

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.

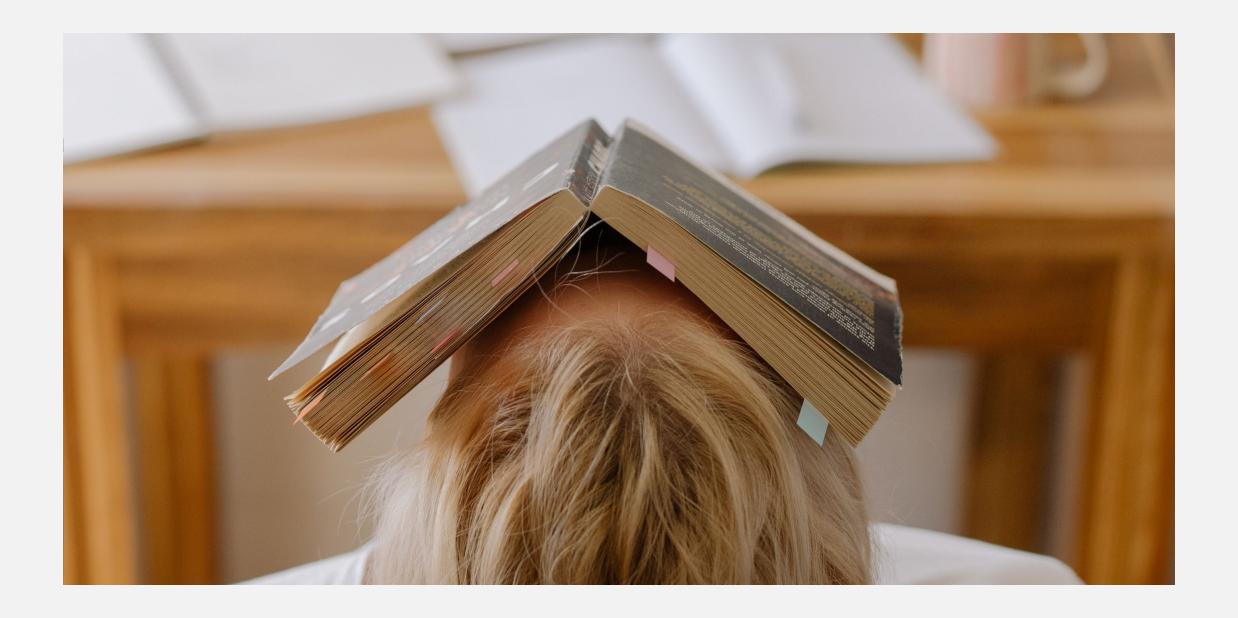


SPEAKER

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

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

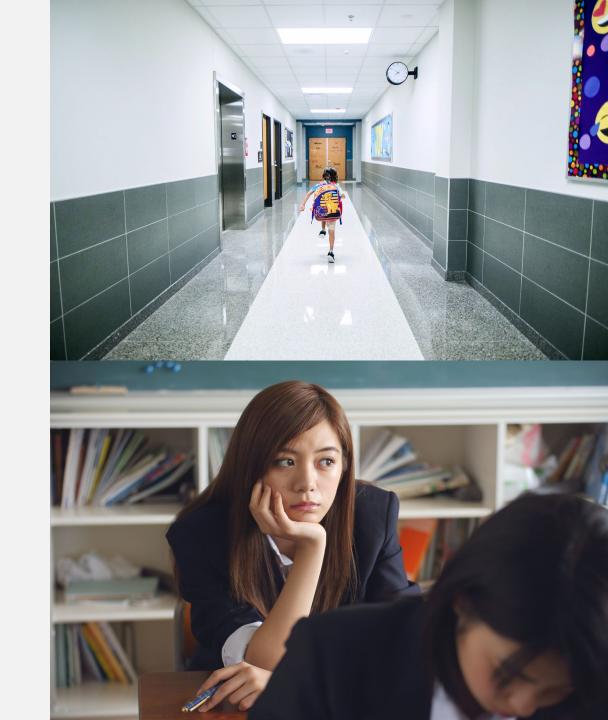
CORE SYMPTOMS OF ADHD

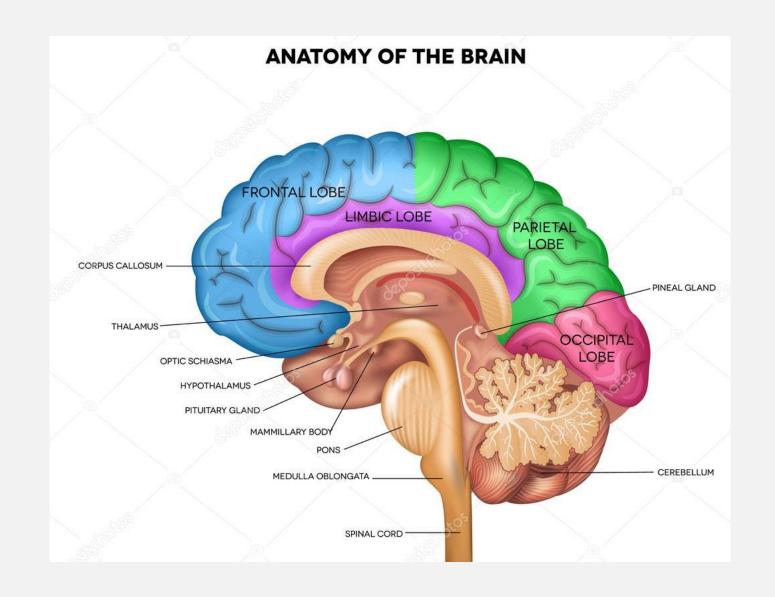
All children with ADHD have difficulty controlling:

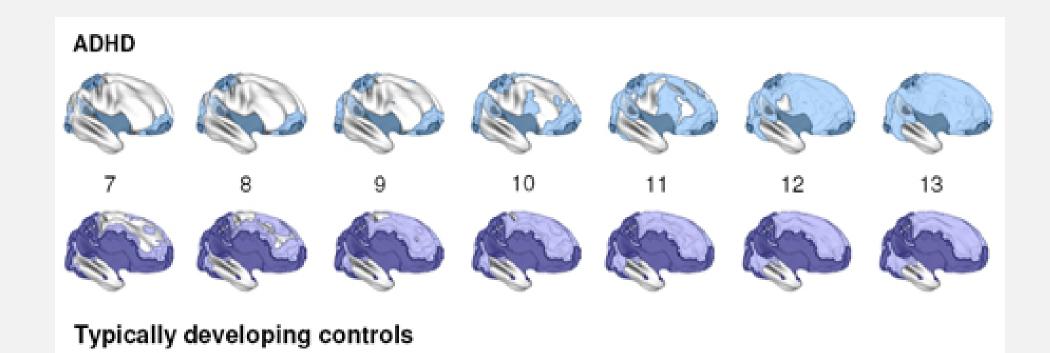
- Attention (too much or too little)

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

- Activity levels
- Impulsivity







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

ADHD **ICEBERG**

CHRIS DENDY ADDITUDEMAG.COM



DOWNLOAD ADDITUDE'S COMPLETE SUCCESS # SCHOOL TOOLKIT AT ADDITU.DE/SCHO

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 of the Iceberg: The Obvious ADHD Behaviors

Hyperactivity

- > Can't sit still
- > Talks a lot
- > Runs or climbs a lot

- > Fidgets
- > Always on the go

Impulsivity

- Lacks self control
- Difficulty awaiting turn > Blurts out
- > Interrupts
- > Intrudes
- > Talks back
 - > Loses temper
 - Inattention
 - Disorganized > Doesn't follow through
- Doesn't pay attention
- > Is forgetful
- > Doesn't seem to listen
- Loses things
- Late homework

Hidden Beneath the Surface: or is late

The Not-So-Obvious Behaviors (2/3 have at least one other condition)

Neurotransmitter Deficits Impact Behavior

> Insufficient levels of neurotransmitters, dopamine and norepinephrine, results in reduced brain activity.

Weak Executive Functioning

- > Working memory and recall
- > Getting started, effort
- > Internalizing language ➤ Controlling emotions
- > Problem solving

Impaired Sense of Time

- > Doesn't judge passage of time accurately > Loses track of time
- > Often late
- > Forgets long-term

projects

- Difficulty planning for future
- > Impatient > Hates waiting
- > Time creeps > Avoids doing

Disturbance (56%)

- > Impacts memory > Doesn't get restful
- > Can't fall asleep
- > Can't wake up > Late for school
- > Irritable > Morning battles
- 3-Year Delayed

Brain Maturation ➤ Less mature

- > Less responsible > 18-year-old acts like 15
- **Not Learning Easily** from Rewards and Punishment
- discipline

> Repeats misbehavior > May be difficult to

THE ADHD ICEBERG

Only 1/8 of an iceberg is visible. Most of it is hidden beneath the surface.

