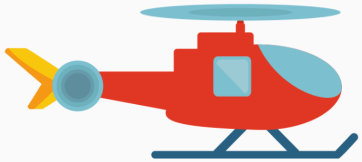
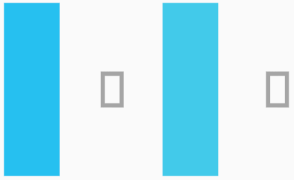
Calm Me Downs Movement Cards

Activity #2



Helicopter

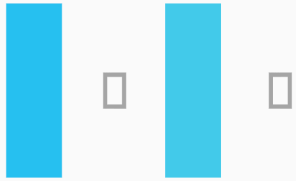


Snail

Calm Me Downs Movement Cards

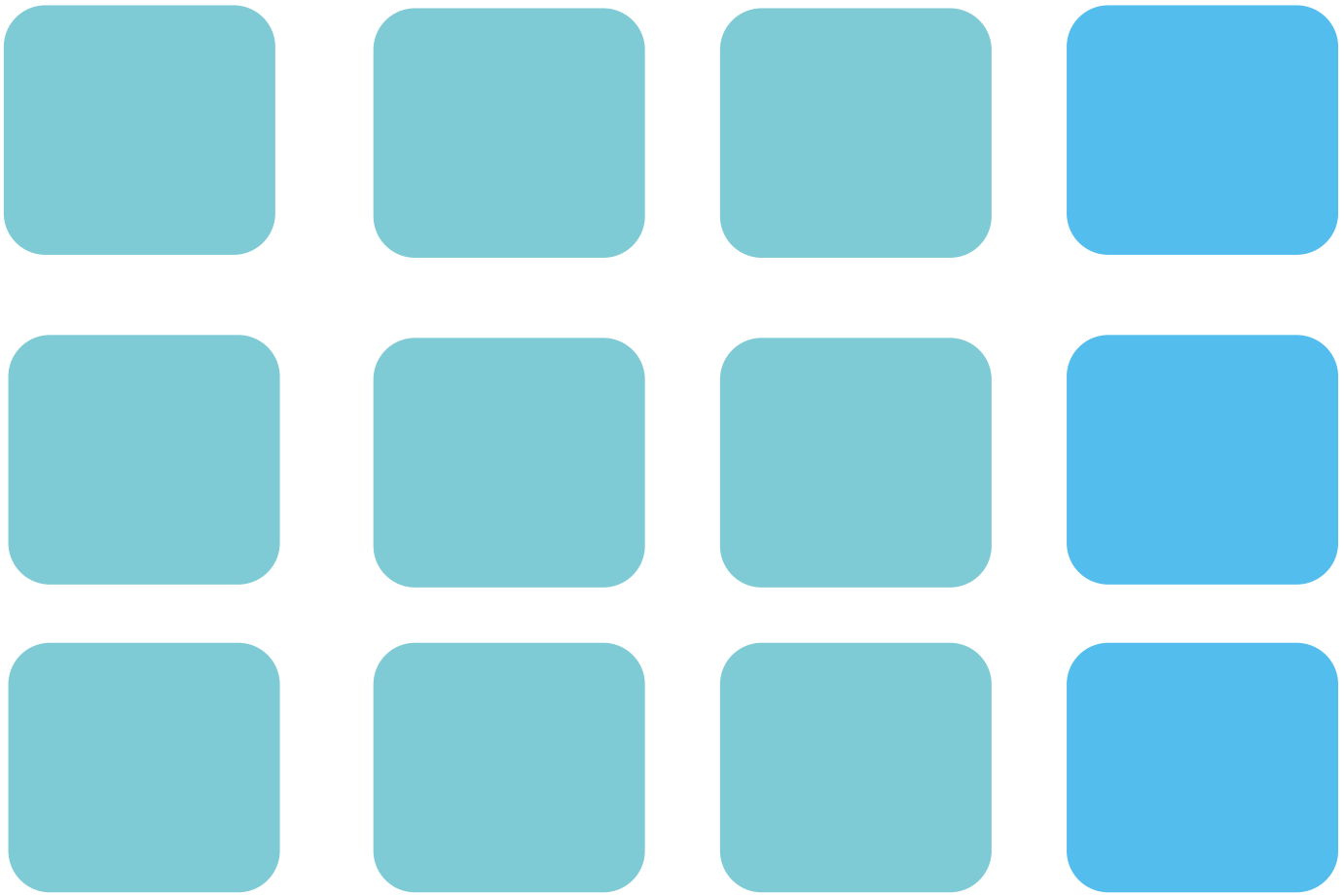
Activity #3

Toronado

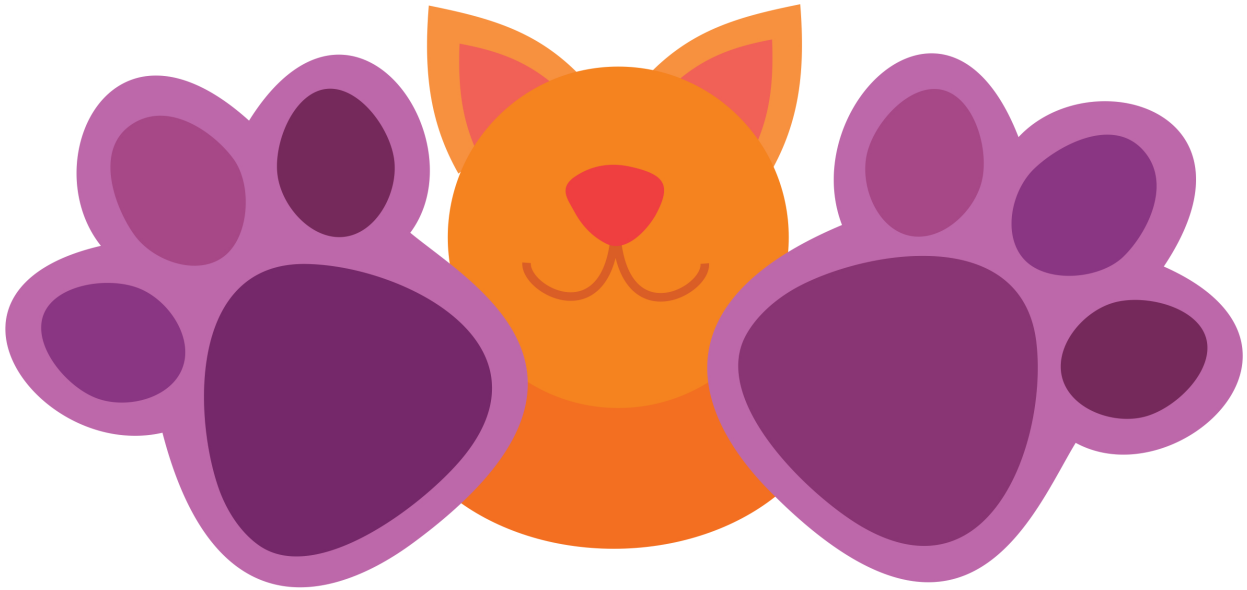


Water Rippling

1 2 3 Freeze



Don’t Forget to Pause



PAUSE

THE KINETIC CLASSROOM PART II

The "Cognitive Conversation" about Attention

CogniTap + Spots for Alerting & Regulating

Music, Drumming and Sound for Cognitive Engagement

Refining Your Tool Box of Cognitive-Movement Sequences + Coaching Strategies for Your Setting

The "Cognitive Conversation" about Attention

Attention is more than ONE Thing

Get the Conversation Started Prompts:

- What is attention?
- What makes it easy to pay attention?
- What makes it difficult to pay attention?
- What are the parts of the attention cycle?
- How do you turn on your attention engine?
- What helps your attention engine run smoothly?
- What does it mean to be alert?
- When does your attention need a break?
- What makes your brain drift?
- When you drift where do you go?
- What distracts you?
- What helps you remain focused?
- What do you tell yourself when you brain needs a break?
- How long do you think a brain breather should last?
- How do you re-alert your attention?
- What do you say to yourself to re-alert your attention?
- Are there ways we, as a class, can help one another remain alert?

Mrs. Johnston's Cognitive Classroom

I am My Brain's Best Coach

Ways to turn my TORCH On! (alert)

1.

2.

3.

I am My Brain's Best Coach

Ways to draw My Attention to a specific target (select)

1.

2.

3.

I am My Brain's Best Coach

Ways to help me FOCUS (attend) during the day

1.

2.

3.

I am My Brain's Best Coach

My favorite ways to "switch off" and take a break (drift)

1.

2.

3.

Selecting and Attending Prompts:

- How do you use your headlights to choose the proper target of your attention?
- What do you see, think and hear when you select different targets of your attention?
- Can you show me how you direct your headlights to the person, place or thing you are to focus on now?
- What do you tell yourself about selecting the proper focus of your attention?
- How do you know if your headlights are off-target?
- Attending is directing your mental energy toward a specific target.
- Can you show me what attending looks like?
- If I am the target of your attention, what will you look like when you are attending to me?
- If your book is the target of your attention, what will you look like when you are reading?
- If a classmate is the target of your attention, what will you look like when you are attending to your classmate?

