# Building Responsive Approaches for Instructional Needs (BRAIN)



Prepared by HWDSB Psychological Services



# **Processing Areas**

<u>Using this guide</u>
<u>Verbal Comprehension - Expressive Language</u>
<u>Verbal Comprehension - Receptive Language</u>
<u>Visual-Spatial Processing</u>
<u>Fluid Reasoning</u>
<u>Processing Speed (Fluency)</u>
Working Memory
<u>Verbal Memory</u>
<u>Visual Memory</u>
<u>Visual-Motor Integration</u>
Phonological Processing
Orthographic Processing
Executive Functioning - Metacognition
Executive Functioning - Behavioural & Emotional Regulation
Nonverbal Communication
<u>Other Resources</u>

### **Using this Guide**

Understanding Learning Profiles: Understanding individual patterns of personal strengths and needs may be useful in promoting academic success, improving learning skills, and determining effective accommodations or interventions to support a student in the classroom.

How to Use this Resource:

Processing area and what it measures.

Processing Area					
	Definition				
Connected Skill	Instructional Strategies	Resources & Assistive Technology Strategies			

If this processing area is a strength, the student may excel with these tasks. If it is an area of need, the student may require support with them.

When choosing instructional strategies, it's important to consider the student's stage of development and overall learning profile.

Strategies and resources are designed with both elementary and secondary students in mind.

\* indicates that app can be found in the HWSDB catalogue

return to home

The Importance of Supporting Students in Their Area of Need: Supporting students' areas of need will reduce the amount of mental effort your brain uses when you are learning something new or doing a task (cognitive load).

Reducing cognitive load can have several positive effects on learning, including:

- improve learning
- increase productivity
- enhance creativity
- reduce stress and fatigue

- promote better decision-making
- increase focus and attention
- improve overall performance

If you come across a link that is not working or have a suggested app/website, please complete this <u>form</u> to let us know!

### **Verbal Comprehension - Expressive Language**

#### The ability to <u>express</u> ideas using words (spoken and written language)

#### Connected Skill

Communicate thoughts, needs or wants

Vocabulary development

Retrieve verbal information from longterm memory

Explain new ideas or concepts to other people

Complete oral or written expression tasks

Ask questions, make requests, express emotions and engage in conversation

Organize thoughts or ideas

Generate grammatically correct sentences and paragraphs

Give directions

Explain abstract concepts

Participate in class discussions

Talk in public

#### Instructional Strategies

Encourage students to read or listen to audiobooks to expand their vocabulary and background knowledge

Give extra time to formulate ideas

Provide cues/prompts, ask questions and model expressive language

Pre-teach new vocabulary and provide visual associations when possible

Use visual supports (pictures and diagrams) to help retrieve language-based information from memory

Encourage students to use mind maps or semantic webbing before presenting or writing to link vocabulary and thoughts

Allow for alternative ways to demonstrate knowledge (e.g., visual representations)

Encourage students to talk about interests and engage in conversation to practice communicating

Encourage students to use synonyms to help with word-finding difficulties

Provide opportunities to practice oral responses in advance

Assess knowledge through cloze activities (fill in the blank, matching, true/false, multiple choice)

## Resources and Assistive Technology Supports

Text-to-speech software and Picture Dictionary (<u>Microsoft Immersive Reader</u>)

Speech-to-text software (Microsoft Dictate)

Build keyboarding skills through online practice (<u>e.g., Typing Club</u> or <u>Typing.com</u>

Turn on word prediction and autocorrect features in <u>Microsoft Word</u>

Electronic dictionary, thesaurus & editing software (Microsoft Editor or Grammarly\*)

Activities to teach how to express emotions and needs (Microsoft Reflect)

Practice Oral Presentations (<u>Microsoft Speaker Coach</u>)

Answer questions and summarize information (Microsoft Co-Pilot)

5 ways to use Copilot in education #shorts

Al in Teams

Graphic organizers (PowerPoint, Canva)

<u>HWDSB's Virtual Library (</u>see last page)

Visual and symbol supported educational resources (<u>Boardmaker</u> and <u>Visual Supports</u>)

Centre for Success AT Resource (innovATion)



### **Verbal Comprehension - Receptive Language**

#### The ability to understand verbal and written language

#### Connected Skill

Understand instructions, directions, lessons, conversations

Understand new vocabulary

Comprehend written information and solve word problems

Identify important information and key points

Understand both figurative and literal language

Interpret sarcasm, play on words, and homonyms

Participate in class discussions and lessons

Socialize with peers

#### Instructional Strategies

Provide overview of lessons in advance

Pre-teach new/complex vocabulary or concepts

Repeat vocabulary, terms and definitions

Explicitly link prior knowledge with new vocabulary

Allow more time to process verbal information

Use simple and familiar language when giving instructions

Check-in to ensure comprehension

Present new information using concrete manipulatives and multisensory methods (written, visual and spoken)