- > Less likely to follow rules > Difficulty managing his own behavior
- > Doesn't study past behavior > Acts without sense of
- hindsight > Must have immediate

behavior

Co-Existing

Conditions

> Anxiety (34%)

> Depression (29%)

- rewards > Can't memorize Long-term rewards don't work easily
- > Forgets teacher and > Doesn't examine his
- own behavior parent requests > Difficulty changing his Slow math calculation
 - > Spelling problems
 - > Poor written expression > Difficulty writing essays
 - > Slow retrieval of information

- Bipolar (12%) Poor listening and > Tourette reading comprehension
- Syndrome (11%) > Obsessive

Serious Learning

Disability (25-50%)

> Specific Learning

> Poor working

Problems

- Compulsive > Disorganization Disorder (4%) Slow cognitive
- ➤ Oppositional processing speed Defiant Disorder (54-67%)
 - > Poor handwriting

 - > Inattention

Difficulty describing

the world in words

> Impulsive learning style

Low Frustration

- Tolerance > Difficulty controlling emotions
- > Short fuse
- > Emotionally reactive
- > Loses temper easily > May give up more
- Doesn't stick with
- things
- > Speaks or acts before
- > Difficulty seeing others' perspective
- > May be self-centered

ADHD is often more complex than most people realize! Like icebergs, many problems related to ADHD are not visible. ADHD may be mild, moderate, or severe, is likely to coexist with other conditions, and may be a disability for some students.

You can order the original color ADHD Iceberg poster at chrisdendy.com.



additu.de/school

WHAT ADHD IS NOT

• 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

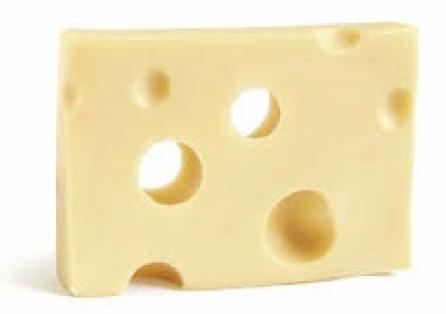
- 1) Learning about ADHD (parents, teachers, child)
- 2) Medication (stimulants 1st line treatment)
- 3) Parent Training Programs (< age 12)
- 4) Classroom support/accommodations
- 5) Organizational skills (EF) interventions (> age 8)

HOW ADHD IMPACTS LEARNING

DOES ADHD MATTER FOR LEARNING?

Attention Dysregulation

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



DOES ADHD MATTER FOR **LEARNING?**

Impulsivity

Speed over accuracy

Restlessness



- Unintentional errors
- Low threshold for frustration

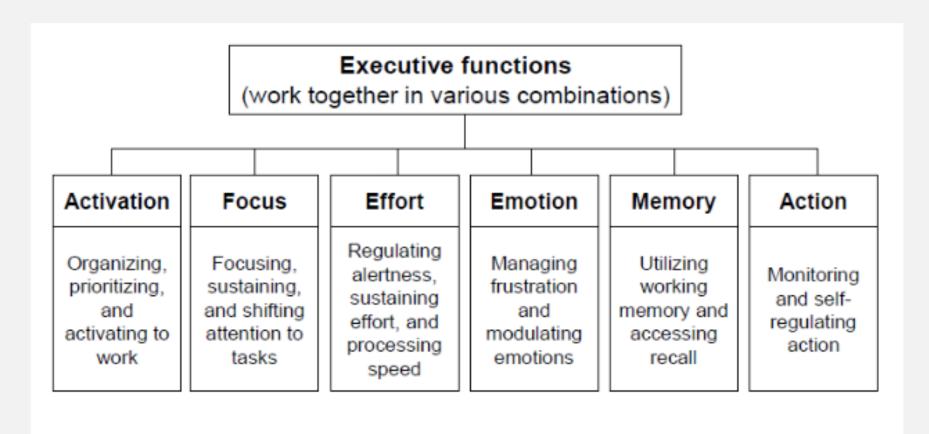
$$A = 8$$
 $2 \times 3 = 5$
 $7^2 = 14$



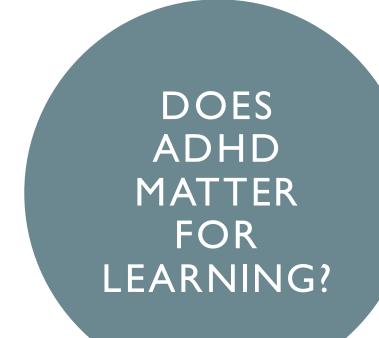
He did that on purpose







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



Reading:

