

Learning skills and executive functions



### Session Format (120 min)

Welcome	5 min	Facilitator Introductions & overview	
Learn	25 min	Session facilitators to share their experience / learning	
Reflect & Share	25 min	Facilitated table <b>sharing of expertise and prior knowledge</b>	
Deep Dive	30 min	Facilitated <b>deep dive</b> into a session sub questions.	
Record & Consolidate	30 min	Participants consolidate with the infographic <b>exit ticket</b>	
Gallery Walk	5 min	Conversations and connections during the coffee break.	



### **Core Agreements**

- 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 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,

#### Network & Connect

Continue the conversation during the breaks and over lunch



### Nice to Meet you!



Tracy Faucher
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# Learning skills and executive functions

"How might we intentionally <u>develop</u> learning skills and executive functions in our students and <u>measure</u> growth?"

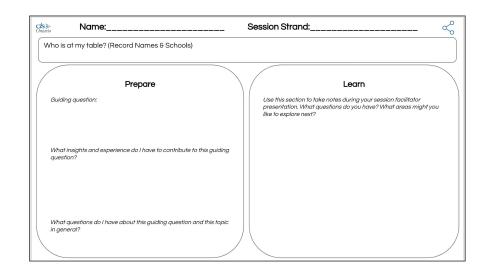


# Your Conference Placemat

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.





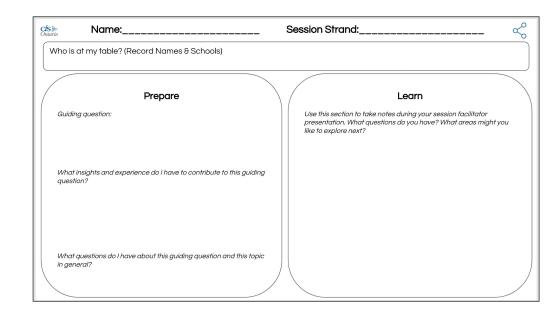
# Prepare & Learn

#### **Prepare**

- 5 min solo reflection and expertise inventory.
- What do you know already and what are you curious about?

#### Learn

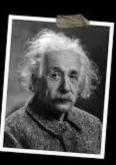
- 20 min presentation from your facilitators.
- Take notes
- Write down questions and ideas



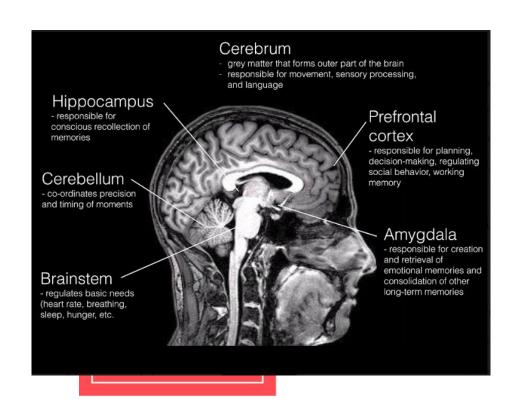


### Teaching with the Brain in Mind

"Education is not the learning of facts, but the training of the mind to think." -Albert Einstein







### **Executive Function Adam Cox's Working Map**

PILLARS	INITIATION	ORGANIZATION	PLANNING	ATTENTION	WORKING MEMORY	FLEXIBILITY	SELF AWARENESS	REGULATING EMOTION
What it means:	The ability to get started on a task without having to be asked multiple times.	The ability to manage space and resources for learning. Without it, it is hard to get momentum to get work done.	The ability to manage time and the ability to prioritize.	The ability to control attention and focus in order to start and complete tasks.	The ability to remember information long enough for it to be stored in long term memory.	The ability to adapt by shifting one's focus and pace as needed.	The ability to understand how one is seen by others.	The ability to express one's feelings in proportion to the events.
EXAMPLES of what a WEAK pillar might "sound" like.	"I could wait and do this tomorrow."	"I am having trouble keeping my process journal updated."	"I thought it would only take 30 minutes to do this!"	"I wanted to finish research on this topic tonight but I kept getting up or playing video games."	"I knew the PP criterion and expectations but I totally forgot it when it came to writing up my project."	"I know I have to move on to the next criterion and answer those prompts, but I need to get this one done perfectly first."	"I was only teasingI don't see what the big problem is."	"I didn't reach out to my supervisor to schedule a meeting so now I feel that my supervisor thinks I don't care."