Highlight key/main ideas

Reduce Auditory distractions

Provide step-by-step instructions with visual examples

Speak clearly, slowly and use gestures and visuals

Encourage student to do practice questions to prepare for tests

Teach student to look for and understand non-verbal gestures

Explain the root or origin of words and concepts to give context and meaning

#### Resources and Assistive Technology Supports

Text-to-speech software and Picture Dictionary (Microsoft Immersive Reader)

Electronic dictionary, thesaurus & editing software (Microsoft Editor or Grammarly\*)

Answer questions and summarize information (<u>Microsoft Co-Pilot</u>) 5 ways to use Copilot in education #shorts

HWDSB's Virtual Library (see last page)

Caption presentations in selected language (Microsoft Live Captions)

Graphic organizers (PowerPoint, Canva)

Reading Comprehension -<u>How Do I</u> <u>Teach Main Idea</u>?

Reading Rockets
Summarizing Strategies
(readingrockets.org)

Visual and symbol supported educational resources (<u>Boardmaker</u> and <u>Visual Supports</u>)

Centre for Success AT Resource (innovATion)



### **Visual-Spatial Processing**

The ability to analyze and integrate visual details, work with part-whole relationships, recognize patterns, and understand spatial relationships

#### Connected Skill

Understand and interpret graphs, charts, figures, geometric shapes, analog clocks, and other types of diagrams or visual information

Seeing the "whole picture" or knowing what details are important

Ability to "read between the lines" and interpret information that may not be obvious

Organize work on a page (e.g., write within margins and align math columns)

Build and assemble objects

Organize information from different sources into one cohesive written piece (e.g., putting parts of information together to create something new)

Understand directional information such as left/right or remembering directions to a location (sense of direction)

Mentally manipulate objects or visual patterns to see how they would appear if rotated

Estimate or gauge distance, depth, size, shape, time

Read nonverbal cues such as body language and facial expressions

Impact performance in Mathematics, Science, Geography, Art & Design

#### Instructional Strategies

Teach students to use self-talk when problem solving to help connect visual symbols to what they represent

Model tracking by using a finger or pointer while reading

Present information step-by-step and include a written or auditory sequence of steps to assist with visual tasks

Supplement visual material with explicit verbal instruction (auditory or written)

Use graph paper to make columns in math

Provide extra paper or space for students to write or show answers

Reduce unessential images and keep all visually presented material simple and uncluttered

Reduce visual distractions by folding a test or cover part of the page

Use highlights or sticky-note to draw attention to important information on worksheets

Provide the option of oral assessment

Explain the big picture before teaching the details with review and reminders throughout on how the parts fit to form the whole

When teaching math use number lines, visual representations and real life examples

#### Resources and Assistive Technology Supports

Mind mapping, concept mapping, outlining and graphic organizers (PowerPoint or Canva)

Khan Academy -Self-paced math practice and instructional videos

<u>GeoGebra</u> for math support and online manipulatives

Virtual manipulatives and math learning centre <u>Polypad</u>

Virtual Math Support (<u>Microsoft Math</u> <u>Solver</u> & <u>Math Assistant in OneNote</u>)

Virtual Math Tutoring (<u>TVO Mathify</u>) Grades 4-12

<u>Knowledgehook</u>-math software used to identify learning gaps in and provide targeted interventions (Grades 1-8)

Math Up: <u>MathUP Resources</u> (license required

<u>Math Manipulative Guide</u>

LDeschool Mathematics and LDs:

<u>Mathematics and Learning Disabilities</u>
(<u>LDs</u>)

Ontario Curriculum-High Impact Math Strategies and Tools: <u>Curriculum and</u> <u>Resources</u>

Resources to support creating positive learning conditions for math class through inclusive practice ideas and engaging activities.



### Fluid Reasoning

The ability to think logically and problem-solve in new situations or unfamiliar scenarios using logic and interpreting patterns, often requiring flexible thinking.

#### Connected Skill

Understand relationships between concepts

Infer or draw conclusions Make connections between new material and previous knowledge

Apply problem-solving skills in new situations (apply rules or transferring skills and knowledge)

Understand and anticipate cause and effect

Recognize patterns and relationships

Think flexibly

Generate multiple perspectives or options (divergent thinking)

See the big picture and how things relate to each other

Identify the main ideas and condense information down to the most essential or relevant parts

Apply logic to new situations

Think on your feet to solve a problem that requires logic and not memorized knowledge

Impacts performance in math, science and reading

#### Instructional Strategies

Explicitly teach multiple approaches to problem-solving

Provide opportunities to sort, classify, and categorize objects to demonstrate connections

Highlight and define relationships and connections between concepts or ideas

Explicitly link cause and effect

Think out loud to demonstrate and model problem-solving strategies

Provide guided practice with feedback

Provide a step-by-step checklist to complete a task

Use real-world problems and examples to help students to apply and generalize problem-solving strategies (e.g., analogies that are relatable)

