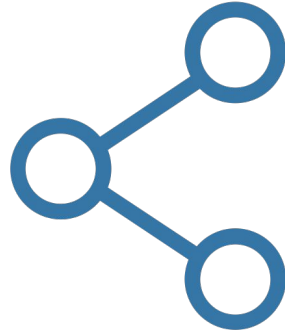


# CIS Ontario Connects

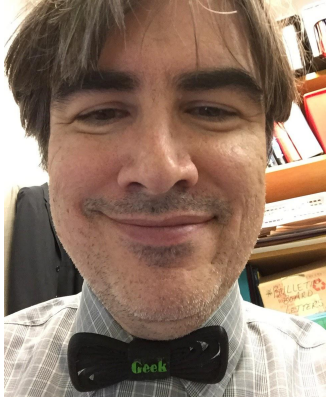


Guiding Question: What new teaching & learning opportunities do **Maker/Design & STEM spaces** present to us?

# Morning Session

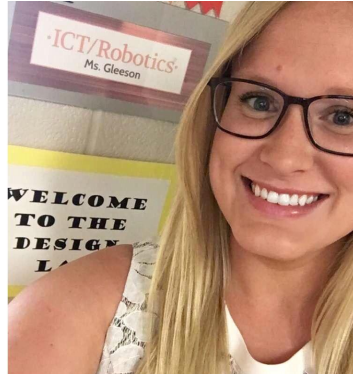
**Facilitators: Laura Gleeson, Tim Cooper, Afzal Shaikh**

# Morning Facilitators



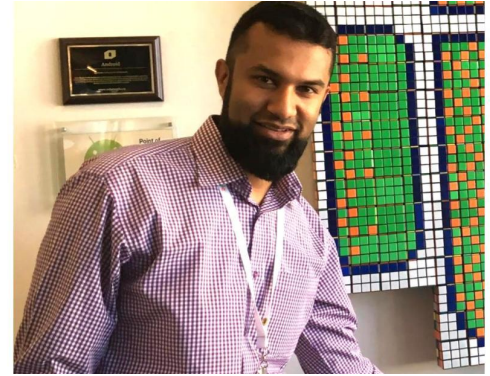
**Tim Cooper**

Technology Teaching and  
Learning Coordinator  
@Yorkscool



**Laura Gleeson**

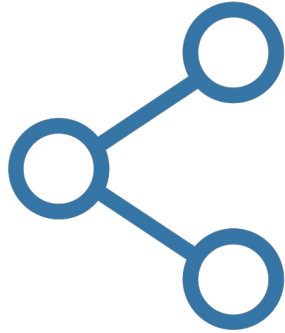
Technology Integration  
Specialist @Bayviewglen



**Afzal Shaikh**

Technology Integration  
Specialist @Yorkscool

# CIS Ontario Connects



Guiding Question: What new teaching & learning opportunities do Maker/Design & STEM spaces present to us?

# Session Format



<b>Welcome</b>	5 min	Facilitator Introductions
		Session Mindset & Format review
<b>Learn</b>	20 min	Session facilitators to share their experience / learning
<b>Share &amp; Reflect</b>	35 min	Facilitated table sharing of expertise and prior knowledge
<b>Deep Dive</b>	35 min	Facilitated deep dive into a session subtopics. Participants choice where they go next
<b>Record &amp; Consolidate</b>	30 min	Participants return to original table group for a consolidation and poster exit ticket activity
<b>Gallery Walk</b>	Exit	Exit while taking pictures of other table group posters. Continue conversations and connections during the coffee break.

# Core Agreements & Session Tips

- Group sizes of 4 - 7 people are best for discussion. If you find yourself in a larger group try and form a smaller one.
- During the deep dive break-out session if you find that your group is too big, feel free to start a new one.
- Respect your own air-time, and that of your fellow participants
- We are all experts:
  - Experts in how to collaborate
  - Experts in how to support one another
  - Experts in how to be generative in our dialogue
  - Experts in being generous listening
- We don't know it all:
  - We all have room to grow, we benefit most when we listen with an open mind
  - We all come from different schools and different cultural contexts, be curious about that
- Use your placemat to record and share what you've learned
- Continue the conversation during the break and at lunch

What new teaching & learning opportunities do Maker/Design & STEM spaces present to us?



# Your Placemat

This is the key to effective learning from today's session:

- Follows the flow of the session
- Provides you with prompts and space to ask questions, write ideas, and document your learning.

It is the artifact of the session. Use it, write on it, doodle, sketch note, whatever helps you learn the most from the the day.

