

# ADHD GOES TO SCHOOL

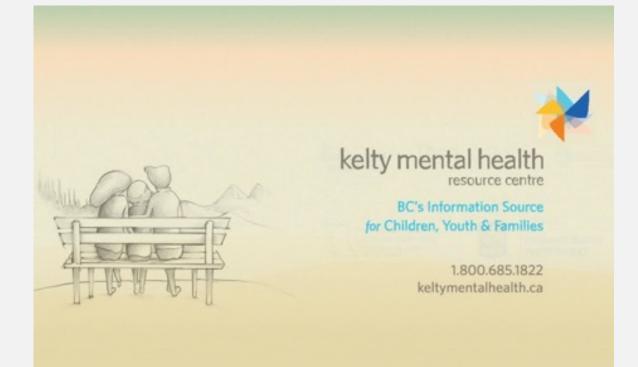
Dr. Candice Murray
Registered Psychologist
Provincial ADHD Program
B.C Children's Hospital
March 03, 202 I

Welcome! We will begin the presentation shortly. Please note that your microphones have been muted and your cameras turned off.

#### KELTY MENTAL HEALTH RESOURCE CENTRE

We help families across the province by:

- Helping with understanding and navigating the mental health system
- Listening and offering peer support, and
- Connecting families to resources and tools.



#### WEBINAR SERIES & RECORDINGS



For recordings, slides, and other resources visit: keltymentalhealth.ca/ADHDWebinarSeries

# HOUSEKEEPING

- Attendees are automatically muted & cameras are turned off.
- Please submit questions for the speakers through the "Q&A" icon.



- You can 'upvote' questions that you want answered.
- You can also submit questions anonymously.
- Please submit technical questions/comments through the "Chat" icon.
- At the end of the webinar, a survey will pop up for you to complete. The survey will also be sent to you in an email tomorrow.

NOTE: This information applies to the context in British Columbia. If you are in another jurisdiction please consult your local health authority for further information.



### SPEAKER

Dr. Candice Murray Registered Psychologist Provincial ADHD Program BC Children's Hospital

#### Land Acknowledgement

I would like to acknowledge with respect and gratitude, that I live and work on the beautiful unceded Coast Salish traditional territory, and I give thanks to the Kwikwetlem, Musqueam, Squamish, Stó:lo, and Tsleil-Waututh, Nations.



# LEARNING OBJECTIVES

- ADHD: Impact on learning
- Strategies to help children with ADHD learn
- Homework struggles
- Advocacy

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# ADHD CHALLENGES IN BC

No Ministry of Education "special needs" designation (12 categories)

Children with ADHD must have another disorder (e.g., learning disability, gifted, behaviour disorder, autism, chronic medical)

Individual Education Plan (IEP) at discretion of school

Parents must advocate

# CADDAC.CA

ADHD Right to Learn is a national campaign asking all

Canadian Ministries of Education to officially recognize ADHD as learning risk.