Provide lesson outline to help student see how parts of lesson go together

Use graphic organizers, writing templates to assist in unifying or breaking information apart

Ask students to show all their work when possible and give partial credit if they can show the correct process

Teach cues for identifying main ideas

When teaching math use number lines, visual representations and real life examples

## Resources and Assistive Technology Supports

Mind mapping, concept mapping, and graphic organizers (PowerPoint, Canva)

<u>Khan Academy</u> -Self-paced math practice and instructional videos

Minecraft in Education

Reading Rockets
Summarizing Strategies
(readingrockets.org)

Knowledgehook-math software used to identify learning gaps in and provide targeted interventions (Grade 1-8)

Math Up: <u>MathUP Resources</u> (license required)

Math Manipulative Guide

LDeschool Math and LDs: <u>Mathematics</u> and <u>Learning Disabilities (LDs)</u>

Ontario Curriculum-High Impact Math Strategies and Tools: <u>Curriculum and</u> Resources

Answer questions, organize, summarize or simplify information (<u>Microsoft Co-Pilot</u> & <u>Al in Teams</u>)

<u>5 ways to use Copilot in education</u>
#shorts

Resources to support creating positive learning conditions for math class through inclusive practice ideas and engaging activities.



### **Processing Speed (Fluency)**

### The ability to rapidly and accurately process information

#### Connected Skill

Process information quickly Respond quickly

Copy information down efficiently

Complete work/tests within the required time frame

Improvise during class discussions

Take notes during lessons

Make rapid comparisons between concepts

Quickly and accurately process letters, words, numbers, and quantity (rapid automatic naming)

Read with sufficient speed and accuracy to support reading fluency and reading comprehension

Count with automaticity and solve basic math calculations quickly to support math fluency

#### Instructional Strategies

Reduce quantity of work in favour of quality

Provide additional time to process instructions, formulate a response, provide an answer and complete a task (extra time at all phases)

Speak slowly and use familiar vocabulary

Minimize the amount of information that needs to be copied (provide copy of notes or have student take pictures)

Provide advanced notice before asking questions in class

Short answer and/or multiple-choice format for assessment and allow for oral assessment

Provide activities for repeated practice to increase fluency and automaticity (e.g., flashcards, speed drills)

Teach keyboarding skills and encourage regular practice

Provide tools that support processing fluency (calculator, word prediction, speech to text)

Break tasks down into manageable chunks

#### Resources and Assistive Technology Supports

Record classroom lessons

Text-to-speech software and Picture Dictionary (<u>Microsoft Immersive Reader</u>)

Speech-to-text software (<u>Microsoft</u> Dictate)

Use Microsoft Office Lens to upload documents and images (<u>Microsoft</u> <u>Office Lens</u>)

Build keyboarding skills through online practice (e.g., Typing Club or Typing.com

Answer questions, organize, summarize or simplify information (Microsoft Co-Pilot & Al in Teams)

5 ways to use Copilot in education #shorts

Centre for Success AT Resource (<u>innovATion</u>)

Virtual E-Resources, Audio and eBooks (HWDSB System Learning Commons)

<u>Knowledge Hook</u>-math software used to identify learning gaps in and provide targeted interventions (Grades 1-8))

Math Up: <u>MathUP Resources</u> (license required)

<u>Math Progress</u>-customize lessons to build foundational math skills



### **Working Memory**

The ability to temporarily hold and manipulate information in your mind while performing a task.

#### Connected Skill

Multi-task (i.e., perform more than one task at a time)

Follow multiple-step instructions

Follow a conversation while keeping responses and follow up questions in mind

Sustain attention during a task

Recall and interpret lengthy reading passages

Organize and sequence ideas for writing tasks

Keep track of belongings and materials

Hold a question in mind while formulating a response or carrying out an action

Remember phonological rules and apply them when reading unfamiliar words

Continue to hold ideas and knowledge in mind while trying to spell words and write sentences (organize ideas)

Work through math calculations while keeping the logical sequence of a math problem in mind

Take notes-listening while writing

Time management-keeping track of what task needs to be done next

Participating in class discussionsremember what was said in the lesson

#### Instructional Strategies

Simplify tasks, present information slowly, and draw attention to key points

Provide a written checklist of steps to complete a task

Clearly lay out success criteria at the beginning of a task

Encourage students to dictate thoughts to reduce cognitive load (e.g., scribing or speech to text resources)

Encourage the use of verbal mediation strategies

Break tasks into smaller chunks Provide information in multiple modalities (e.g., verbal, written, kinesthetic)

Use visuals to support information like anchor charts, diagrams, pictures

Overlearn information so it becomes automatic to reduce cognitive load (e.g. math facts)