**Name:** \_\_\_\_\_ **Session Focus:** \_\_\_\_\_

**Learn**  
*Use this section to take notes during your session facilitator presentation. What questions do you have? What areas might you like to explore next?*

**Reflect**  
*Guiding question: What insights and experience do I have to contribute to this guiding question?*

*What questions do I have about this guiding question and this topic in general?*



Name: \_\_\_\_\_

## Reflect

*Guiding question:*

*What insights and experience do I have to contribute to this guiding question?*

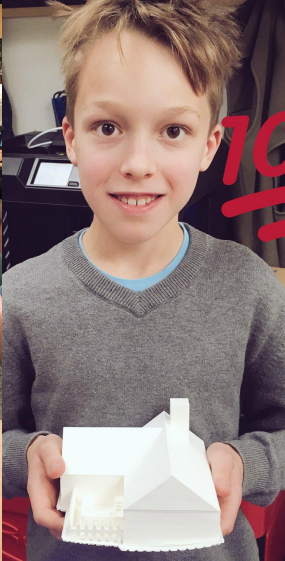
*What questions do I have about this guiding question and this topic in general?*

Session Focus: \_\_\_\_\_



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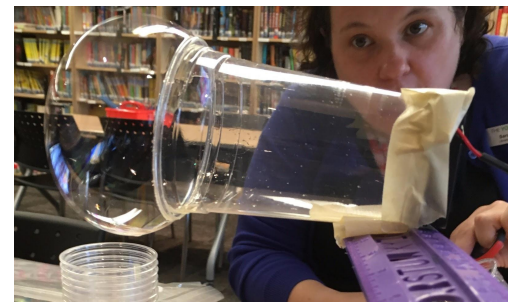
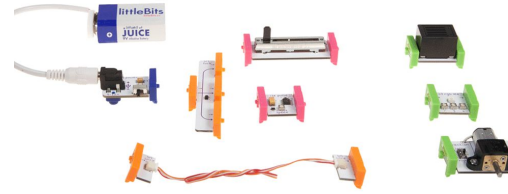


# Afzal Shaikh

 @Edushaikh

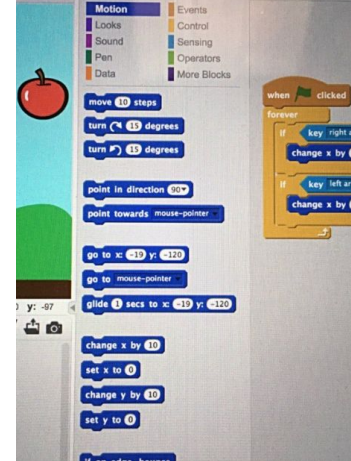


**LEARNING,  
INNOVATION &  
TECHNOLOGY @  
THE YORK SCHOOL**

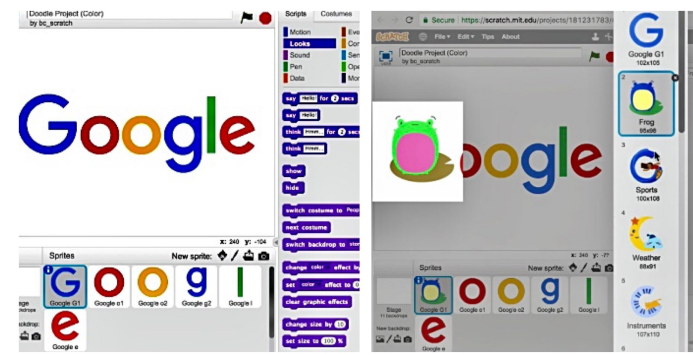


Tech Stars

3D Designers



Are these the new opportunities that Maker/Design teaching present?

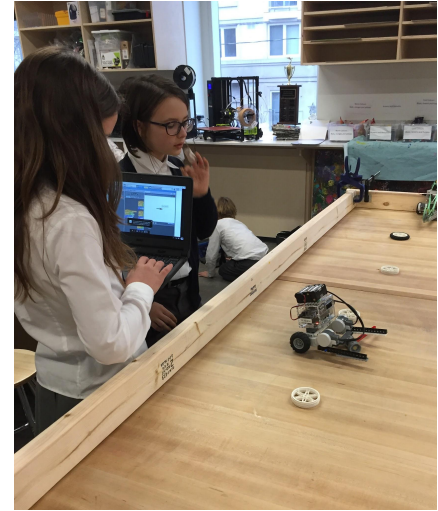
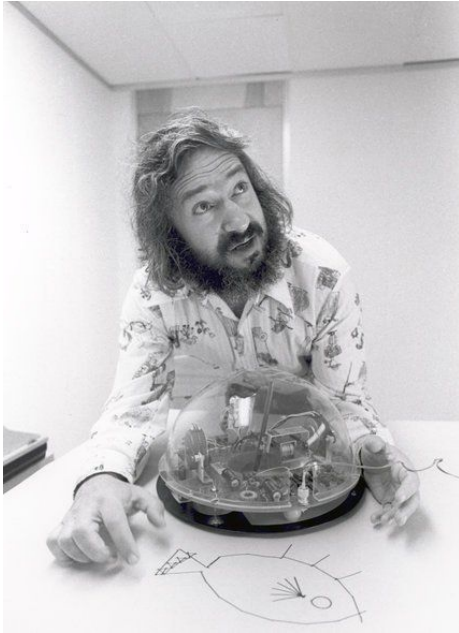
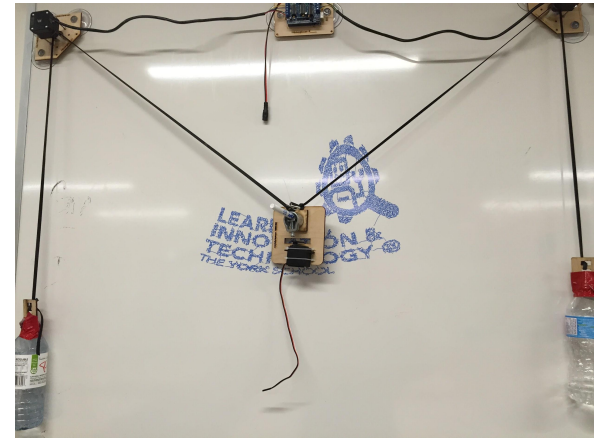




