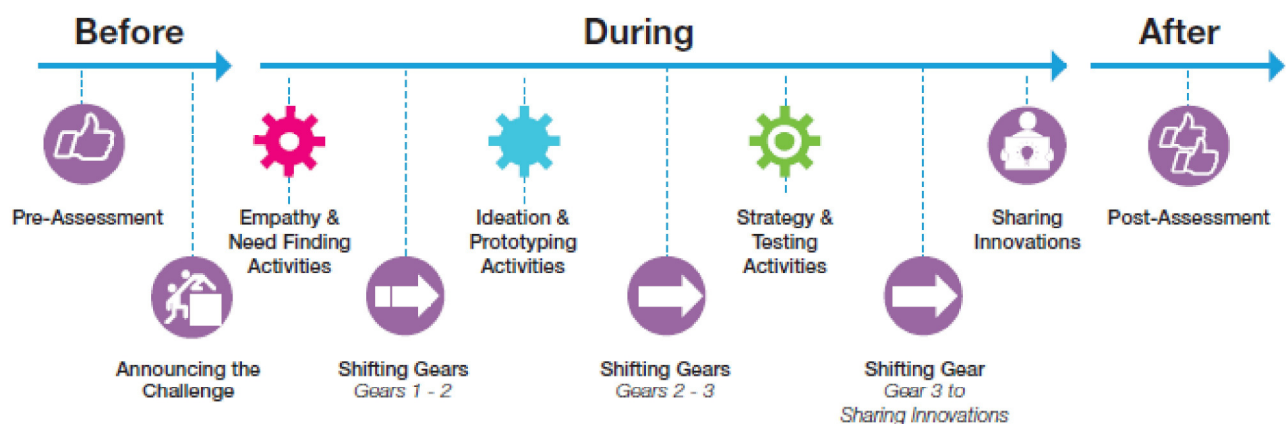# The Marshmallow Challenge

The task is simple: in sixteen minutes, teams must build the tallest free-standing structure out of 20 sticks of spaghetti, one foot of tape, one foot of string and one marshmallow. The marshmallow needs to be on the top.

Lasalle's ICE Training - SNC2D

Here is an overview of ICE Training:

Take the time right now to fill out your pre-assessment pages and make sure to keep these with you throughout the training.

Our 2017 Challenge

Climate change has had an adverse effect on the bee populations around the world.

Gear #1: 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.

http://www.bbc.com/news/av/science-environment-33473963/bees-at-risk-from-climate-change

https://www.youtube.com/watch?v=Zl45LYL5DOg

https://www.youtube.com/watch?v=-qsoRkl6Njs

https://www.theglobeandmail.com/news/national/bumblebees-trapped-by-warming-climate-study-finds/article25394453/

Steps in the Activity

1. Use the Observation Template to make notes.

2. Observe. Pretend this is the first time you have seen this issue.

   Take care to note:
   - » What was surprising or unexpected?
   - » What appeared very difficult?

3. Reflect and ask - what do I think these observations mean about what I saw?

Switching from Gear #1 to Gear #2

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

Steps in the Activity

1. Each member of the group briefly shares what they heard, what the experienced and their 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 desk 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 needs for the challenge.

5. From the list, choose one unmet need - something required but isn't happening.
    – 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 _____?

    We are ready to move on when you have your "How might we help?" question.

Gear #2: Ideation and Prototyping

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.

6. **Gear 2 – Ideation and Prototyping:** Brainstorming is mandatory (lotus blossom template optional)

| Mash Up	Sketch and Feedback	Build and Feedback	Role Play and Feedback
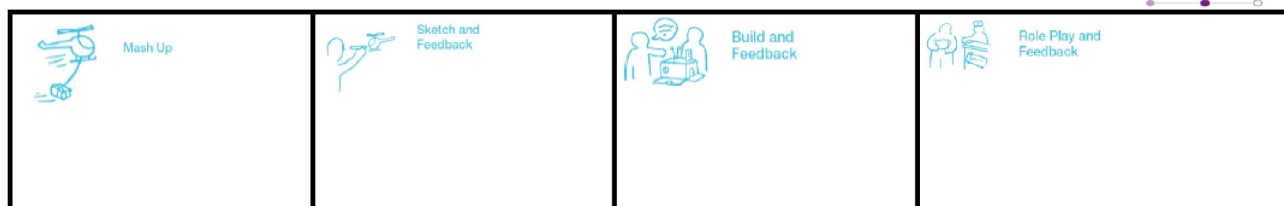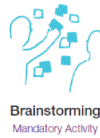
Brainstorming

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.