Provide class notes and handouts prior to class

Teach students to be active readers (e.g. highlighting, underline and summarizing key points)

Repeat instructions and highlight main points (Chunk, pause and repeat critical key items)

Check in with students to ensure comprehension of task expectations and how to begin

#### Resources and Assistive Technology Supports

Make use of external memory devices such as assistive technology, calculators, alarms, calendars (MS 360 calendar – Planner Guide)

Turn on word prediction and autocorrect features in <u>Microsoft Word</u>

Text-to-speech software and Picture Dictionary (<u>Microsoft Immersive Reader</u>)

Speech-to-text software (<u>Microsoft</u> <u>Dictate</u>)

Mind mapping, concept mapping, and graphic organizers (PowerPoint, Canva)

Visual memory aids for math (e.g., multiplication table, visual representations, number lines)

Virtual manipulatives and math learning centre <u>Polypad</u>

Virtual Math Support (<u>Microsoft Math</u> <u>Solver</u> & <u>Math Assistant in OneNote</u>)

Note taking app: OneNote & Notability\*

Mnemonics such as acronyms, rhymes or visualization mnemonics:

mnemonic-strategies

Magic-to-do page on <u>Goblin Tools</u>- A tool to break tasks down into manageable steps

<u>Knowledgehook</u>-identify gaps & provide targeted math interventions (Grade 1-8)

Summarize or simplify information (Microsoft Co-Pilot & Al in Teams)



### **Verbal Memory**

The ability to remember and recall information that is presented in words (spoken or written). It involves the storage and retrieval of language-based information, such as lists of words, sentences, conversations and stories

#### Connected Skill

Remember and follow verbal instructions

Memorize factual or rote information (e.g., math facts, months of the year, alphabet song)

Remember details from stories, conversations and class lessons

Recall sequences

Remember lengthy verbal instructions or reading passages

#### Instructional Strategies

Present information in small chunks

Check in with students to ensure comprehension of task expectations and how to begin

Repeat key points

Teach alternative ways to recall information (e.g., mnemonics)

Accompany information with multisensory learning experiences (e.g., visual, tactile, kinesthetic cues, videos)

Teach paraphrasing

Give verbal information in written form so it can be reviewed as often as needed

Use visuals to teach new concepts and use them to cue memory

State important information at the beginning and the end of a lesson encourage drill/active rehearsal to help convert information to longer-term storage

Embed information in context Encourage frequent review of subject material (repeated exposure)

### Resources and Assistive Technology Supports

Use text to speech software to improve comprehension and retention")
(Microsoft Immersive Reader)

<u>HWDSB's Virtual Library (</u>see last page)

Speech-to-text software (<u>Microsoft</u> <u>Dictate</u>)

Record classroom lessons (to allow for repeated exposure)

Summarize or simplify information (Microsoft Co-Pilot & Al in Teams)

Strategies to Enhance Students' Memory

<u>Making It Stick: Memorable Strategies</u> to Enhance Learning

mnemonics, such as acronyms, rhymes or visualization mnemonics:

mnemonic-strategies from LDonline & mnemonic-strategies



### **Visual Memory**

The ability to remember and visualize things you have seen before.

#### Connected Skill

Recall visual details of images

Remember maps and diagrams

Remember the layout of a room or objects

Recall visual sequences (e.g., spelling patterns)

Remember mathematical formulas

Remember movement sequences (e.g., dance and martial arts)

Remember landmarks to help navigate directions

Copy from a book or from the board

Find letters on a keyboard or numbers on a calculator

#### Instructional Strategies

Verbally explain visual information
Use mnemonics and alternative memory
strategies for easier recall

Provide information through multiple sensory learning experiences (e.g., visual, tactile, kinesthetic cues, videos)

Draw student's attention to key visual elements (e.g., highlight or underline)

Provide auditory cues (e.g., use keywords to cue)

Reduce the amount of information on the page (e.g., less print to read, isolate key info)

Provide access to formula or data sheets during tests

Use graphic organizers, mind maps, writing templates to assist in unifying information and breaking information apart

#### Resources and Assistive Technology Supports

Video record demonstrations to allow for repeated exposure

Speech-to-text software (<u>Microsoft</u>
<u>Dictate</u>) and Text-to-speech software (<u>Microsoft Immersive Reader</u>)

Build keyboarding skills through online practice (e.g., Typing Club or Typing.com

Electronic dictionary and thesaurus (Microsoft Editor)

Virtual Math Support (<u>Microsoft Math</u> <u>Solver</u>)

Use Microsoft Office Lens to upload documents and images (<u>Microsoft</u> <u>Office Lens</u>)

Strategies to Enhance Students' Memory

<u>Making It Stick: Memorable Strategies</u> to Enhance Learning

mnemonics, such as acronyms, rhymes or visualization mnemonics:

mnemonic-strategies from LDonline

mnemonic-strategies



### **Visual Motor Integration**

The ability to coordinate visual perception and motor movement to guide hand or body movements accurately and efficiently (e.g., printing, drawing, and catching)