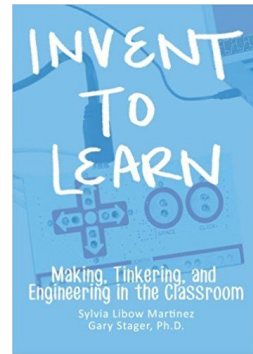
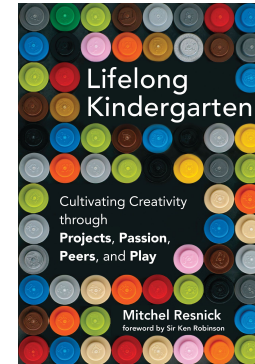
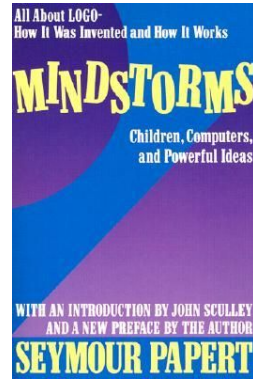
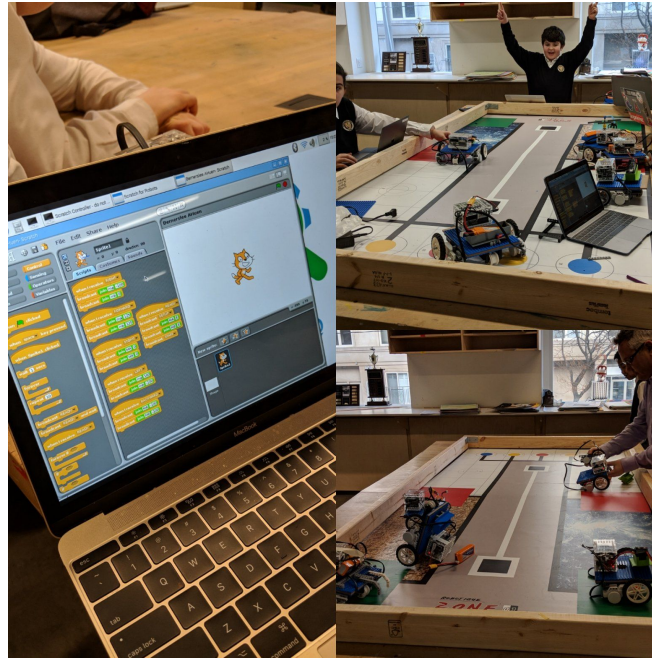
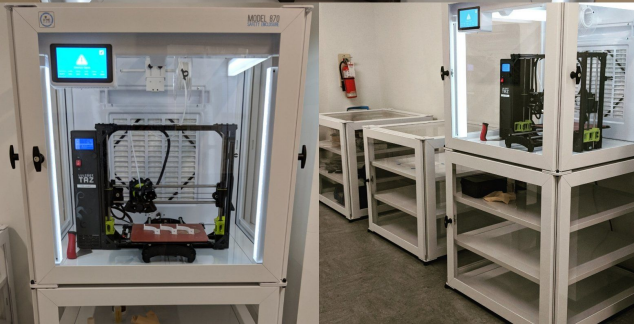
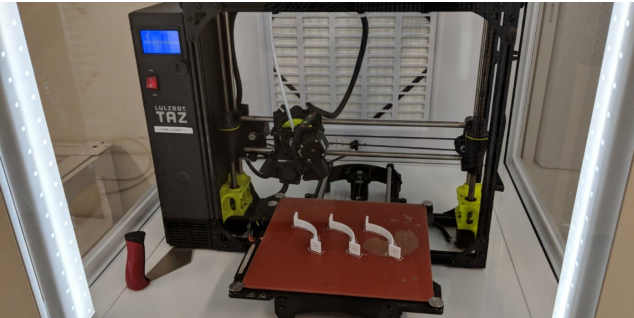
**LEARNING,  
INNOVATION &  
TECHNOLOGY @**  
THE **YORK** SCHOOL