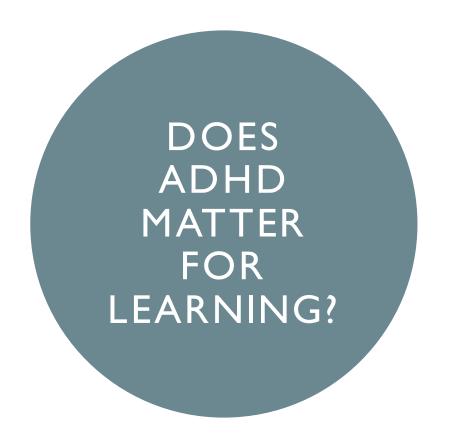
 Skip lines/words, losing track, add or replace words, reading comprehension

Math:

 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)

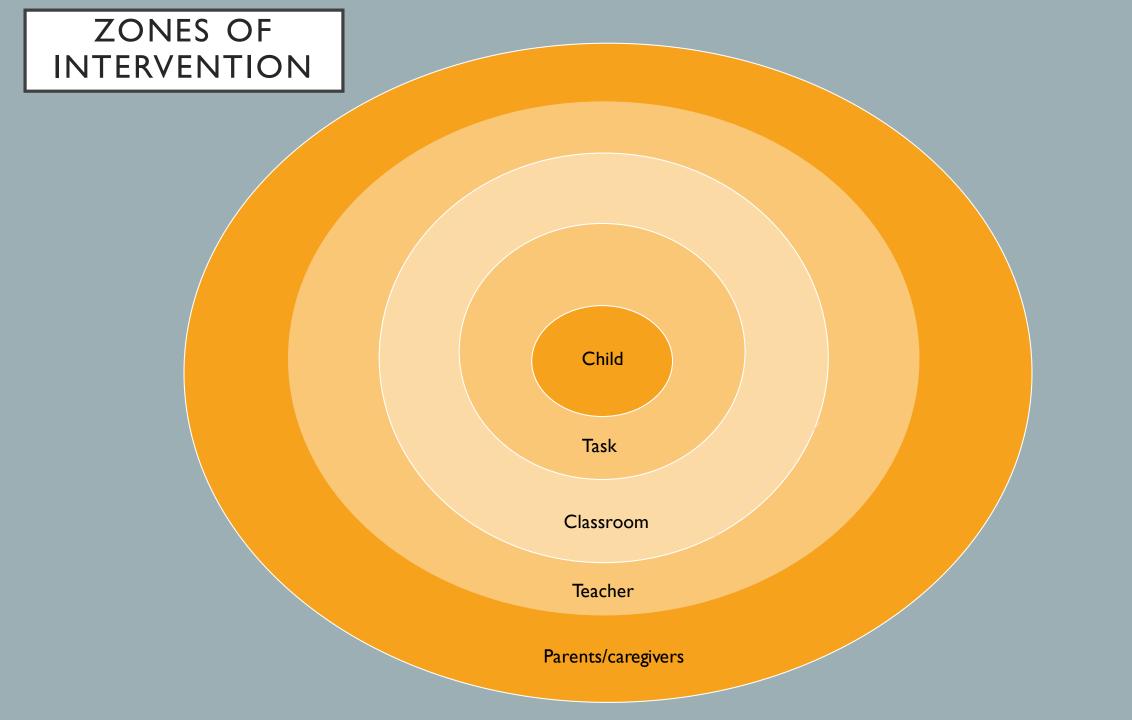
More & Immediate Feedback (more praise, more feedback)