# ADHD, BRIEFLY

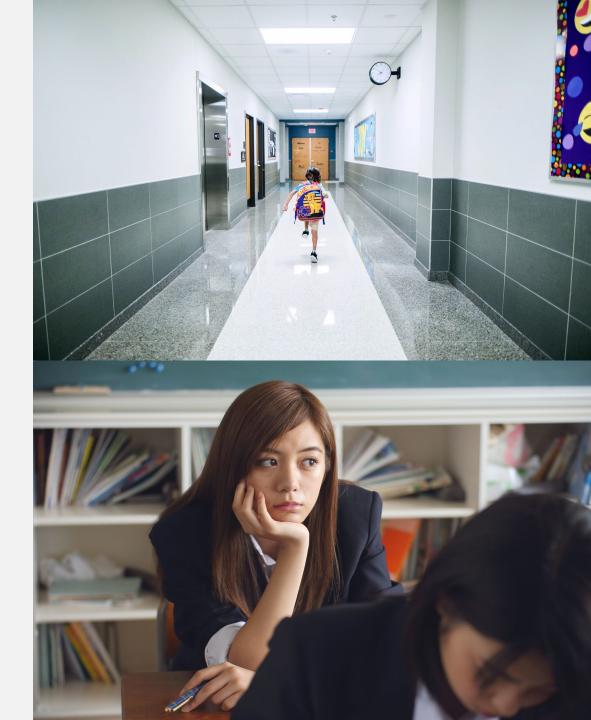
# CORE SYMPTOMS OF ADHD

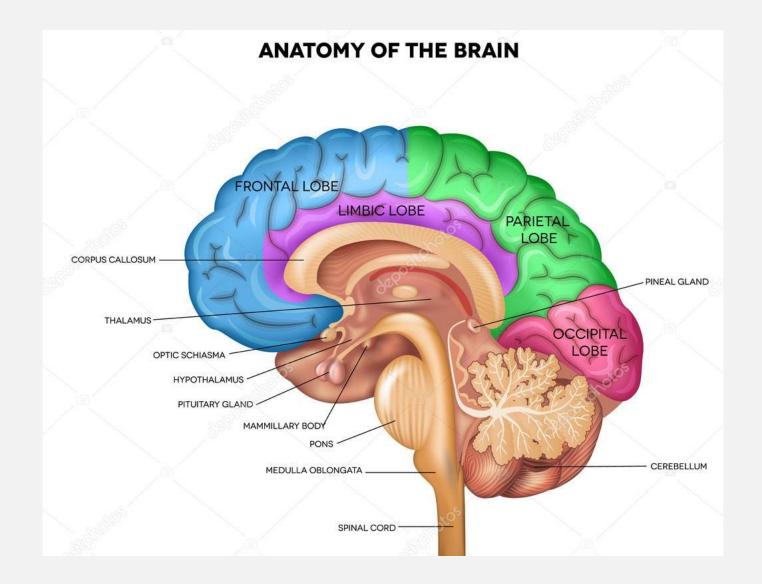
All children with ADHD have difficulty controlling:

- Attention (too much or too little)

Many (but not all) children with ADHD also have difficulty controlling:

- Activity levels
- Impulsivity





### NATIONAL INSTITUTE OF HEALTH STUDY SHAW, RAPPAPORT, & EVANS 2007



nd hension bing

ing style

before g others' tered

additu.de/school

DOWNLOAD ADDITUDE'S COMPLETE SUCCESS = SCHOOL TOOLKIT AT ADDITU.DE/SCH

#### **Explaining ADHD to Teachers**

Share this infographic, created by Chris A. Zeigler Dendy and Alex Zeigler, with your teacher (artwork adapted by ADDitude magazine).

The Tip	Hyperactivity	Impulsivity	Talks back	Doesn't pay attention
of the lceberg:	Can't sit still	Lacks self control	Loses temper	> is forgetful
The Obvious ADHD	Fidgets	Difficulty awaiting turn	Inattention	> Doesn't seem to listen
Behaviors	Talks a lot	Blurts out		Loses things
	Runs or climbs a lot	> Interrupts	Disorganized	Late homework
	> Always on the go	> Intrudes	> Doesn't follow through	
		THE ADHD		
Hidden Beneath	projects	ICEBERG	> Bipolar (12/6)	> Poor listening and
the Surface:	or is late	Only 1/8 of an icebe	FOULGULE	reading comprehensio
The Not-So-Obvious	> Difficulty	is visible. Most of	Syndrome (11%)	> Difficulty describing
Behaviors (2/3 have	planning for future	it is hidden beneat	h >Obsessive	the world in words
at least one other	> Impatient	the surface.	Compulsive	Disorganization
condition)	> Hates waiting		Disorder (4%)	Slow cognitive
	> Time creeps		Oppositional	processing speed
Neurotransmit-	Avoids doing	> Less likely to follow rules	Defiant Disorder	Poor handwriting
ter Deficits Impact	homework	Difficulty managing his	(54-67%)	> Inattention
Behavior	Sleep	own behavior	Paulous Lanatas	Impulsive learning style
> insufficient levels of	Disturbance (56%)	Doesn't study past	Serious Learning Problems	Low Frustration
		behavior		Tolerance
dopamine and norepi-	Impacts memory	Acts without sense of	Specific Learning	
nephrine, results in	Doesn't get restful	hindsight	Disability (25-50%)	> Difficulty controlling
reduced brain activity.	<ul> <li>sleep</li> <li>Can't fall asleep</li> </ul>	Must have immediate	> Poor working	emotions Short fuse
resource to an activity.	> Can't wake up	rewards	> Can't memorize	<ul> <li>Emotionally reactive</li> </ul>
Weak Executive	Late for school	Long-term rewards don't work	easily	<ul> <li>Enotionary reactive</li> <li>Loses temper easily</li> </ul>
Functioning	> Irritable	> Doesn't examine his	> Forgets teacher and	May give up more
> Working memory	<ul> <li>Morning battles</li> </ul>	> Doesn't examine his own behavior	parent requests	easily
and recall	and a second	<ul> <li>Difficulty changing his</li> </ul>	<ul> <li>Slow math calculation</li> </ul>	Doesn't stick with
> Getting started, effort	3-Year Delayed	behavior	<ul> <li>Spelling problems</li> </ul>	things
> Internalizing language	Brain Maturation	Denerror.	Poor written	> Speaks or acts before
Controlling emotions	Less mature	Co-Existing	expression	thinking
> Problem solving	> Less responsible	Conditions	> Difficulty writing essays	> Difficulty seeing others
and the second second	> 18-year-old acts like 15	> Anxiety (34%)	Slow retrieval of	perspective
Impaired		> Depression (20%)	information	> May be self-centered
Sense of Time	Not Learning Easily			
Doesn't judge passage of time accurately	from Rewards and Punishment		complex than most people i	
> Loses track of time	> Repeats misbehavior		d to ADHD are not visible. Al	
> Often late	> May be difficult to		ely to coexist with other co	
> Forgets long-term	discipline	and the second	disability for some students	

Iceberg poster at chrisdendy.com.