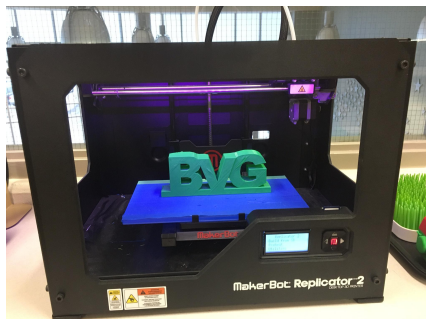
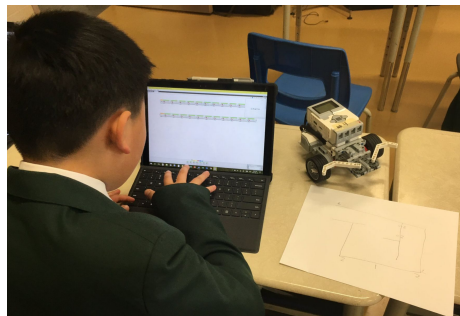
**TIM  
COOPER  
@TCOOPS**



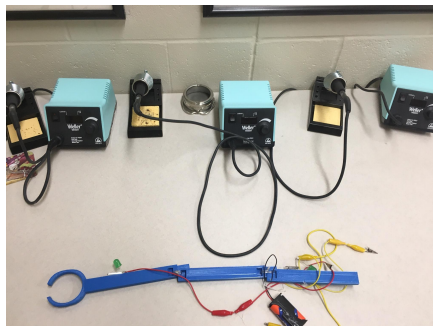
# THE YORKSCHAD LAB



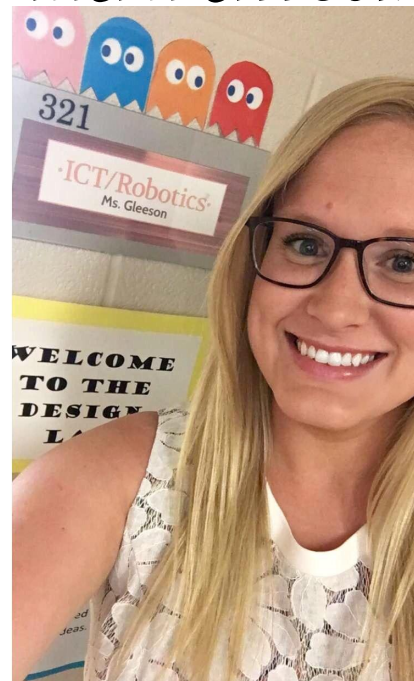
Making is communication, experimentation, and imagination.  
It is a literacy of expressing ideas through the use of inspiration, tools and materials.



Bayview Glen  
INDEPENDENT : SCHOOL



**LAURA GLEESON**



 **@lauragleeson12**

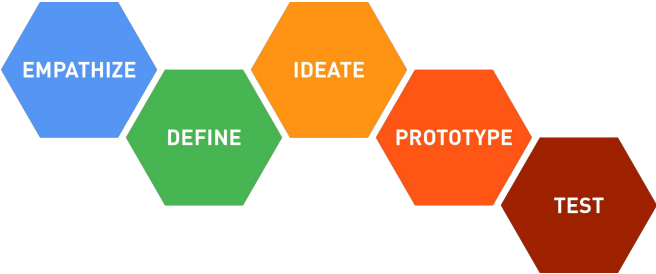
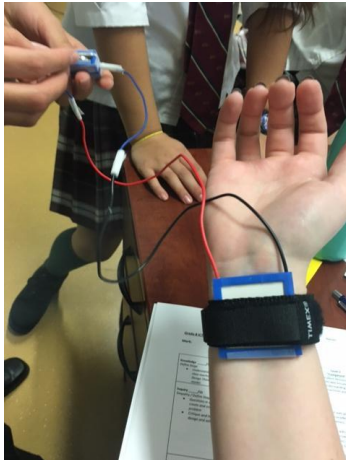
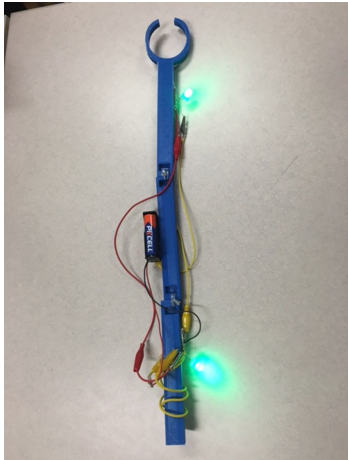
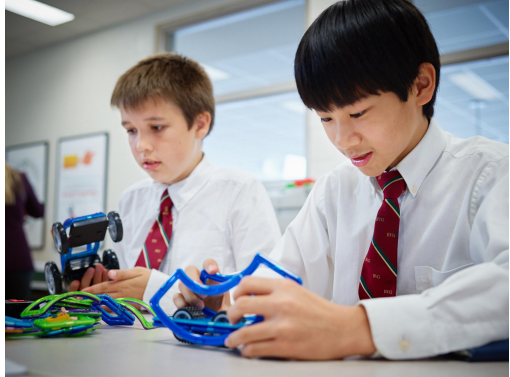