Executive Function Songs & Chants

PreK-5th SAM Songs Self-Control Attention Memory The Kinetic Classroom

Wait!

Wait, wait, wait it out
THINK ABOUT IT FIRST
Before you do anything

It's *smart* to think it out

When you get the urge to act
You can wait and think
All the possibilities
Result in different things

You want what you do
To be good for all
When you wait and you think
Things will turn out well

PreK-5th SAM Songs Self-Control Attention Memory The Kinetic Classroom

Hey Attention!

Hey **ATTENTION**, how are YOU?

Wake up we have much to do

FOCUS on what's important

Turn on your headlights take it in

Thank you **ATTENTION** you are my friend

Now the learning is about to begin

Seated Work For Better Attention

Cognition is Mediated by the Cerebellum

"When we consider brain anatomy, we recognize the importance of the integration of the cortical and subcortical structures of the brain in learning and behavior. We need to keep front of mind that the higher level cognitive systems, rest on the subcortical structures including the limbic system and the cerebellum. Proper integration is needed for high quality learning. As the phylogenetically older of the brain systems, the cerebellum precedes the prefrontal cortex, in the automaticity of learning and behavior. Both are stored in and mediated by the cerebellum." (Kenney & Comizio, 2016)

Q:

How can we maximize entrainment, cognition and social connections?

CogniTap & CogniTap Spots

- Alerting Attention
- Calming & Organizing the CNS
- 1-5 minute Desk Percussion Activities
- The Stadium Effect
- Compositions & Orchestras