### My Top 10 Favourite EF Strategies



Teach Neuroscience



Study Strategy Infomercial



Not going alone



Agenda Skills



1:1 Check ins



Active Learning



Homework Club



Reflection



Mindfulness

Teachers take on practice

### Executive Functioning Program Pieces

#### All Boys - Planning Organizing

- Bookended timetable Form time in the AM/PM
- Explicit teaching of Google cal, use of Power school as a LMS

#### Wernham West Centre for Learning Programs - Planning, Organizing, Initiating Action, Working Memory

- Homework Club/ Hub Grades 5 9
- One on one and small group skill development
- Weekly Locker/desk checks
- Study skills Year 5 -10

#### **Support Services** - Regulating Emotion, Flexible thinking

Mindfulness groups, Chillaxing club, Zones of Regulation taught in life skills



# Looking at Learning Skills:

What are they?

How can we capture them?

How can we help our students be more aware of them?

Learning Skills and Work Habits	Sample Behaviours	Collaboration	The student:  • accepts various roles and an equitable share of work in a group;		
Responsibility	The student:  fulfils responsibilities and commitments within the learning environment;  completes and submits class work, homework, and assignments according to agreed-upon timelines;  takes responsibility for and manages own behaviour.		<ul> <li>responds positively to the ideas, opinions, values, and traditions of others;</li> <li>builds healthy peer-to-peer relationships through personal and media-assisted interactions;</li> <li>works with others to resolve conflicts and build consensus to achieve group goals;</li> <li>shares information, resources, and expertise and promotes critical thinking to solve problems and make decisions.</li> </ul>		
Organization	The student:  devises and follows a plan and process for completing work and tasks;  establishes priorities and manages time to complete tasks and achieve goals;  identifies, gathers, evaluates, and uses information, technology, and resources to complete tasks.	Initiative	The student:  looks for and acts on new ideas and opportunities for learning;  demonstrates the capacity for innovation and a willingness to take risks;  demonstrates curiosity and interest in learning;  approaches new tasks with a positive attitude;  recognizes and advocates appropriately for the rights of self and others.		
Independent Work	The student:  independently monitors, assesses, and revises plans to complete tasks and meet goals;  uses class time appropriately to complete tasks;  follows instructions with minimal supervision.	Self-regulation	The student:  sets own individual goals and monitors progress towards achieving them;  seeks clarification or assistance when needed;  assesses and reflects critically on own strengths, needs, and interests;  identifies learning opportunities, choices, and strategies to meet personal needs and achieve goals;  perseveres and makes an effort when responding to challenges.		

#### Collaboration: From "Report Card Talk" to Student Co-Constructed Language

COLLABORATION						
Report Card	Accepts various roles and equitable share of work in a group	Responds positively to the ideas, opinions, values and traditions of others	Builds healthy peer to peer relationships through personal and media assisted interactions	Works with others to resolve conflicts and build consensus to achieve group goals	Share information, resources, and expertise and promote critical thinking to solve problems and make decisions	
What it means to us	- Everyone in a group is important - No one should be "bossy" - Divide tasks equally - complete the part assigned to you and then help others	- every idea should be heard- no one in the group should say "that's stupid" - if there is a disagreement, take a vote - it is ok to disagree but we should try not to get upset - it is a good idea to try different ideas to find the best one	- only write project related things on the group google doc -take turns doing different things -divide roles on strengths (if we can) -if there was a problem in the group do not talk about it on social media or behind the person's back	-vote if there is a problem - ask teacher for help - check the rubric or assignment sheet	- don't "hog" information so you can seem the smartest - if you find something that goes with someone else's work, tell them about it -double check everyone's work to make sure they have the "WHY" answered -ask teacher for help	

This was done in class with Post it Notes first. Students consolidated ideas and teacher created this and large printed it to hang in the classroom.

### Capturing and student accountability are united!

The Learning Skill I am working on today is: The I Independent Work Collaboration Regulation lam going to sho I am going to show my learning in collaboration Else and I get in fights with my friends " Student Reflection on their progress and next steps: Well I did not get in a bigut with my Today gaoup today but I didn't share my doing ideas because they were different from my group. Maybe mext time I my tr can share and dolea and sisk bor a vote it is not the Teacher Feedback on their progress and next steps: This is a hard one to find balance with. I'm glad you I We the bothers you. You can say that you did not respond It was a negatively, but we are still working on how to respond did more positively. I like your idea of a vote - I want after. to make sure your voice is heard as well. What plan can we make in case the group does not vote What do'or your idea and you feel upset? asked for

# The Learning Skill I am working on today is: Independent Work Collaboration Regulation I am going to show my learning in regulation asking my teacher questions when I ask questions that is clarifying the problem.