Innovative Educator Expert



# The Creation of the BVG Design Lab

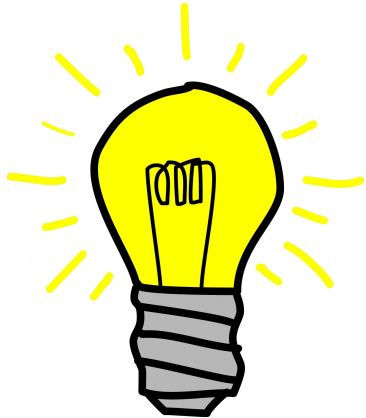
**FAIL**  
[F] **F**IRST  
[A] **A**TTEMPT  
[I] **I**N  
[L] **L**EARNING



# Shared Ideas/Struggles/Goals

## ***OUR SHARED IDEAS:***

Wide Range of Tools  
Anyone can adapt to a maker culture  
Tools get easier each day ;)  
Start small and learn up



## ***OUR STRUGGLES:***

Time Management  
Teacher Supervision  
Tool Storage/ Maintenance

## ***OUR GOALS:***

Tool knowledge / literacy for teachers  
and students  
Curricular connections





# Share & Reflect

*#1 - What does \_\_\_\_\_ look like when it is implemented and functioning at its best?*

*#2 - Where can I look for answers, ideas and best practices to inform my own?*

#3 - What are some important steps to consider when planning & implementing?



35 minutes



Who is at my table?

*#1 - What does \_\_\_\_\_ look like when it is implemented and functioning at its best?*

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*#3 - What are some important steps to consider when planning & implementing?*

# Five Corner Deep Dive

This is where you explain the five corner exercise. There are four predetermined lines of inquiry to parse out the topic further, and there is room for a fifth corner where participants can start their own line of inquiry if not covered by the four initial ones.

Each of the four facilitators in the room will take one question and support a facilitated discussion into it.



35 mins



Who is at my table?

*#1 - What does \_\_\_\_\_ look like when it is implemented and functioning at its best?*

*# 2 - Where can I look for answers, ideas and best practices to inform my own?*

*#3 - What are some important steps to consider when planning & implementing?*

*#4 - What if...?*

*What would change if...?*

*If we could we would...*

*#5 - I used to think now I think.....*

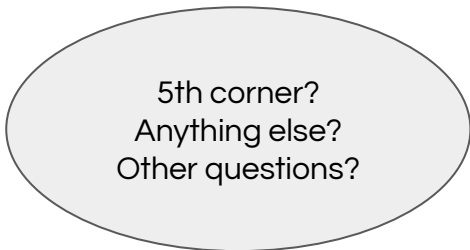
*#6 - It might seem like a good idea, but trust me, don't even think about...(share a failure or story that resulted in learning from something that did not go as planned)*

# Five Corners: STEM/MakeSpace

I have a great makerspace, now what?

How can building a culture of making lead to more effectively using technology to enhance learning?

Where do I start?



What capacities are realistic to build in your community?

What outside resources can you bring in to augment your STEM/MakeSpace?

What are some great examples of projects that take advantage of new Maker & STEM spaces?

# Return to your original table group

Record and consolidate your learning using your personal placemat.



30 minutes

## Record & Consolidate - 5 min

What is my draft answer to the guiding question?

Design an anchor image or logo for this session? How might you capture your learning in an image or icon?

Resources to read and follow up with (blogs, books, etc...)

Schools and individuals to follow up with:

Tips and Advice to take back:

What is one strategy/proposal that you will take back to your school to initiate, reinforce, and/or push innovation further?



# Regroup, Share & Consolidate (**Exit Artifact**) - 15 min

Your group must complete a **POSTER** that answers the session guiding question and consolidates all of the learning experiences by the group..

Your **HEADLINE** should capture the essence of your combined learning.