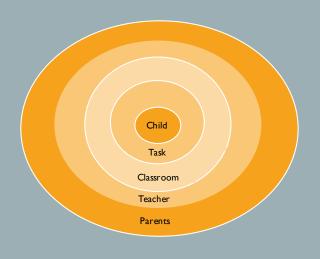
- "Point of Performance"
- Positive (praise, point system)
- Response cost (take away privileges)

Organizational Skills Training (break tasks down, externalize)

Peer Tutoring (more feedback, active learning)

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





CHILD ZONE

I. Medication



2. Fuel



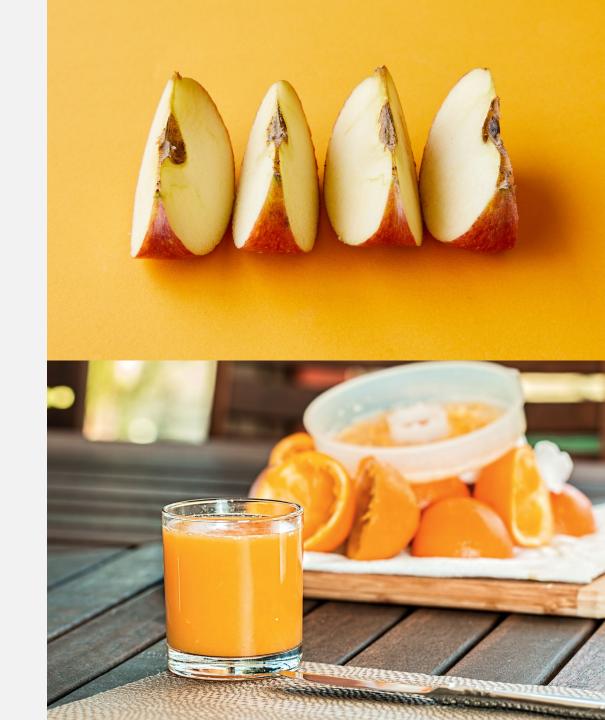
3. Movement



CHILD ZONE FUEL

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





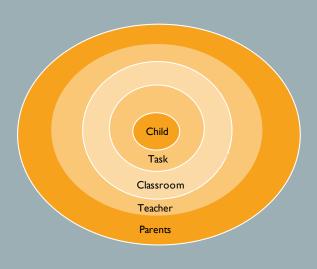
Move in class:

Take attendance, pass out materials, door person

Leave class:

Deliver message, get a drink, hallway pass





TASK ZONE

I. Choice of tasks (boost interest)

2. Break tasks down

3. Active Learning







TASK ZONE CHOICE

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 mus wear these clothes,' the assistant said firmly.

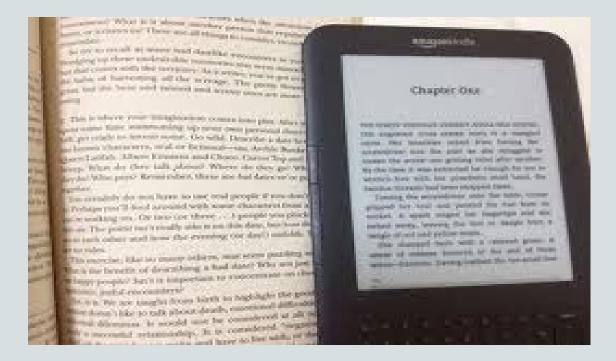
And now this amazing fancy-dress was all laid out on my bed waiting to be put on. 'Put it on,' my mother said. 'Hurry up or you'll miss the train.'

'I'll look like a complete idjot,' I said. My mother went out of the room and left me to it. 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 have

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.

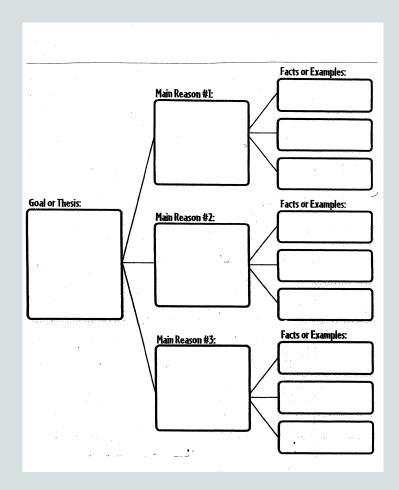
To attach the butterfly collar to the shirt you needed a back stud and a front stud. I had never been through this rigmarole before. I must do this properly, I told myself. So first I put the back stud into the back of the collar-band of