#### Connected Skill

Print or write

Maintain consistent size and spacing when printing or writing

Letter formation

Copy from blackboard

Complete written work

Make columns in math

Put numbers on a line

Draw or copy shapes

Perform motor tasks such as using scissors, tying shoelaces and assembling items

Play sports that track the movement of a ball (e.g., throwing, catching, hitting, and kicking)

Hand-Eye coordination tasks such as mazes, and connecting dots

Plan or organize movements in a sequence to complete a multi-step task (motor planning)

#### Instructional Strategies

Reduce the quantity of work in favour of quality

Provide copies of class notes

Take pictures of important class information

Scribe or allow speech-to-text and word prediction for tasks with extensive written output

Implement strategies to strengthen visual-motor skills (e.g., tracing, threading beads, guided templates to practice cutting and writing)

Allow extra time to complete tests and written work

Cloze activities (e.g., fill in the blank or short answer)

Allow the student to demonstrate knowledge in alternative formats (e.g., demonstrate, orally describe, use virtual manipulatives)

Accept point form answers

Use graph paper to guide number or letter placement

Make accommodations in gym class (e.g., larger balls)

#### Resources and Assistive Technology Supports

Speech-to-text software (<u>Microsoft</u> <u>Dictate</u>)

Build keyboarding skills through online practice (e.g., Typing Club or Typing.com

Turn on word prediction and autocorrect features in Microsoft Word

Video record demonstrations to allow for repeated exposure

Use Microsoft Office Lens to upload documents and images (<u>Microsoft</u> <u>Office Lens</u>)

Handwriting without Tears <u>Handwriting</u>
<u>Without Tears® | Learning Without</u>
<u>Tears® (lwtears.com)</u>

<u>Printing Like a Pro! - An Evidence-Based</u> <u>Resource for Teaching Students to Print</u> (bctf.ca)

Mind mapping, concept mapping, and graphic organizers (PowerPoint, Canva)

Centre for Success AT Resource (innovATion)

Virtual manipulatives and math learning centre <u>Polypad</u>



### **Phonological Processing**

The ability to hear, identify and manipulate the sounds of words (phonemes) to process written and spoken language.

#### Connected Skill

Identify and make rhyming words

Learn sound to symbol correspondence

Break words into chunks (syllable segmentation)

Break down words into individual sounds and blend the sounds back together to form words

Decode- convert symbols to sounds (read words)

Encode-convert sounds to symbols (spell words)

Reading fluency and comprehension

Writing fluency and written expression

Confuse words that sound similar

Articulate words

Word Finding (use precise language)

Vocabulary development

Learn a new language

#### Instructional Strategies

Systematic and explicit phonics instruction

Activities that focus on identifying, segmenting, blending and identifying sounds in words (e.g., clapping out syllables, rhyming games)

Explicitly teach rhyme and phonetic rules (e.g., Empower program strategies)

Use multi-sensory (visual, auditory and tactile) methods to develop symbolsound correspondence

Use decodable text to help students apply their phonic knowledge

Phonological memory games using whole-word or word families (e.g., word bingo, word match)

Ensure students have accurate and fast recognition of the alphabet and consonant letter combinations

Small group or individualized instruction to address specific areas of challenge

Allow for repeated reading with corrective feedback

Use partner and/or model reading strategies

#### Resources and Assistive Technology Supports

<u>Acadience Assessment Tools by Grade</u>

HWDSB's <u>Decision Making Tool</u> for reading intervention <u>Gr 3-8</u> & <u>Gr 9-12</u>

HWDSB's Guide to Evidenced based Reading Interventions (Gr 3-8): phonemic awareness, phonics, decoding, reading fluency reading comprehension

Gr K-2 Acadience Reading Support

Literacy Activities (K-2)-Family Guide

<u>University or Florida Reading Institute</u> (<u>UFLI</u>) Systematic reading intervention

Reading Rockets- reading activities

Book Creator - create interactive eBook

MOE:<u>Effective early reading instruction:</u>
<u>a guide for teachers</u>

<u>HWDSB's Virtual Library</u> (see last page)

Alternative Education Resources Ontario (AERO) - text in an accessible format

Text-to-speech software (<u>Microsoft</u> <u>Immersive Reader</u>)

Centre for Success (innovATion)

Onlit: structured literacy instruction

All about Adolescent Literacy

Reading Coach & Reading Progress



### **Orthographic Processing**

The ability to quickly and accurately identify (when reading) and recall (when spelling) the letters and letter sequences that correspond to the speech sounds of language

#### Connected Skill

Recognize/or correctly form letters and letter sequences

Identify letter-sound correspondence

Word recognition (e.g. sight word vocabulary)