ADDITUDE

# ADHD **ICEBERG**

#### CHRIS DENDY ADDITUDEMAG.COM

## WHAT ADHD IS <u>NOT</u>

- A behaviour disorder
- Caused by poor parenting, too many screens, diet, etc
- Something everyone has



# WHAT ADHD IS

- A neurodevelopmental (brain based) disorder
- Genetically acquired in most cases
- Causes problems (age-appropriate independence, learning, peer relations, comorbidities)
- Manageable if treated using a combination of interventions

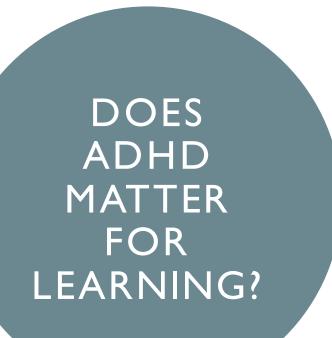
# EVIDENCE BASED TREATMENTS FOR ADHD: 5 PILLARS

Multi-Modal Treatment

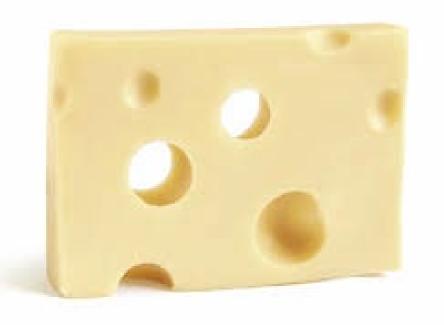
- 1) Learning about ADHD (parents, teachers, child)
- 2) Medication (stimulants 1st line treatment)
- 3) Parent Training Programs (< age 12)
- 4) Classroom support/accommodations
- 5) Organizational skills (EF) interventions (> age 8)

# HOW ADHD IMPACTS LEARNING

#### Attention Dysregulation



- Can cause distractibility
- All senses (sights, sounds, tastes, touch, smells)
- Thoughts
- Over time = learning gaps develop



# DOES ADHD MATTER FOR LEARNING?

Restlessness

#### Impulsivity

• Speed over accuracy



• Low threshold for frustration

I'm stupid

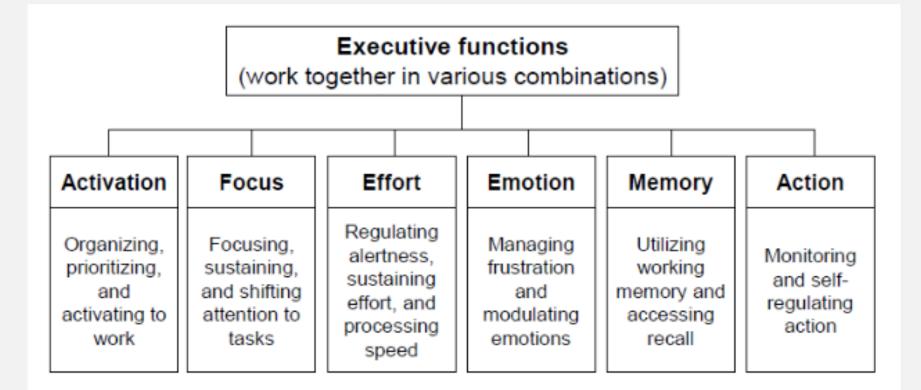
He did that on purpose

l can't do

This will take forever!

this.

(A) 
$$4+2=8$$
  
 $2\times3=5$   
 $7^{2}=14$ 



Brown, T.E. (2001). Manual for Attention Deficit Disorder Scales for Children and Adolescents.

Reading:

• Skip lines/words, losing track, add or replace words, reading comprehension

Math:

DOES

ADHD

MATTER

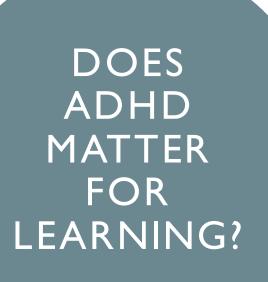
FOR

LEARNING?