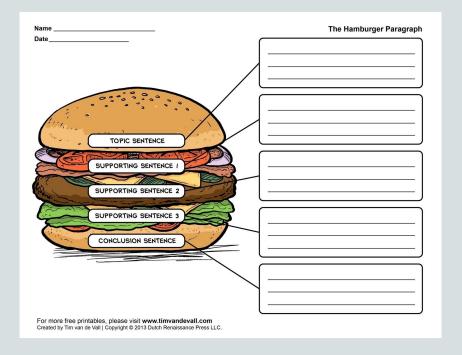


TASK ZONE BREAK IT DOWN – SCORING RUBRIC

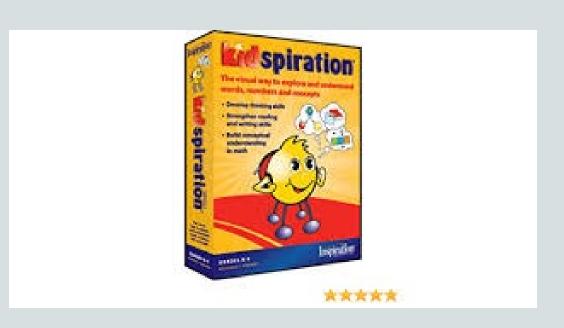
Simple Grading Rubric			
Criterion Task		Level of Performa	ance Score
History Research Paper Rubric			
Criteria	Excellent	Good	Poor /
	3	2	1
Number of sources	Ten to twelve	Five to nine	One to four
Historical accuracy	No apparent inaccuracies	Few inaccuracies	Lots of historical inaccuracies
Organization	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
Des	criptor		

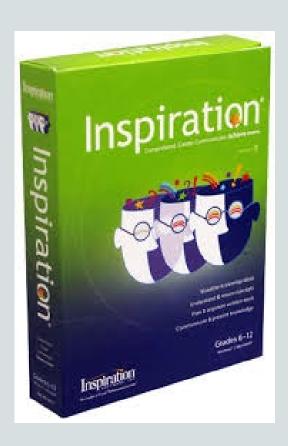
TASK ZONE BREAK IT DOWN - WRITING





TASK ZONE BREAK IT DOWN - WRITING

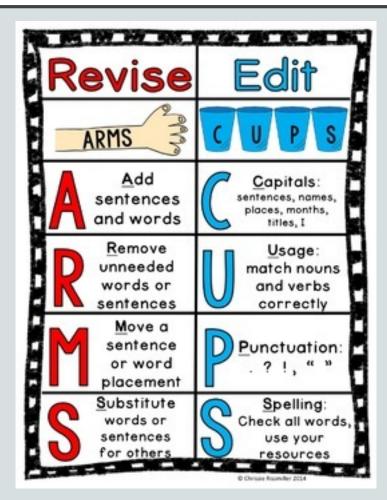




TASK ZONE BREAK IT DOWN / FEEDBACK

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	

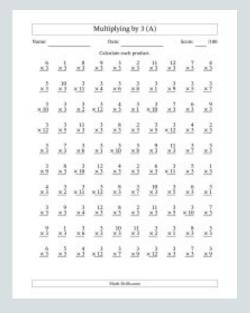
TASK ZONE BREAK IT DOWN - EDITING



TASK ZONE BREAK IT DOWN - WORKSHEETS







Name : Teacher :			Score : Date :	
5 x 9	5 x 9	x 9	8 x 3	<u>* 4</u>
8	5	8	7	7
<u>x 4</u>	x 3	<u>x 3</u>	x 6	<u>x 6</u>
6	4	9	9	6
<u>× 4</u>	<u>x 4</u>	x 8	x 7	<u>x 8</u>
8	7	4	6	8
x 8	<u>x 3</u>	x 7	<u>x 7</u>	<u>x 4</u>
			10 M	at-No.Con

TASK ZONE ACTIVE LEARNING



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
- ➤ Text to speech software (Read & Write Software)
- Editing software (e.g., Grammarly)



TASK ZONE ACTIVE LEARNING

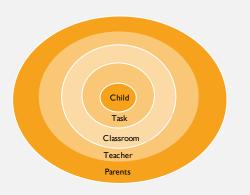


Listening:

- > Take notes in class
- ➤ Consider Smart Pen (e.g., Livescribe)
- > Highlight information while reading