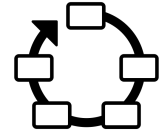
Your **ANCHOR IMAGE** should reflect something about the session topic or be a logo that somehow represents your collective learning

**Sticky notes or writing directly on the poster** should/could contain the following:

- 1) Resources to read and follow up with (Authors, Names of books, sites, thought leaders, videos etc.)
- 2) Names of educators, leaders to follow up with.
- 3) Schools to visit to see in action
- 4) Tips, ideas, planning principles, Best Practices, vendors,
- 5) Important notes to share and explore further

**Headline.....**

Anchor Diagram . Logo



Resources



People



Ideas & practices

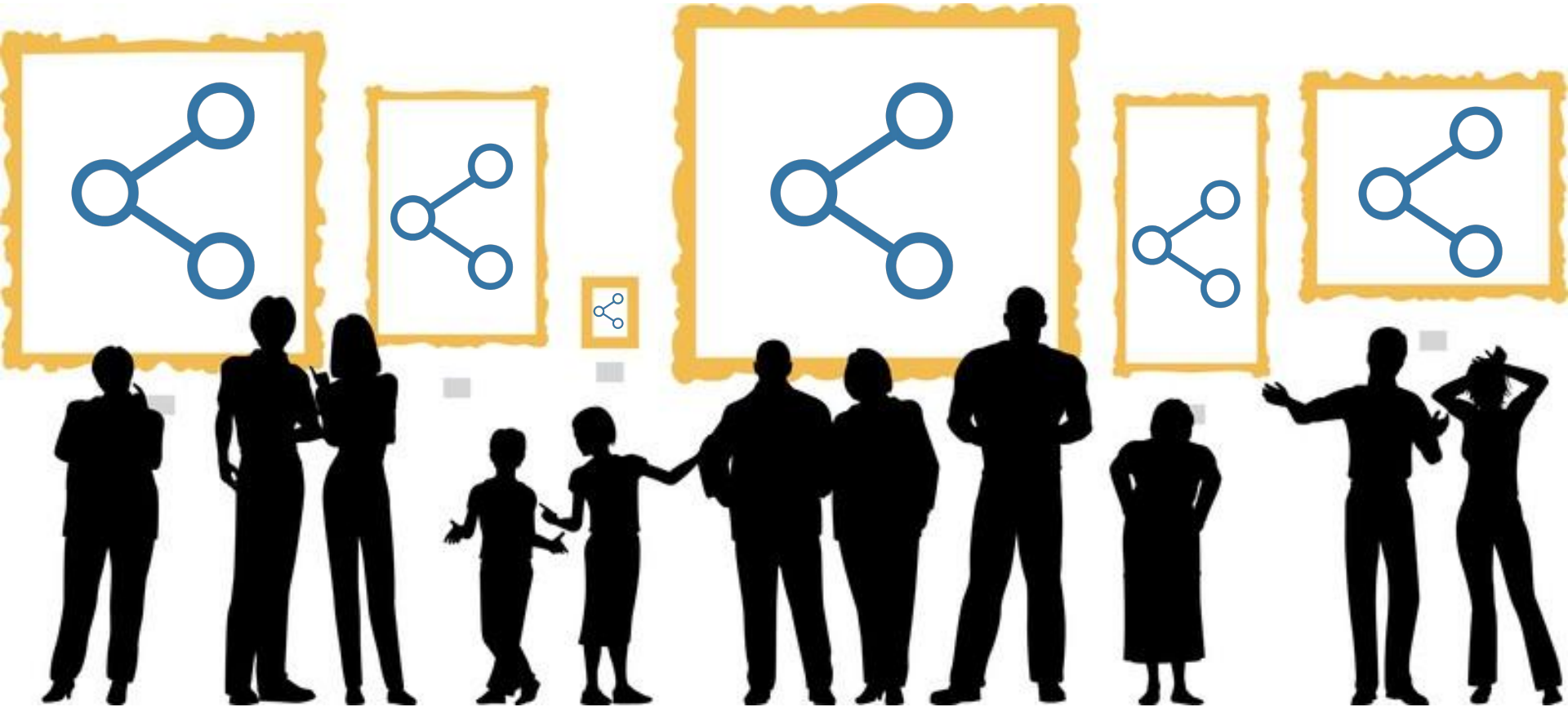


Tips & Tricks





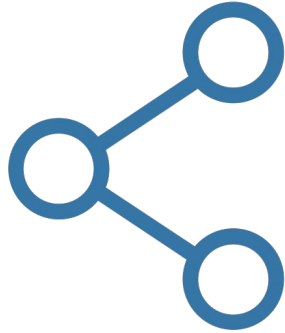
# Gallery Walk



# Afternoon STEM Session

**Facilitators: Kyle Cardinale, Diliana Popova**

# CIS Ontario Connects



Guiding Question: How do we create a makerspace that is meaningful and impactful in our immediate community and beyond?