#### Student Reflection on their progress and next steps:

I asked questions and that helped me but I think I had more questions. I felt clarified and did my paragraph. Maybe next time I can ask all my questions at the same time.

#### Teacher Feedback on their progress and next steps:

I Loved your questions today! And you can't have too many! Keep 'en coming! I know you feel really nervous about asking questions, so I'm really provid of you today! You don't have to ask your questions are at once but if that is a strategy that makes you feel better than lets try it!

Name:				/35	
Expectation	Level 4 80-100%	Level 3 70-75%	Level 2 60-69%	Level 1 50-50%	
Knowledge and Unders	tanding /10	8.5-10 points	7.5 points	6.5 points	5.5 points
A3.4 Describe significant maturities of cooperation and conflict among the colonies during Confederation discussions.	Preliminary and Final Proposal  ☐ Point makes sense for the colony and is different from other group members. ☐ durnthise relevant resolved issues. ☐ bernthise relevant resolved issues. ☐ Point is securitarly explained. ☐ Specific evidence and obtail is used to support ideas.	Esterding	Meeting	Approachs ng	Limited
Thinking and Inquiry	/10	8.5-10 points	T.5 points	6.5 poets	5.5 points
A1.1 Evaluate the importance of various internal and external factors that played a role in the creation of the Dominion of Canada	Bill Reflection  Point makes were for the colony and is different from other group members.  Addresses relevant anticipated benefits  Addresses relevant anticipated negative consequences  Makes specific connections to the Bill  Specific evidence and offsall is used to support ideas.	Extending	Meeting	Approachi	Limited
Communication		4-5 parts	3.5 points	3 ponts	2.5 post
A2.7 Communicate the results of their inquiries steing appropriate vocateulary and presentation formal for a political conference.	s using Voice is loud and class to street.  Voice is loud and class  Voice is loud and class  Voice by loud and class  Voice by loud and professional and suits		Meeting	Approachi ing	Limited
Application	710	8.5-10 points	7.5 points	6.5 points	5.5 points
A2 5 Evaluate evidence and draw conclusions about the perspectives of the different colonies on significant teaues concerning the charlon of the Dominion of Caranda	Vote justification  I have makes aware for the colony and is different from other group members.  I have to directly related to colony's voting choice.  I have to accustely explained.  I specific evidence and debat in speed to support ideas.	Extending	Meeting	Approachi ng	Limited

Responsability	Organization	Independent Work	Collaboration	Initiative	Self Regulation

Teacher Feedback	
Teacher Feedback	

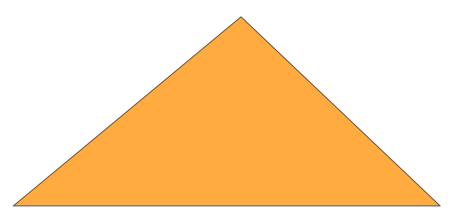
Learning skills are added to
Learning Of rubrics. They do not
impact the overall mark, but they
are there to let the student know
how they did in these areas.
Teachers use N, S, G and E. The
student's reflection is around how
they did with the Learning Skills and
how that affected their work.
Teacher Reflection provided LS
feedback.

Not all learning skills are always assessed. This was a group project so the class and he teacher decided Independent Work should not be on the rubric. Teacher has greyed it out so that this is clear.

### Triangulation of Evidence of Learning - Anne Davies

#### **Observation of Learning**

Observing students and using checklists to record outcomes



#### **Conversations**

assess work in relation to criteria to gauge understanding

#### **Products Students Create**

to assess achievement of outcomes



#### Example 1: (student reflection pages)

Add N-Needs Improvement

S- Satisfactory

G-Good

E- Excellent

 This will be added for both student reflection and teacher reflection. We are hoping this will help what they see on their report card have more meaning and they will understand why they have earned what they have.