• Rote math (multiplication tables), word problems, multi-step problems

Writing:

 Organizing ideas, missing details, missing punctuation & capitalization, unintentional spelling errors, editing



#### **Elementary School**

- Less work completion
- Less accuracy in work
- Off task more
- Less homework completion

#### Middle/High School

- Less organized (planning, deadlines, time management)
- Lower grades
- Higher rates of dropping out

# STRATEGIES THAT HELP

# **KEY STRATEGIES**







More movement

Break tasks & instructions down

Externalize reminders/instructions/time

More feedback

Increase praise

#### BEHAVIOURAL CLASSROOM INTERVENTIONS

(CHRONIS ET AL, 2007; EVANS ET AL., 2014) Modify Task (break tasks down, more feedback)

- Reduce task length
- Divide task into sub-units (chunking)
- Set goals with shorter time intervals between them
- Increase stimulation of task (multi-sensory:colour, texture, highlight, rate)

#### More & Immediate Feedback (more praise, more feedback)

- "Point of Performance"
- Positive (praise, point system)
- Response cost (take away privileges)

<u>Organizational Skills Training</u> (break tasks down, externalize)

Peer Tutoring (more feedback, active learning)

\*\*Effective, but less than medication (Pelham & Fabiano, 2008)

# ZONES OF

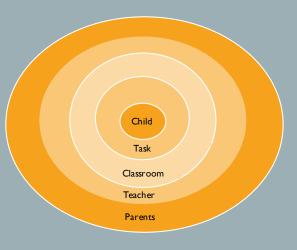
Child

Task

Classroom

Teacher

Parents/caregivers



# CHILD ZONE

#### I. Medication



2. Fuel



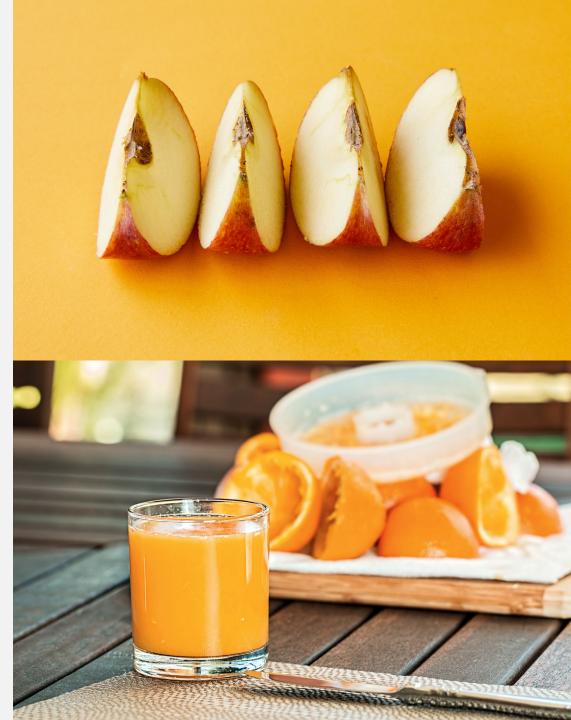
3. Movement



# CHILD ZONE

Food & Drink

- Send "easy to eat" food
- Request supervision of food intake @ lunch
- Juice box (glucose) @ 2pm





#### CHILD ZONE MORE MOVEMENT



Before School: Walk, bike, let them off a few blocks away Recess, lunch:

Never use removal as punishment; advocate for active tasks/chores Move at desk:

Stand, doodle, theraband, tictacs, gum





#### Move in class:

Take attendance, pass out materials, door person

#### Leave class:

Deliver message, get a drink, hallway pass





I. Choice of tasks (boost interest)

2. Break tasks down

**3.Active Learning** 









#### TASK ZONE BREAK IT DOWN - READING

I was exactly thirteen in September 1929 when the time came for me to go to Repton. On the day of my departure, I had first of all to get dressed for the part. I had been to London with my mother the week before to buy the school clothes, and I remember how shocked I was when I saw the outfit I was expected to wear.

'I can't possibly go about in *those*!' I cried. 'Nobody wears things like that!'

'Are you sure you haven't made a mistake?' my mother said to the shop assistant.

'If he's going to Repton, madam, he must wear these clothes,' the assistant said firmly. And now this amazing fancy-dress was all laid out on my bed waiting to be put on. 'Put it on,' my mother said. 'Hurry up or you'll miss the train.'

'I'll look like a complete idiot,' I said. My nother went out of the room and left me to t. With immense reluctance, I began to dress myself.

First there was a white shirt with a detachable white collar. This collar was unlike any other collar I had seen. It was as stiff as a piece of perspex. At the front, the stiff points of the collar were how the a pair

of wings, and the whole thing was so tall that the points of the wings, as I discovered later, rubbed against the underneath of my chin. It was known as a butterfly collar.

