few remaining administrative items. The checklist below will help you keep track of these items:

- Confirm that your students have completed the post-training assessment.
- Thank your sector partners for their participation.
- Address any expenses incurred as part of the training.
- Ensure completion of ICE training has been entered into the student management system.
- Send a message to the parents, if appropriate, informing them of the training their student's received related to ICE.
- Ensure that the appropriate waiver forms have been signed and documented, if you decided to capture images or videos of the students.
- Consider making a making a short presentation to your staff on the intent and results of the ICE training.

## Optional Reflection Activities

### Open-Ended Discussion: 15 minutes

On page 113 of the Appendix, there are a series of open-ended questions that you can explore with students at the end of their ICE training.

### Storyboard: 20 minutes

The storyboard reflection gives students an opportunity to visualize their experience. The activity can be found in the Appendix on pages 114-115.

### Building Blocks: 30 minutes

The Building Blocks reflection was developed as a tool to help students make connections between concepts. This activity can be found in the Appendix on page 116-117.

## Resources

- ICE Toolkit
  - Appendix, pp. 104-117
- Slideshow