#### Overall:

- Ask students what they value in each model
- Next year all teachers will do one, or both

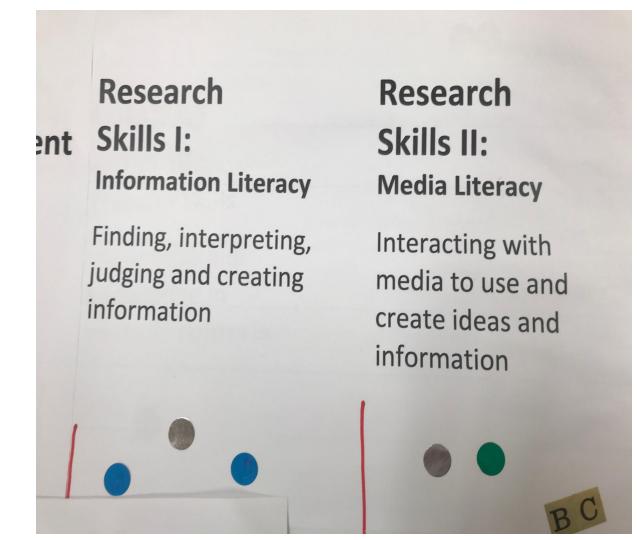
#### Still to do:

Finalize Tracking Draft

## Insights from TFS Experience

- Teacher PD Mapping the Scope and Sequence Over Time
- Teaching EF and new Resources
- Tracking and Teaching Reflection

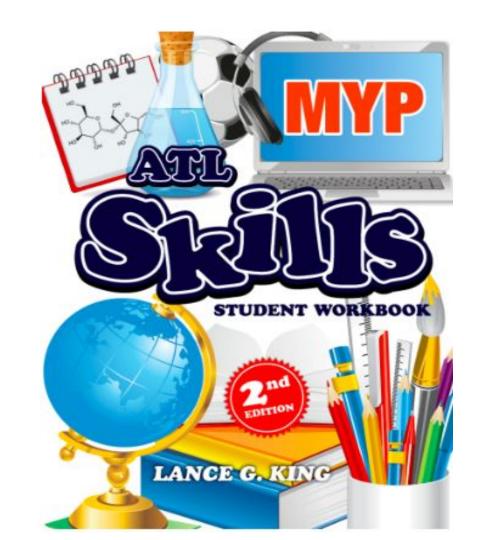
Developing a scope and sequence of skills across subjects



Executive
Functions in the
IB

Approaches to Learning

**New Resources** 



# Teaching Reflection

- Students will gain skills in self-reflection and use of feedback to improve learning
- Students will contribute their perspectives and experiences with the process to improve the system next year.

#### Purposes of the reflection process

1. Practice in using feedback from teachers to improve learning.

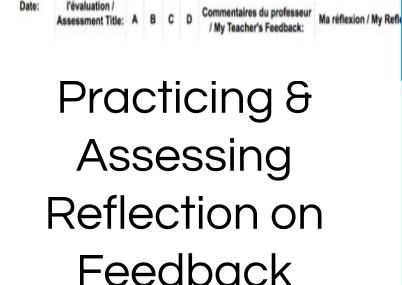




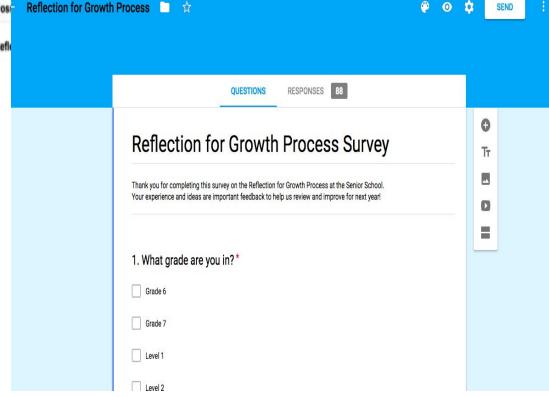
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### **Senior School**

#### Assessment Tracking Folder: CHW3M!



Criteria:



### Assessment of Executive Functions

When specific ATL skills become an explicit focus for teaching and learning, students can begin to take responsibility for their own development. Over time, students can identify themselves and their competence in any learning strategy using terms like these:

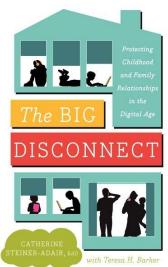
- Novice/ beginning students are introduced to the skill and can watch others performing it (observation)
- Learner/ developing students copy others who use the skill and use the skill with scaffolding and guidance (emulation)
- Practitioner/ using students employ the skill confidently and effectively (demonstration)
- Expert/ sharing students can show others how to use the skill and accurately assess how effectively the skill is used (self-regulation)

A concept-based curriculum that uses ATL skills effectively enables all students to become stronger, more selfregulated learners.

### Managing Attention - Supporting "Screenagers"



What strategies do schools have in place to develop a healthy digital life?