Discriminate between visually similar letters (e.g., b and d) and words (e.g., "no" and "on"; "of" and "off")

Read and spell irregular words (e.g., colonel)

Reading fluency and comprehension

Spelling (sound to print)

Written expression and writing fluency

Recognize and remember symbols and notations (e.g., math formulas)

Develop vocabulary by recognizing and retaining new words

Edit text (e.g., recognizing when a word is spelled correctly)

#### Instructional Strategies

Explicitly teach letter identification, formation and spelling patterns to help with letter & word reversals

Systematic & explicit phonics instruction - phoneme (sound)-grapheme (letters) correspondence

Use multi-sensory methods to develop symbol-sound correspondence

Word work that focuses on specific orthographic patterns (word families)

Phoneme manipulation & rhyming activities

Ensure students have accurate and fast recognition of the alphabet and consonant letter combinations

Systematic spelling instruction that emphasizes letter patterns, common letter sequences, syllabication rules, spelling rules & exceptions to the rules

Targeted practice with high-frequency words, including irregular words

Teach words using morphological strategies (how specific letter patterns convey meaning)

Repeated reading of connected text with specific letter pattern to increase fluency (decodable text)

Learning word structures, including roots, prefixes, and suffixes, can help to decode and spell complex words (e.g., peeling off strategies)

## Resources and Assistive Technology Supports

Acadience Assessment Tools by Grade

HWDSB's <u>Decision Making Tool</u> for reading intervention <u>Gr 3-8</u> & <u>Gr 9-12</u>

Evidenced based Reading Interventions (Gr 3–8): <u>phonemic awareness</u>, <u>phonics</u>, <u>decoding</u>, <u>reading fluency</u> <u>reading comprehension</u>

Gr K-2 Acadience Reading Support

Literacy Activities (K-2)-Family Guide

<u>University or Florida Reading Institute</u> (<u>UFLI</u>) Systematic reading intervention

MOE: <u>Effective early reading instruction:</u> <u>a guide for teachers</u>

<u>HWDSB's Virtual Library (</u>see last page)

<u>Teach Morphology</u> & <u>Morphology</u> <u>Instruction</u>

<u>Alternative Education Resources Ontario</u> (<u>AERO</u>)- accessible text

Text-to-speech (Immersive Reader)

Typing skills Typing Club or Typing.com

Word prediction Microsoft Word

Editing & Spell Check (Microsoft Editor)

Speech-to-text (Microsoft Dictate)

Reading Coach & Reading Progress

Centre for Success (innovATion)



### **Executive Functioning (EF) - Metacognition**

The ability to be cognitively flexible, initiate, plan, organize, sustain attention and monitor. Executive functioning acts as the brain's overall management system and is a strong predictor of academic success and productivity.

#### Connected Skill

Create an overall plan to reach a goal

Shift focus between different tasks

Adjust thinking and abandon unsuccessful strategies while problemsolving (mental flexibilty)

Get started on tasks

Maintain focus, energy, and momentum to complete a task

Prioritize when there is more than one thing to do

Develop sequential steps to complete a task

Sustain attention

Follow complex or multi-step tasks

Tolerate transitions and changes to routine

Keep track of belongings

Organize books, locker, desk, bedroom

Notice mistakes in work (self-monitoring)

Estimate time required for tasks

#### Instructional Strategies

Predictable and consistent routines (include visual daily schedules)

Provide forewarning of upcoming transitions/changes to a schedule

Explicitly teach cognitive flexibility, divergent thinking (generate multiple possibilities), and problem-solving strategies such as self-talk

Provide support to identify and initiate the first step of a task

Provide work samples and models

Use labelled binders, bins, etc.

Organize work into electronic folders

Provide instructions in writing (step by step with clear sequence)

Use graphic organizers, mind maps, writing templates to help unify information & break information apart

Chunk, pause & repeat critical key items

Provide checklists, schedules, organizers

Model planning, organization and goal setting (establish SMART goals)

Make time visual (visual timers, calendars, due dates in writing with planned mini-due dates)

Use strategies to reduce stress and promote healthy sleep habits to help optimize executive functioning

#### Resources and Assistive Technology Supports

Mind mapping & graphic organizers (PowerPoint or Canva)

E-tools for scheduling/reminders & lists (<u>Microsoft Planner</u> & <u>Microsoft To-Do</u>)

Visual Task Timer\*

Use camera to take a picture or video to capture important class information

Use <u>Microsoft Office Lens</u> to upload documents and save as PDF

Answer questions and summarize information (Microsoft Co-Pilot)

<u>Strategies to help develop critical</u> <u>thinking skills (metacognition)</u>

Activities Guide: Enhancing and
Practicing Executive Function Skills with
Children from Infancy to Adolescence

<u>Card games and board games to practice EF skills</u>

<u>Executive Skills Coaching - What</u> <u>Parents Should Know</u> (middle school)