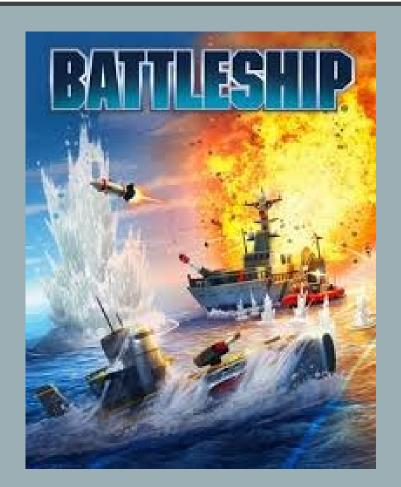
CLASSROOM ZONE REDUCE DISTRACTIONS

Seating Type

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

CLASSROOM ZONE

REDUCE DISTRACTIONS



CLASSROOM ZONE REDUCE DISTRACTIONS







CLASSROOM ZONE REDUCE DISTRACTIONS

Seating Placement

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











CLASSROOM ZONE EXTERNALIZETIME

e.g., Sarah Ward efpractice.com

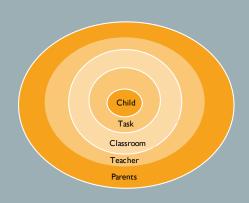
CLASSROOM ZONE EXTERNALIZE INFORMATION

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	NovelNotebookThoughtquestions	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	

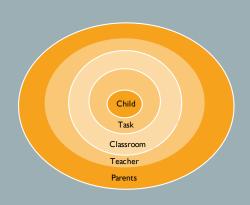


TEACHER ZONE FEEDBACK, PRAISE

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 SKILLSTRAINING (OST)

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



- 1. Skills instruction
- ✓ recording assignments/due dates in calendar
- ✓ using checklists for materials
- ✓ 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