How do we protect childhood and family relationships in the digital age?- Catherine Steiner

### Teaching and Managing Attention

Mindfulness as a strategy for self-awareness, paying attention and emotional regulation.

HTS - Mindful Monday, Flex Periods

TFS - Mindup program parent/teacher sessions, Calm.com in Guidance

TFS Libguide on mindfulness

UCC - Principal's Innovation Fund, Curriculum Integration, Mind Up program

### Beneficial effects of mindfulness meditation



#### Physical impacts

- Improve immune functioning (Carlson et al., 2007; Davidson et al., 2003)
- Reduce stress-related cortisol (Carson et al., 2007; Hanson, 2009)
- Reduce chronic pain (Grossman et al., 2007)
- Improve cognitive functioning (Jha et al., 2007; Ortner et al., 2007; Pagnoni & Cekie, 2007)
- Enhance immune system (Hanson, 2009)
- Thickens and strengthens frontal cingulate cortex and insula (Hanson, 2009)



#### **Emotional and mental well-being**

- Increases activation of left frontal regions which lifts mood (Hanson, 2009)
- Depression (Hoffmann et al., 2010; Teasdale et al., 2000)
- Anxiety (Hoffmann et al., 2010; Roemer et al., 2008)
- Substance use (Hoffmann et al., 2010; Roemer et al., 2008)
- Eating disorders (Tapper et al., 2009)
- Psychological well-being in healthy participants (Carmody & Baer, 2008; Chiesa & Serretti, 2009)



#### Strengthens empathy and compassion

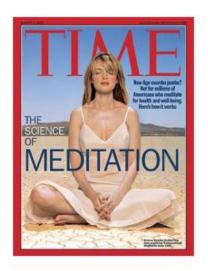
Enhances attention, empathy, and compassion (Hanson, 2009)

Activates emotional processing (Hutcherson, Seppala, & Gross, 2014; Hoffmann, Grossman, & Hinton, 2011)





#### MINDFULNESS MEDITATION



Definition: Non-judgmental attention to experiences in the present moment (Kabat-Zinn, 1990). Involves attention on the experience of thoughts, body sensations, emotions and observing them as they arise and go away.

Two central components: (1) regulation of attention to keep it on the immediate experience; (2) approaching experiences with curiosity, openness, and acceptance, and loving kindness, regardless of whether they are positive or negative.

C-O-A-L
A mental filter during meditation





# Reflect & Share

#### Reflect on your answer to Question #1

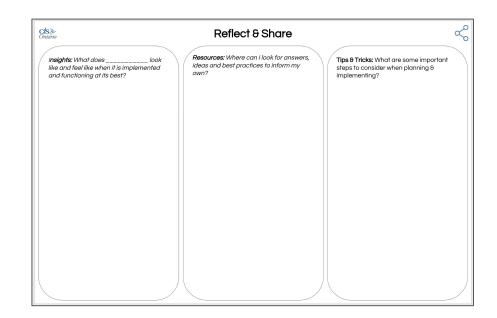
1 min (solo)

#### Share Your answer to Question #1

7 min (group share)

#### Repeat with Question #2 and #3

- \*\* This should take 30 min total\*\*
- \*\* Record all you hear and learn on your placemat





# Deep Dive

#### Reflect on your answer to Question #1

• 1 min (solo)

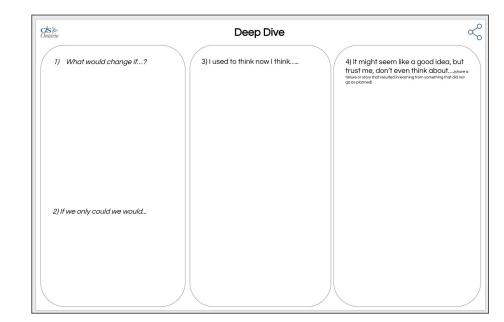
#### Share Your answer to Question #1

• 4 min (table share)