Helping kids who struggle with EF

<u>HomeworkPlanner.pdf</u>

EF in Teens: 10 Strategies for Parents

Magic to-do page in <u>Goblin Tools</u>- A tool to break tasks down into steps



# Executive Functioning (EF) - Behaviour & Emotional Regulation

The ability to guide and modify behaviour and emotions while working towards a goal, especially in challenging situations. (e.g., regulate emotions, goal directed perseverance, response inhibition, and shift flexibly between tasks)

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### Manage impulsivity and think before acting

Consider the consequences of actions

Tolerate transitions and routine changes

Shift between tasks

Abandon unsuccessful strategies while problem-solving

Manage frustrations

Control temper and emotions

Understand the impact of behaviours on others

Maintain focus, energy, and momentum to complete a task

Delay gratification

#### Instructional Strategies

Explain the rationale of the task to increase engagement

Establish routine and keep schedules as consistent and predictable as possible

Model calm & reflective problem-solving

Establish and maintain a supportive and reliable relationship with student

Provide reminders & instruction prior to transitions or situations known to trigger dysregulation

Explicitly teach cognitive flexibility, divergent thinking, problem-solving, impulse control and self-talk strategies

Provide external reminders to mitigate externalizing behaviours (e.g., Stop, Now, and Plan)

Anticipate & plan for problem situations

Teach and practice coping & calming strategies

Help students to better understand the consequences of their behaviour

Develop a system to communicate when a break is needed (e.g., exit card)

Teach students to advocate for needs

Provide movement breaks

Reward system/external motivators to make connection between practicing skills and working towards reward

#### Resources and Assistive Technology Supports

#### Smart But Scattered Kids (website)

Electronic devices for scheduling/reminders and making lists (Microsoft Planner & Microsoft To-Do)

Validate feelings: Emotion Coaching

<u>Homepage - We Help with Emotion</u>

<u>Coaching (elearningontario.ca)</u>

Relaxation techniques in the classroom
Chill Out! Classroom Relaxation
Exercises for All Ages » Britannica
(britannicaeducation.com)

<u>Strategies to identify and manage</u> <u>emotions from School Mental Health</u> <u>Ontario (SMHO)</u>

Organize your mind strategies

Incentive planning: IncentivePlanners.pdf

Activities to teach how to express emotions and needs (Microsoft Reflect)

Visual and symbol supported educational resources (<u>Boardmaker</u> and <u>Visual Supports</u>)

Social Emotional Learning tools



### **Nonverbal Communication**

The ability to understand and interpret social cues and pragmatic language (knowing what to say, how to say it, and when to say it)

#### Connected Skill

Understand and apply appropriate social skills

Manage transitions

Comprehend figurative speech, idioms, humour, sarcasm

Understanding nuances (reading between the lines)

Control or coordinate movements (i.e., clumsy, poor balance, fine motor control)

Recognize and understand how people communicate without words through facial expression, body language, and tone of voice

Recognize emotions

Express emotions

Make friends and navigate relationships

See the big picture (e.g., get lost in the details)

Organization and planning

Spatial awareness

Thinking in flexible ways (seeing the ambiguity in situations)

Being able to generate multiple explanations (divergent thinking)

#### Instructional Strategies

Use role play and provide direct instruction about social situations (e.g., model how to join a group, where to sit)

Provide a daily schedule and explicitly explain what is expected over the day

Monitor social interactions and provide feedback to assist with possible misperception or misinterpretation

Provide warnings related to transitions and possible changes in routine or plans

Teach by talking rather than by showing

Explicitly teach ways to plan, organize, and understand social situations

Limit or narrow down options to avoid becoming overwhelmed

Use explicit language - avoid idioms, slang, sarcasm, figurative speech

Emphasize similarities, differences, and connections between details

Breakdown abstract information into concrete terms and clues

Help students to assess the size of a problem- is it big or is it little?

Explain the rationale or goal of the task to increase engagement

Reward system/external motivators to help see the connection between practicing skills and working towards a reward

#### Resources and Assistive Technology Supports

Visual and symbol supported educational resources (<u>Boardmaker</u> and <u>Visual Supports</u>)

Classroom accommodations for nonverbal learning disabilities (understood.org)

Activities to teach how to express emotions and needs (<u>Microsoft Reflect</u>)

Identification and Management of
Emotions - Resource from School Mental
Health Ontario (SMHO)

<u>The NVLD Project | Non-Verbal Learning</u>
<u>Disability</u>

Social Skills in Your Classroom | Reading Rockets

<u>Reimagining Wellness 2024</u> fosters wellbeing, creates community and supports each student in feeling safe, supported and included

Create a social story: <u>Templates for</u>
<u>Personalized Teaching Stories | Autism</u>
<u>Speaks</u>

<u>Visual Supports (HWDSB Speech and Language Services)</u>



### Other Resources - Infolets

These and other resources can be found on the HWDSB website under the Mental Health tab (Help by Topic)





### **HWDSB** Lost, Late and Scattered: Helping a Child with Executive Functioning Difficulties.

#### **HWDSB**



#### Suide to Understanding Learning Disabilities (LDs)









curiosity • creativity • possibility

#### **HWDSB**





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#### What is Anxiety?