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 center of the Lotus Diagram.
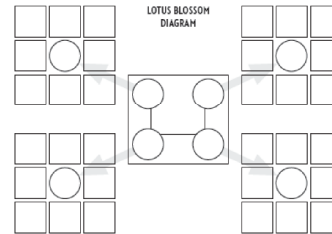
3. Imagine solutions to the question by capturing one idea on each sticky note. Each round of brainstorming will be 3-5 minutes long.
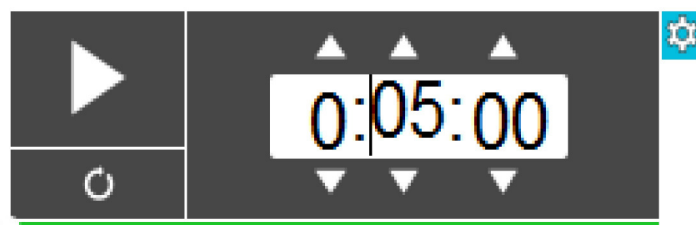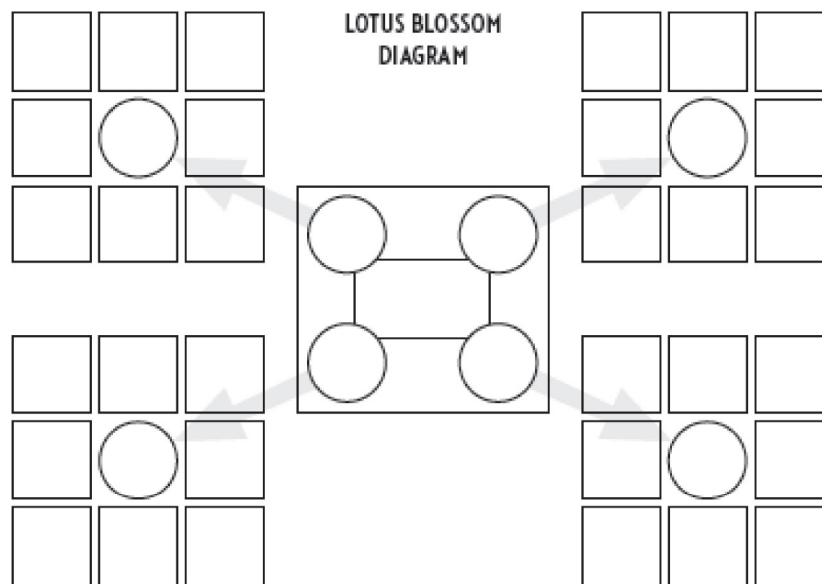
- Individual (everyone brainstorms by themselves in silence)
- Paired (brainstorm in pairs: one shouts ideas the other captures ideas)
- Group (everyone captures their own ideas and shares them aloud)

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".
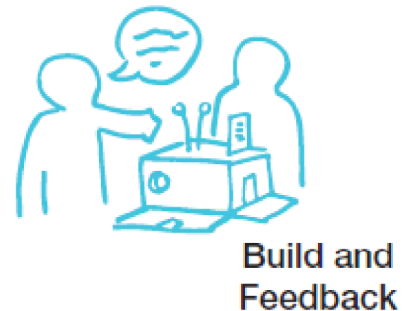
5. Select one idea or a set of ideas that fit together that you are really excited about.

Lotus Blossom Diagram

1. Do an initial brainstorm, filling the area immediately around the centre of the Lotus Blossom with ideas.

2. Choose the top 4 ideas from the brainstorm (A, B, C, D), and move them to the four outer blossoms.

3. Use the idea in the centre of each blossom as the catalyst for a new brainstorm, focused on building out that idea.

LOTUS BLOSSOM DIAGRAM

0:05:00

Prototype 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.

MashUp

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 iteas into a new idea.

5. Together, sketch the new idea.

Mash Up

Sketch

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.
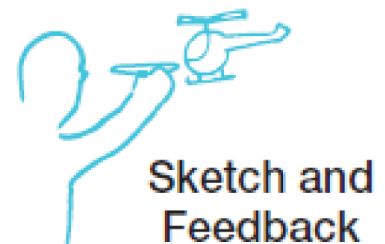
Build

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.

Role Play

Steps in the Activity

Role Play and Feedback

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.

Time to create!