To attach the butterfly collar to the shirt you needed a back stud and a front stud. I had never been through this rigmarole before. I must do this properly, I told myself. So first I put the back stud into the back of the collar-band of and a second sec

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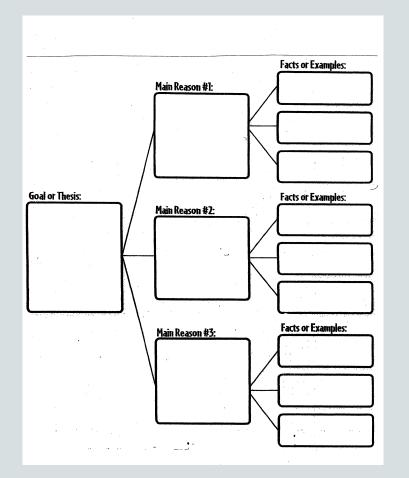
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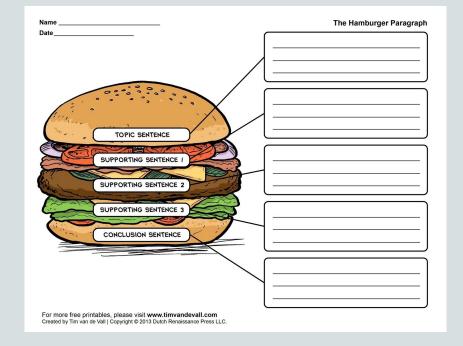
#### TASK ZONE BREAK IT DOWN – SCORING RUBRIC

Simple Grading Rubric

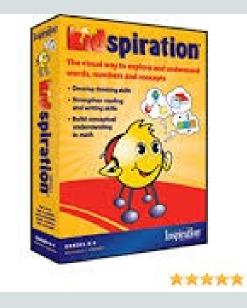
Criterion	Гask	Level of Performa	ance Score		
History Research Paper Rubric					
Criteria	Excellent	Good	Poor /		
	3	2	1 /		
Number of sources	Ten to twelve	Five to nine	One to four		
Historical accuracy	No apparent inaccuracies	Few inaccuracies	Lots of historical inaccuracies		
Organization	Can easily tell from which sources information was drawn	Can tell with difficulty from where information came	Cannot tell from which source information came		
Bibliography	All relevant bibliographic information is included	Bibliography contains most relevant information	Bibliography contains very little information		
Descriptor					

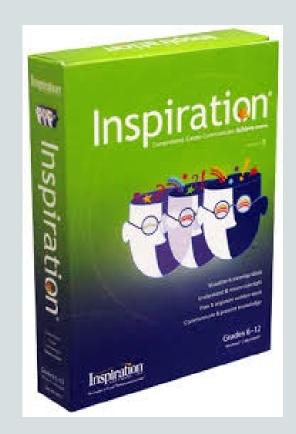
#### TASK ZONE BREAK IT DOWN - WRITING





#### TASK ZONE BREAK IT DOWN - WRITING

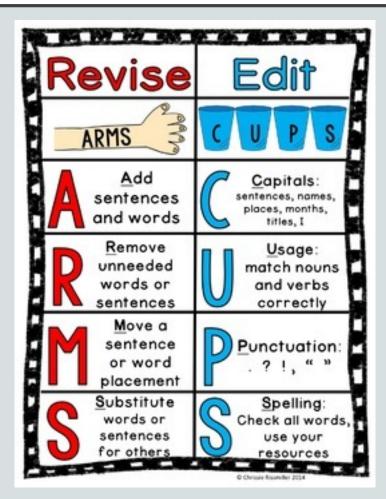




#### TASK ZONE BREAK IT DOWN / FEEDBACK

Writing Assignment	Due Date
Decide on a topic	
Thesis statement	
Outline (graphic organizer)	
Intro paragraph	
Body paragraphs (use hamburger)	
Concluding paragraph	
First draft	
Edits	
Final paper	

#### TASK ZONE BREAK IT DOWN - EDITING



#### TASK ZONE BREAK IT DOWN - WORKSHEETS





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				kalde es					
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8 <u>× 8</u>	x 3	<u>x 7</u>	x 7	8 <u>x 4</u>
			22 M	eb-Adulan 🎆

# TASK ZONE



## Reading: (e.g., SQ3R)

> Preview summary, skim chapter headings, images

> Preview study questions before reading

>Read to answer questions

> Take notes; Write down main characters, points

#### TASK ZONE ACTIVE LEARNING

## Editing written work:

➢Read aloud when editing if possible

Fext to speech software (Read & Write Software)

>Editing software (e.g., Grammarly)



