



YOUR SKILLS,
FUTURE.



Innovation Creativity & Entrepreneurship

Feature Challenge: Related to Automotive & Mobility Sector
Student Workbook



Be prepared for success, take **TECH.**



Empathy & Need Finding

Potential Challenge 1

Community Partner:

McMaster University: Centre for Automotive Materials & Corrosion - Dr. Beth McNally

Challenge:

Notes:



ICE Gear 1

What is empathy?

Why is it important to build empathy and understand the needs before trying to find innovative solutions to a problem?

What are needs?

What are needs not?



Empathy & Need Finding

Potential Challenge 2

Community Partner:

Challenge:

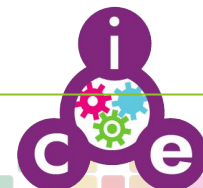
Notes:

Potential Challenge 3

Community Partner:

Challenge:

Notes:





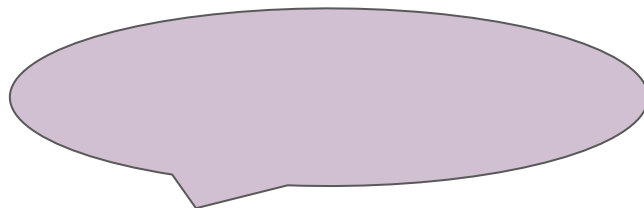
Your Selected Challenge ...

How might we



Gear 2: Need Ideation

Write your “How might we....” question from the previous page into the bubble. Then start listing all of the different needs that you heard or can think of.





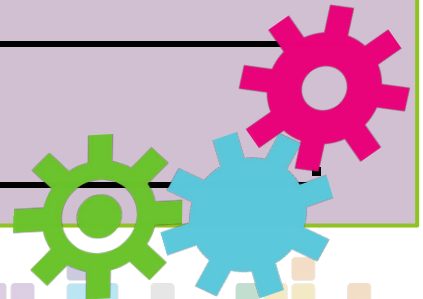
Shifting Gears ... How might we?

In your group or individually select one unmet need from any of the challenges that you observed that seems interesting or compelling.

You will write a “how might we” question related to this need in this format:

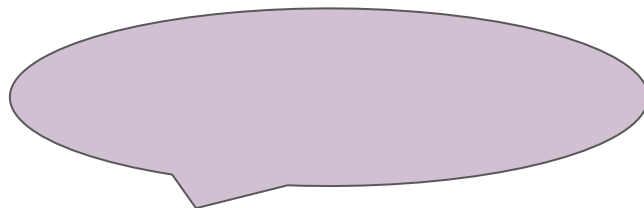
How might we help _____

with their need to _____



Gear 2: Solutions Ideation

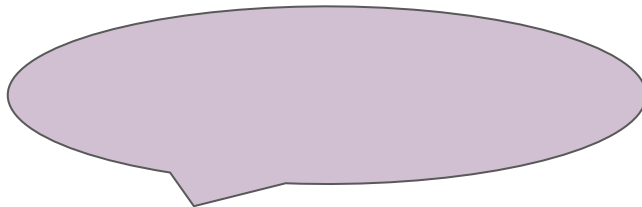
Write your “How might we....” question from the previous page into the bubble. Then start generating ideas to meet the need. Every idea is a good idea! Do this part quickly!



Gear 2: Ideation Cont'd

Organize your ideas into the following categories: Seen It (it's been done before!), Could Be Fun and Radical Change.

Seen It:



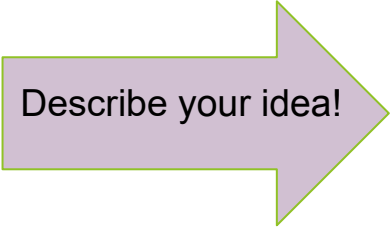
Could Be Fun:

Radical Change:



Gear 2: Sketching & Prototyping

Based on all of your ideas select the one that you think is best and draw it below to showcase your idea.



Describe your idea!

Those working in the printed student workbook will draw their prototype. You could also draw on paper or design in a software of choice.



Gear 2: Mash-Up Prep

As others share their ideas document the parts of their ideas that you like the best.

Idea 1	Idea 2	Idea 3	Idea 4



Shifting Gears - 2 to 3

How Might We Question:

Draw a Picture of your idea:

On a piece of paper

Describe your idea
(In 1-2 Sentences):



Gear 3: Making Strategic Choices

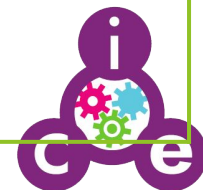
Who is your customer?	What is your product or service?	How will you win?	Does your solution meet the needs of the target market?



Gear 3: Presenting Your Innovations

Create a 5-minute presentation that answers the following questions (can be a recorded google meet, video, google slides, etc., your choice). Use the template below to help you plan your presentation. Evaluate your plan...add to it if you need to, take away from it if you need to.

What was the need you heard?	What is your idea? Share the single sentence that describes it.	What is the strategy?	What are the impacts and consequences of your idea and strategy on the world around you?



Your Pitch

- Evaluate your plan...add to it if you need to, take away from it if you need to.
- Question what you have done.
- REFINE YOUR PLAN, no restrictions! Present your idea however you like...
- Remember you can present your idea in any format that works best for you (video, slides, prototype (take a picture) etc)

Once you have your presentation complete please submit your presentation to your SHSM Lead.

SHSM Leads are then invited to submit their top 2 for each challenge for review to the industry partner related to the challenge that was selected.

Leads please submit these presentations through this [google form](#) or email to Donna Norrie at dnorrie@octe.ca or Veronica Kleinsmith @ vkleinsmith@octe.ca





YOUR SKILLS,
YOUR FUTURE.

OVIN Career Navigator

Go to the OVIN [Career Navigator](#) and select high school student. No need to sign up. List the careers associated with each of the Sector Segment below.

Connected & Autonomous Vehicles (C/AV)	Auto & Parts Manufacturing (APM)	Tool, Die & Mold (TDM)	Aftermarket, Maintenance & Repair (AMR)	Freight & Goods Movement	Mobility Planning & Infrastructure





Post-Survey

All students are asked to complete the very short post-survey that will be provided by your SHSM Lead.

Collection of this data for our Future Forward program is what allowed OCTE to plan this free event for you.