#### Share your answer with the Room

4 min room share

Repeat with Question #2, #3, #4





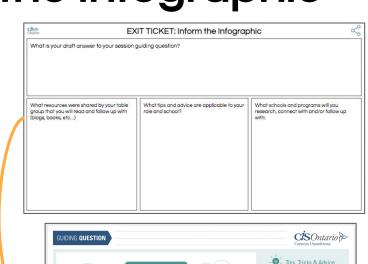
# EXIT TICKET: Inform the Infographic

#### Inform yourself:

- 5 min solo reflection
- Consolidate your learning on your placemat

#### Inform the Infographic:

• 20 mins group synthesis to create the table infographic





# Gallery Walk



### CONTENT - P.M.

### Nice to Meet you!



Nicole Klement



Cheryl Mackinnon



Kirsten Uhre



### Session Format (120 min)

Welcome	5 min	Facilitator Introductions & overview
Learn	25 min	Common EF language Data / Observation driven learning
Reflect & Share	25 min	Resource sharing - facilitated table <b>sharing of expertise and prior knowledge</b> (small group)
Deep Dive	30 min	Facilitated <b>deep dive</b> into a session sub questions (large group)
Record & Consolidate	30 min	Participants consolidate with the infographic <b>exit ticket</b> (table group)
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- Respect your own air-time, and that of your fellow participants
- We are all experts:
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- We don't know it all:
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# Overarching Question

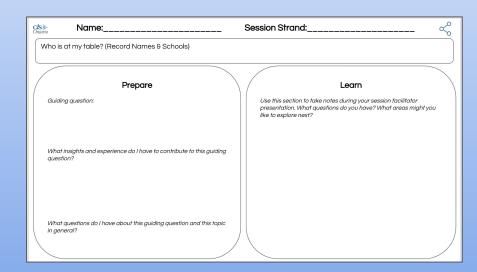
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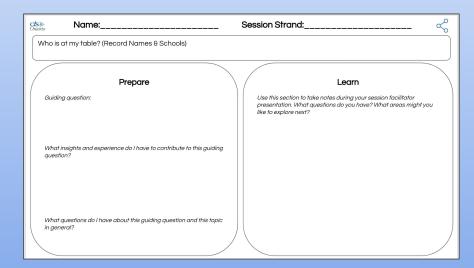
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#### Learn

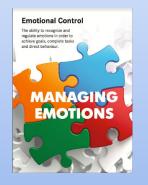
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### Executive Functioning Language at Havergal





















## **Executive Functioning Survey**

Please Complete

the Executive Functioning Assessment (for Adults)

## Analyse Data from Survey



### Please Join a Grade Related Group:

#### **Junior**

Grades 4-6

Cheryl Mackinnon

#### <u>Senior</u>

Grades 10-12

Nicole Klement

#### **Middle**

Grades 7-9

Kirsten Uhre

## Reflect & Share

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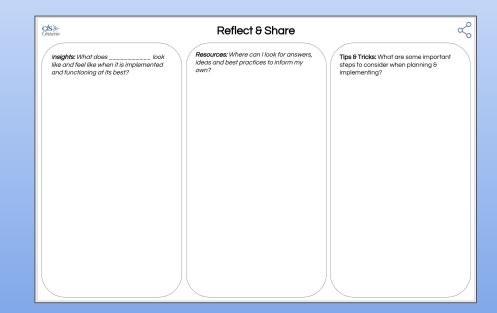
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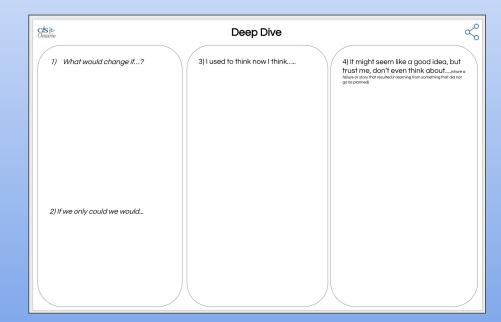
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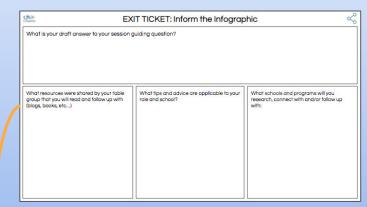
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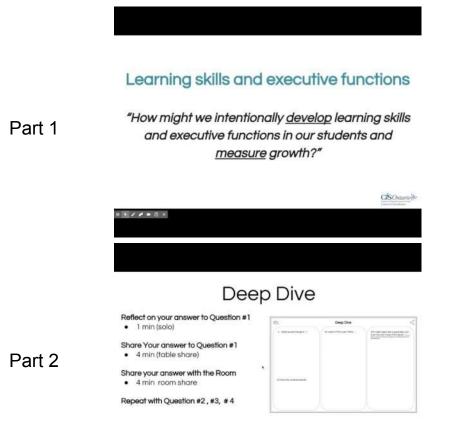


## Gallery Walk



### Session Facilitator Training Videos - Part 1 - 4

CISOntario



Part 3

Part 4