# TASK ZONE



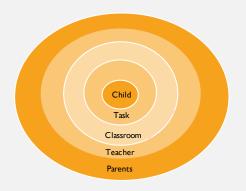
## Listening:

Take notes in class

Consider Smart Pen (e.g., Livescribe)

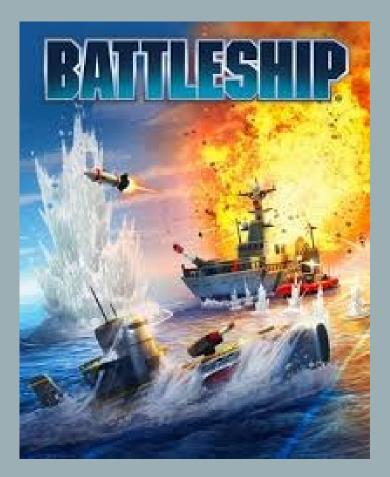
Highlight information while reading





Seating Type

- Individual desk for independent work
- Study carrel or resource room







#### Seating Placement

- Sit near teacher
- Away from friends, doors, windows
- Wear headphones, ear plugs





## CLASSROOM ZONE EXTERNALIZE TIME

e.g., Sarah Ward efpractice.com

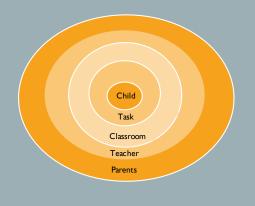
#### CLASSROOM ZONE EXTERNALIZE INFORMATION

Time	Activity
7:45-8:00	Doors open, morning routines
8:00-8:15	Calendar
8:15-8:45	S.M.A.R.T. Time
8:50-10:25	Reading Block
10:32-11:02	Lunch
11:05-11:45	Math
11:48-12:28	Activity
12:30-12:45	Snack/Read Aloud
12:45-1:20	Writing
1:20-1:45	Recess
1:45-2:00	Silent Reading
2:10-2:30	Start Dismissal

Assignment	Materials Needed	Date Assigned	Date Due	What to do?
Read chapter I of novel	- Novel - Notebook - Thought questions	Feb 3, 2021	Feb 10, 2021	Be ready to discuss in class
Outline for passion project	-Graphic organizer sheet - Research materials (computer, books)	Feb 17, 2021	March 3, 2021	Hand in outline to teacher in class

## CLASSROOM ZONE EXTERNALIZE INCENTIVES

Target Behaviour	Teacher's Initials
Used fidget tool at desk when needed	
Placed belongings neatly in desk	
Wrote homework instructions in planner	
Used backpack checklist	

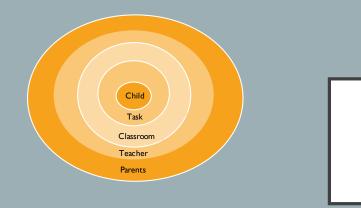


#### TEACHER ZONE FEEDBACK, PRAISE

Positive Feedback

- Verbal and nonverbal validation
- Praise most effective way to increase desired behaviour (Tells child what to do)
- Reward chart
- Punishment does not teach skills





#### TEACHER ZONE BREAK IT DOWN



#### Instructions

- One at a time
- Point of Performance (when behaviour expected to occur)
- Written back up
- Giving instructions: Name, eye contact, brief touch (elbow, shoulder)

## TEACHER ZONE VALIDATE

Remain Calm & Listen

- Children with ADHD have difficulty with verbal expression
- They miss parts of stories
- They often assume they are in trouble (activates fight/flight)
- Give them time and space to explain





## ORGANIZATIONAL SKILLS TRAINING

#### ORGANIZATIONAL SKILLS TRAINING (OST)

EVANS ET EL., 2018, ABIKOFF ET ALL, 2012; BIKIC ET AL., 2017; LANGBERG ET AL., 2017)



- I. Skills instruction
- ✓ recording assignments/due dates in calendar
- $\checkmark$  using checklists for materials
- $\checkmark$  tracking time for tasks
- break tasks into steps & write down order before starting
- 2. Practice & feedback key elements
- 3. Break skills into steps
- 4. Parents/teachers prompt, praise, reward skill use

#### ORGANIZATIONAL SKILLSTRAINING (OST)

ABIKOFF ET ALL, 2012; BIKIC ET AL., 2017; LANGBERG ET AL., 2017)



- Skills block required
- Resource teacher present & involved
- 20 min; 16 sessions; 45 min, 5 days a week
- Need parent meetings/involvement