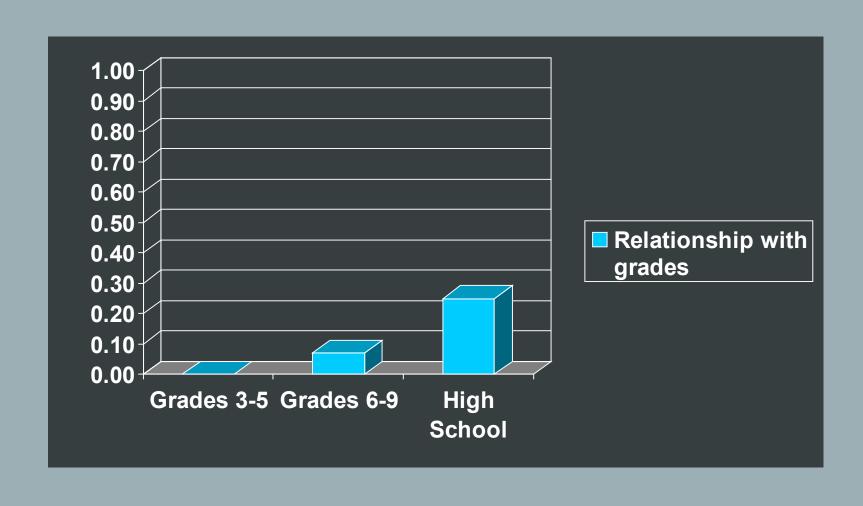


Increase praise

HOMEWORK

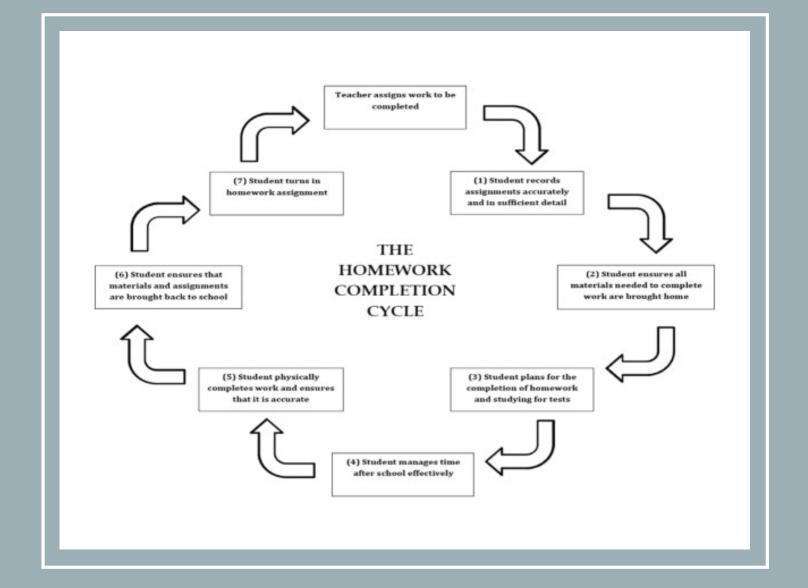
HOMEWORK & ACHIEVEMENT

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

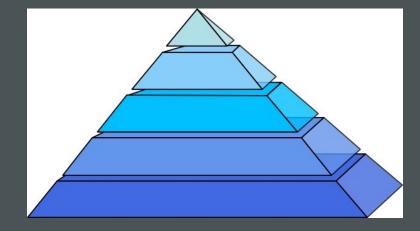
- 1) Stage manager (quiet setting, materials, remove screens, medication active?)
- 2) Motivator (positive reinforcement; reward system)
- 3) Role Model (match them: read, do banking; no screens)
- 4) Monitor (suggest breaks if frustration sets in; make sure length/content reasonable for your child)
- 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



Tests



Report cards



Notes from meetings



Notes from phone calls



All correspondence



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



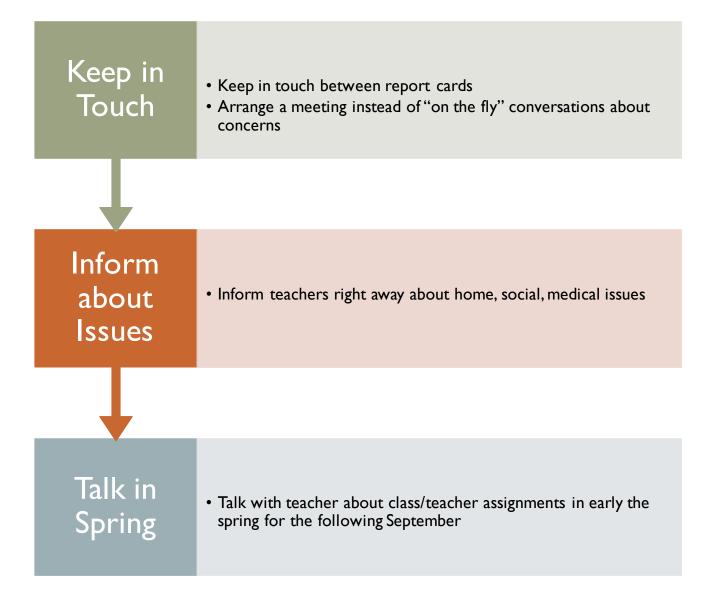
COMMUNICATE EARLY

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

改改改改 Dear (Teacher's Name) - Writing to help you get to know my child better - List 1 or 2 strengths, then share ADHD diagnosis. (Child's name) Interests/talents 女女女女女女 (Child's name) strengt hs (focus on (academic, athletic, musical, artistic, personal attributes): social, et c) 2) 1) 2) 3) (Child's name's) challenges related to ADHD and executive function deficits οА οВ o C Ineffective strategies (makes things worse) οА οВ o C Effective strategies that teachers have used in previous years οА οВ o C 影 - Best way to contact you (text, email, calling) - Thank teacher for their time/ express optimism about work t oget her 人女女女女 Thank you, (Your name)

COMMUNICATE





PARTING WORDS

Be informed

Be realistic

Pace yourself

Get support – you are not alone

RESOURCES

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

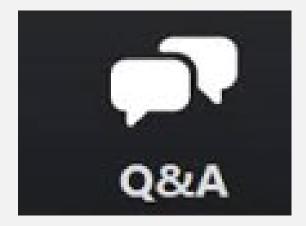
School Act: bclaws.gov.bc.ca



QUESTIONS FOR THE SPEAKER?

Please use the "Q&A" icon





"Question mark made of puzzle pieces" by Horia Varlan is licensed under CC BY 2.0



THANK-YOU FOR JOINING.

CONTACT THE KELTY MENTAL HEALTH RESOURCE CENTRE:

E-MAIL: KELTYCENTRE@CW.BC.CA

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