# Session Format



<b>Welcome</b>	5 min	Facilitator Introductions
		Session Mindset & Format review
<b>Learn</b>	10 min	Session facilitators to share their experience / learning
<b>Share &amp; Reflect</b>	30 min	Facilitated table sharing of expertise and prior knowledge
<b>Break</b>	15 min	Continue conversations and connections during the coffee break.
<b>Deep Dive &amp; Record</b>	35 min	Facilitated deep dive into a session subtopics. Participants choice where they go next. Consolidation and poster exit ticket activity.
<b>Consolidate</b>	25 min	Participants return to original table group to share their findings.
<b>Gallery Walk</b>	Exit	Exit while taking pictures of other table group posters.

# Core Agreements & Session Tips

- Group sizes of 4 - 7 people are best for discussion. If you find yourself in a larger group try and form a smaller one.
- During the deep dive break-out session if you find that your group is too big, feel free to start a new one.
- Respect your own air-time, and that of your fellow participants
- We are all experts:
  - Experts in how to collaborate
  - Experts in how to support one another
  - Experts in how to be generative in our dialogue
  - Experts in being generous listening
- We don't know it all:
  - We all have room to grow, we benefit most when we listen with an open mind
  - We all come from different schools and different cultural contexts, be curious about that
- Use your placemat to record and share what you've learned
- Continue the conversation during the break and at lunch

Beyond buying cool 'stuff':  
How do we create a makerspace  
that is meaningful and impactful  
in our immediate community and beyond?

Name: \_\_\_\_\_

## Learn

*Use this section to take notes during your session facilitator presentation. What questions do you have? What areas might you like to explore next?*

Session Focus: \_\_\_\_\_



## Reflect

*Guiding question:*

*What insights and experience do I have to contribute to this guiding question?*

*What questions do I have about this guiding question and this topic in general?*

# Your Placemat

This is the key to effective learning from today's session:

- Follows the flow of the session
- Provides you with prompts and space to ask questions, write ideas, and document your learning.

It is the artifact of the session. Use it, write on it, doodle, sketch note, whatever helps you learn the most from the the day.

**Name:** \_\_\_\_\_ **Session Focus:** \_\_\_\_\_

**Learn**  
*Use this section to take notes during your session facilitator presentation. What questions do you have? What areas might you like to explore next?*

**Reflect**  
*Guiding question: What insights and experience do I have to contribute to this guiding question?*

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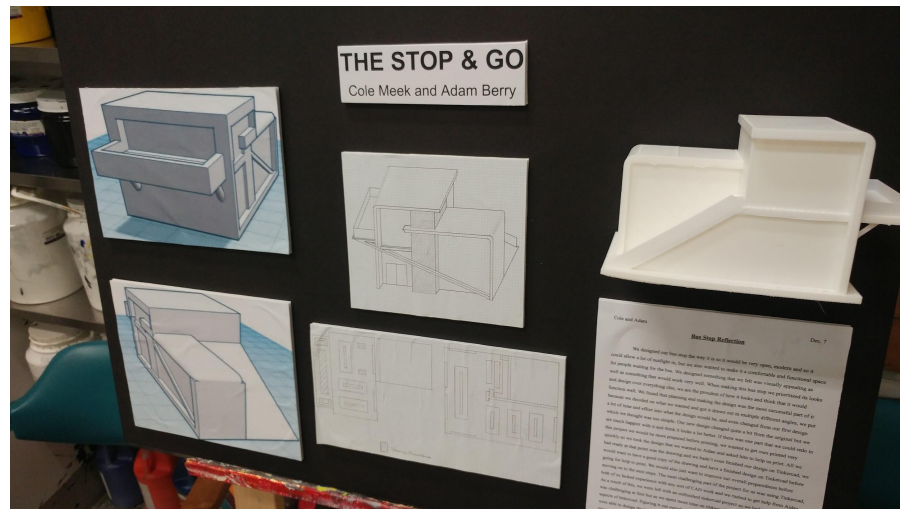
Diliana Popova, Crescent School