## **KEY STRATEGIES**









More movement

Break tasks & instructions down

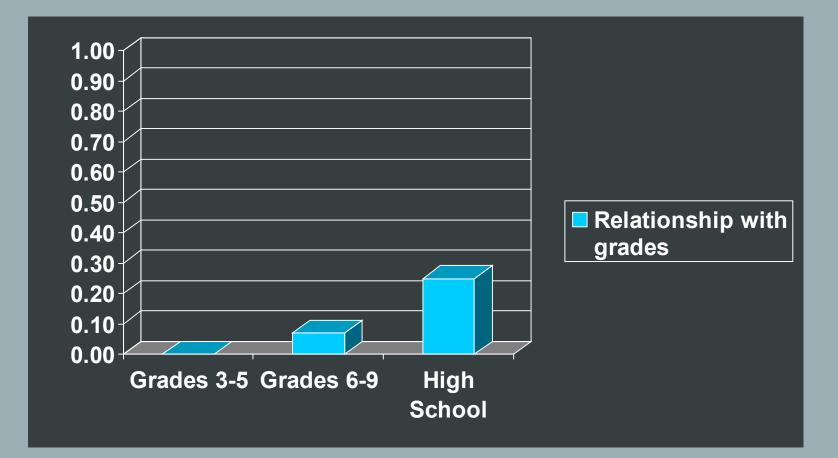
Externalize reminders/instructions/time

More feedback

Increase praise

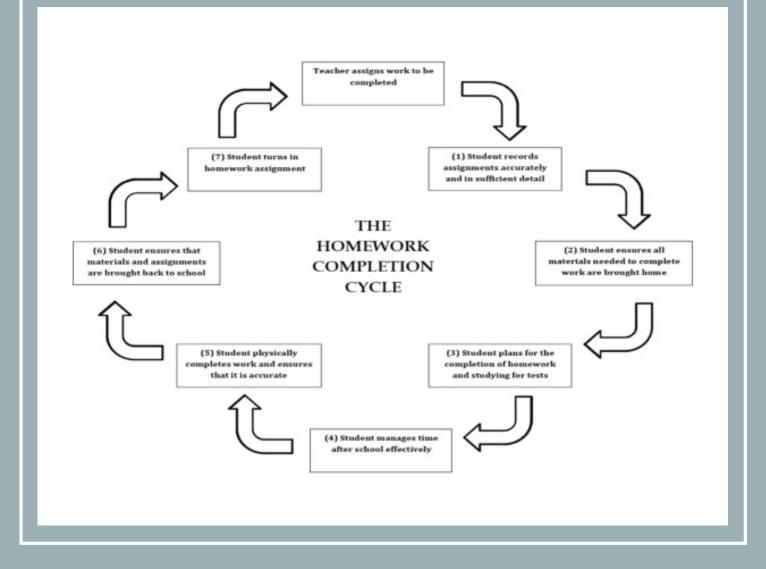
## HOMEWORK

## HOMEWORK & ACHIEVEMENT COOPER, ROBINSON, PATALL (2006)



#### HOMEWORK STEPS:

#### ASSESS POINT OF BREAKDOWN & TARGET AREA



## KEEPINGTRACK

- Planner
- Monthly wall calendar
- Folder (left side "To Do", right side "Turn in"



## 5 ROLES FOR PARENTS COOPER

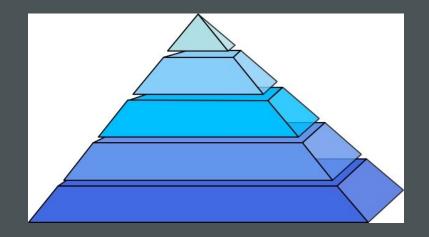
- 1) Stage manager (quiet setting, materials, remove screens, medication active?)
- 2) Motivator (positive reinforcement; reward system)
- 3) Role Model (match them: read, do banking; no screens)
- 4) Monitor (suggest breaks if frustration sets in; make sure length/content reasonable for your child)
- 5) Mentor (stay near but don't step in unless asked)

## ADVOCACY

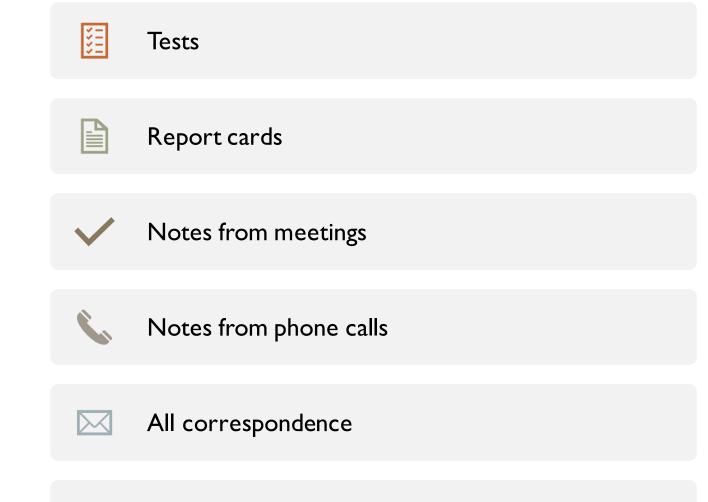
## KNOW WHO DOES WHAT

#### Organizational hierarchy in most schools:

- (1) Teacher & Teaching Assistant
- (2) Principal
- (3) Director of Special Education
- (4) Assistant Superintendent
- (5) Superintendent
- (6) School District / Board of Trustees