#### **HWDSB**



We Help.

#### **HWDSB**





#### **HWDSB**





### **ACCESSIBILITY FEATURES**

in HWDSB's Elementary

# **VIRTUAL LIBRARY**

### Logging into the Virtual Library in 1, 2, 3:

- 1. Have your board-issued email and password ready. Don't have it? *Check with your teacher.*
- 2. Visit HWDSB's Student website & log into the Hub.
- 3. Click the Virtual Library button or search for HWDSB Virtual Library.



#### Sora

Popular reading App for students in K-12

- Increase/decrease font size
- Audiobooks and read-along titles available
- Colour contrast
- Alternative fonts

### ON\*CORE

#### **ON-Core**

Multimedia correlated to the K-12 ON curriculum

- Closed captioning
- Video transcription available
- Can request CC on videos without, contact the SLC to request.



### **Curio**

10,000+ high-quality videos and podcasts

- Closed captioning
- Video transcription available, including interactive transcription



### **Britannica Elementary**

Research database geared to students in grades JK-5.

- Option to choose reading levels
- Increase/decrease font size
- Text-to-speech available
- Alternative fonts



#### **PebbleGo**

Research Database specifically designed for JK-3 students.

- Read-along feature
- Default large type font
- Transcripts for videos
- Screen reader support



### **Gale Elementary**

Geared to students in grades JK-4.

- Alternative font sizes
- Ability to adjust font spacing
- Colour contrast
- Text-to-speech available
- Screen reader support





### **ACCESSIBILITY FEATURES**

# **VIRTUAL LIBRARY**

#### Logging into the Virtual Library in 1, 2, 3:

- 1. Have your board-issued email and password ready. Don't have it? *Check with your teacher.*
- 2. Visit HWDSB's Student website & log into the Hub.
- 3. Click the Virtual Library button or search for <a href="https://example.com/html/>
  HWDSB Virtual Library.">HWDSB Virtual Library.</a>



#### Sora

Popular reading App for students in K-12

- Increase/decrease font size
- Audiobooks and read-along titles available
- Colour contrast
- Alternative fonts

## ON\*CORE

#### **ON-Core**

Multimedia correlated to the K-12 ON curriculum

- Closed captioning
- Video transcription available
- Can request CC on videos without, contact the SLC to request.



### **Curio**

10,000+ high-quality videos and podcasts

- Closed captioning
- Video transcription available, including interactive transcription



### **Britannica High**

Research database geared to students in grades JK-5.

- Option to choose reading levels
- Increase/decrease font size
- Text-to-speech available
- Alternative fonts



### **Gale High**

Gale High is geared for students in grades 9-12.

- Increase/decrease font size
- Adjust font spacing
- Colour contrast
- Text-to-speech
- Screen reader support

### **Need More Help?**

- Check with the Teacher Librarian in your school
- Check with the Learning Commons Technician in your school
- Email slc@hwdsb.on.ca





## ACCESSIBILITY SYMBOLS

**VIRTUAL LIBRARY** 

### **Accessibility in Databases**

Many databases offer accessibility features that help make learning inclusive for all students. Below are common symbols and their meanings.



Text to Speech: words read aloud to assist with auditory processing.



Font Size: increase or decrease the font size.



Alternative Fonts:
Different fonts
offered for easier
visual processing.



Closed Captions: Shows spoken dialogue as text on the screen.



Transcription: written text of audio/video recordings.



Translation:
Represents
multiple language
options.

#### **HWDSB VIRTUAL LIBRARY**



Find Resources with these accessibility features on the <u>HWDSB Virtual Library</u>.

### **Student Support Template**

	ose an area of processing <u>need</u> from the Strengths and Needs chart that is included BRAIN document (e.g., Phonological Processing)
aca	ze the BRAIN document to define selected areas of need. Identify connected skills and demic tasks that may be challenging. Select an Instructional Strategy and Resource/
	essing area of Need: nition:
 Con	nected skill:
	demic impact:
 Resc	ource or AT support:
	ose an area of processing <u>strength</u> from the Strengths and Needs chart that is includ BRAIN document and can be used to support learning.
	essing area of Strength: nition:
 Con	 nected skill:
 Rela Instr	rted academic strength:uted academic strength:uctional strategy to leverage strength:
 Use	the information above to update the IEP.
	ersal Design for Learning - Consider other students in the classroom who might bene othese strategies.

Link to editable version