Laser Cutting + 3D Printing + iPads + Traditional Art Studio



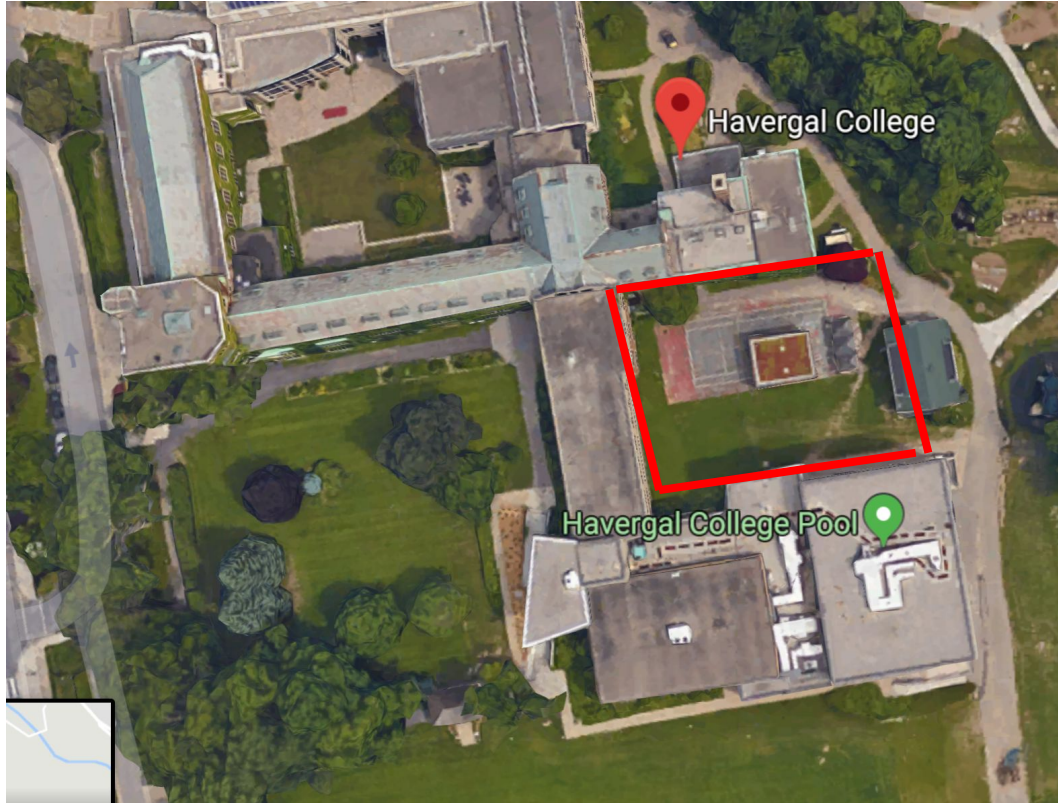
Diliana Popova, Crescent School



Architecture Models created using laser cutter and 3D printers.

Kyle Cardinale

Havergal  
COLLEGE



Kyle Cardinale

Havergal  
COLLEGE



# Share & Reflect

*#1 - What does \_\_\_\_\_ look like when it is implemented and functioning at its best?*

*#2 - Where can I look for answers, ideas and best practices to inform my own?*

#3 - What are some important steps to consider when planning & implementing?



25 minutes



Who is at my table?

*#1 - What does \_\_\_\_\_ look like when it is implemented and functioning at its best?*

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# Five Corner Deep Dive

This is where you explain the five corner exercise. There are four predetermined lines of inquiry to parse out the topic further, and there is room for a fifth corner where participants can start their own line of inquiry if not covered by the four initial ones.

Each of the facilitators in the room will take one question and support a facilitated discussion into it.



25 mins

# Five Corners: STEM/MakeSpace

- 1) **Headspace:** How do we encourage and grow a culture of making?
- 2) **Now What:** I know I need one but where do I start?
- 3) **Thinking BIG:** How can makerspaces become launch-pads for social innovation, global citizenship and creative entrepreneurship?
- 4) **Nitty Gritty:** How do we manage the scheduling, booking, staffing and day to day logistics of a makerspace?
- 5) **Learning Structures:** How do we design successful curricular and co-curricular programs around makerspaces? What types of projects could you see? What are the limitations?
- 6) **The 'C' Word:** How do we encourage a culture of faculty collaborations and subject area cross-pollination?





Who is at my table?

*#1 - What does \_\_\_\_\_ look like when it is implemented and functioning at its best?*

*# 2 - Where can I look for answers, ideas and best practices to inform my own?*

*#3 - What are some important steps to consider when planning & implementing?*

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*What would change if...?*

*If we could we would...*

*#5 - I used to think now I think.....*

*#6 - It might seem like a good idea, but trust me, don't even think about... (share a failure or story that resulted in learning from something that did not go as planned)*

# Return to your original table group

Record and consolidate your learning using your personal placemat. - **5 min**



20 minutes

## Record & Consolidate - 5 min

What is my draft answer to the guiding question?

Design an anchor image or logo for this session? How might you capture your learning in an image or icon?

Resources to read and follow up with (blogs, books, etc...)

Schools and individuals to follow up with:

Tips and Advice to take back:

What is one strategy/proposal that you will take back to your school to initiate, reinforce, and/or push innovation further?



# Regroup, Share & Consolidate (Exit Artifact) - 20 min

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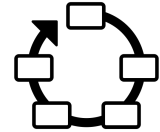
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- 2) Names of educators, leaders to follow up with.
- 3) Schools to visit to see in action
- 4) Tips, ideas, planning principles, Best Practices, vendors,
- 5) Important notes to share and explore further **20 min**

**Headline.....**

Anchor Diagram . Logo



Resources



People



Ideas & practices



Tips & Tricks



# Gallery Walk