## CREATE A BINDER





Put a photo of your child on the front of the binder



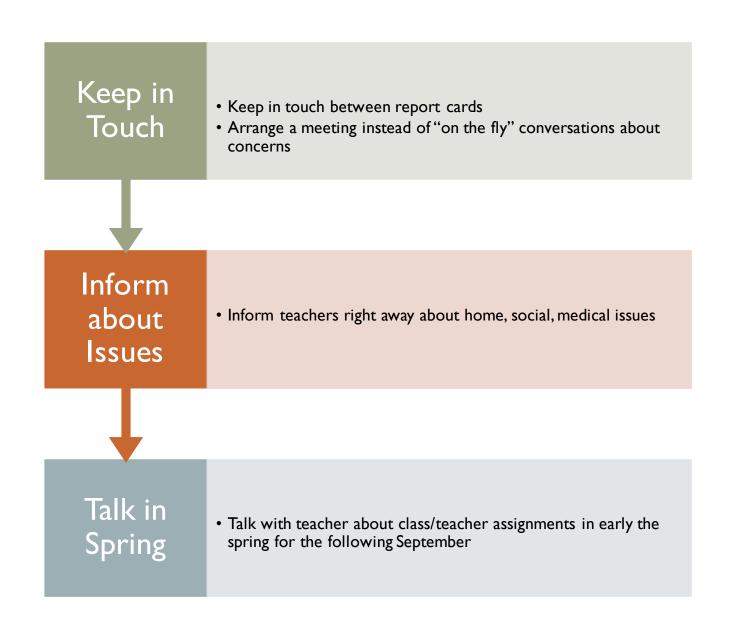
## COMMUNICATE EARLY

#### Parent/teacher collaboration is crucial

- Introduce yourself in Sept
- Discuss experience with ADHD (provide 1 page handout on your child)
- Discuss seating arrangements, homework system, incentive program
- High School: Resource teacher key

<ul> <li>Writing to help you get to</li> <li>List 1 or 2 strengths, then s</li> </ul>	
(Child's name) strengths (focus on personal attributes): 1) 2) 3)	(Child's name) Interests/talents (academic, athletic, musical, artistic, social, etc) 1) 2) 3)
(Child's name's) challenges related t oA oB oC	o ADHD and executive function deficits
Ineffective strategies (makes things o A o B o C	s worse)
Effective strategies that teachers l o A o B o C	nave used in previous years
<ul> <li>Best way to contact you (t)</li> <li>Thank teacher for their tin together</li> </ul>	ext, email, calling) ne/expressoptimism about work
Thank you,	
(Your name)	







## PARTINGWORDS

Be informed

Be realistic

Pace yourself

Get support – you are not alone



The Ultimate ADHD Toolkit for Parents and Teachers: additudemag.com

Focus on Success: Teaching Students with Attention Deficit/Hyperactivity Disorder; Alberta Education

Centre for ADHD Awareness Canada: caddac.ca

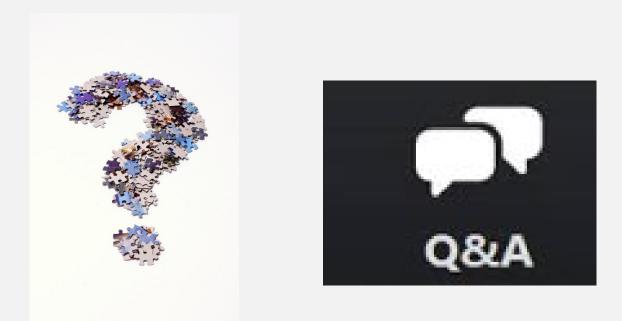
keltymentalhealth.ca

School Act: bclaws.gov.bc.ca



# **QUESTIONS FOR THE SPEAKER?**

# Please use the "Q&A" icon



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# THANK-YOU FOR JOINING.

## CONTACT THE KELTY MENTAL HEALTH RESOURCE CENTRE:

E-MAIL: KELTYCENTRE@CW.BC.CA

PHONE (TOLL-FREE): I-800-665-1822



Kelty Mental Health Resource Centre