CogniTap Desk Moves: Set 3

Hand Table Taps

R	L	R	L	R	L	R	L
L	R	L	R	L	R	L	R
1	&	2	&	3	&	4	&

Toe Floor Taps

R	L	R	L	R	L	R	L
R	R	L	L	R	R	L	L
1	&	2	&	3	&	4	&

Sequential or Simultaneous

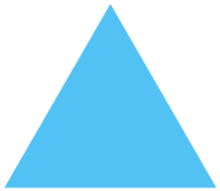
Right Toe Tap

Left Toe Tap

Right Hand Tap

Left Hand Tap

Clap



Left Heel Tap

Right Heel Tap

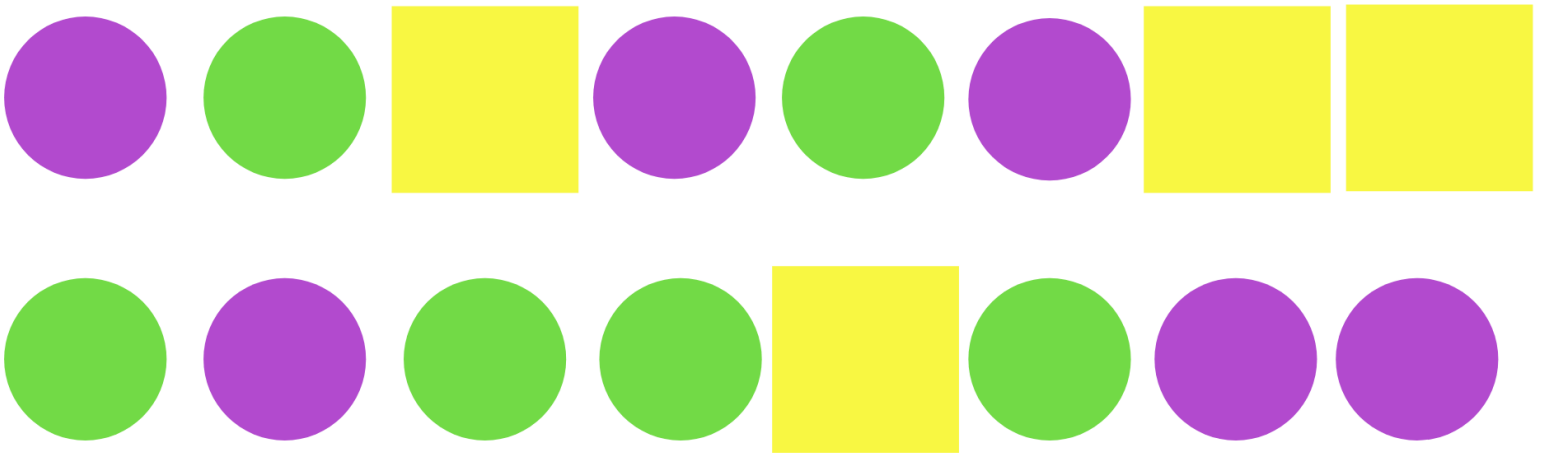
Both Hands Pat

Rest - Be Still

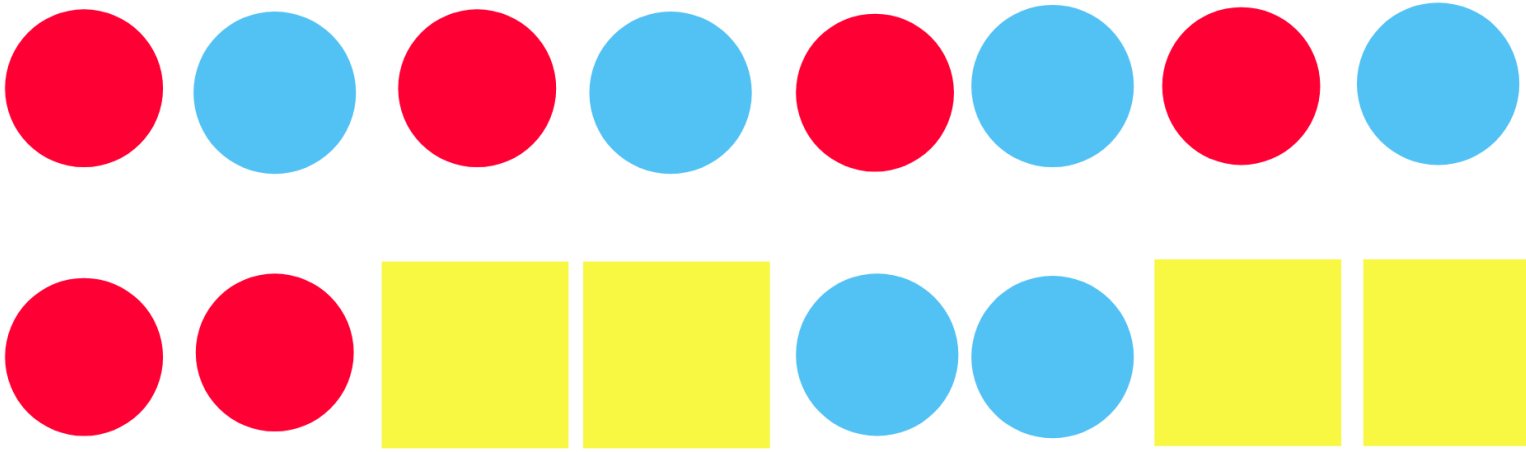
CogniTap SPOTS:

The Visual-Motor Code

CogniTap SPOTS: Pattern 7



1 & 2 & 3 & 4 &



Q:

What cognitive skills can you feel working now?

Music, Piano and Drumming for Cognitive Engagement

Q:

What are some benefits of music in the academic curriculum?

How Rhythm and Music Enhance Cognition

Learning includes recognizing, understanding and responding to patterns and sequences.

- Tasks of daily living, dressing, cooking, walking to school, playing
- Reading & writing
- Numeracy
- Spelling and vocabulary
- Homework and projects require sequencing

Rhythm and Tempo provide the opportunity to anticipate, respond, and create.

Timing supports and enhances coordination which underlies cognition.

Benefits of Music & Movement Training

Music and movement instruction has been shown to engage children's memory, cognitive development, social skills, learning and auditory processing.

(See - Dumont 2017; Miendlarzewska, & Trost, 2014)

- Develop fine motor skills
- Develop gross motor skills
- Learn to express emotions
- Learn how to manage one's body in space
- Improve balance and coordination
- Improve social interaction
- Improve self-regulation
- Increase working memory load
- Increase selective attention

Music and Movement in Curriculum

Integrating music and movement into the curriculum, has shown to directly affect numerous areas, including recall, reading levels, mathematics skills, engagement, and motivation (Cole & Boykin, 2008; Vazou, Gavrilou, Mamalaki, Papanastasiou, & Sioumala, 2012; Jensen & Kenny, 2004; Iwasaki et al., 2013; Mendelson, Greenberg, Dariotis, Gould, Rhoades, & Leaf, 2010; Song, Capraro, & Tillman, 2013), Hall 2019.

Meludia Paris

THE KINETIC CLASSROOM PART III

Language, Dyslexia, Reading & Learning

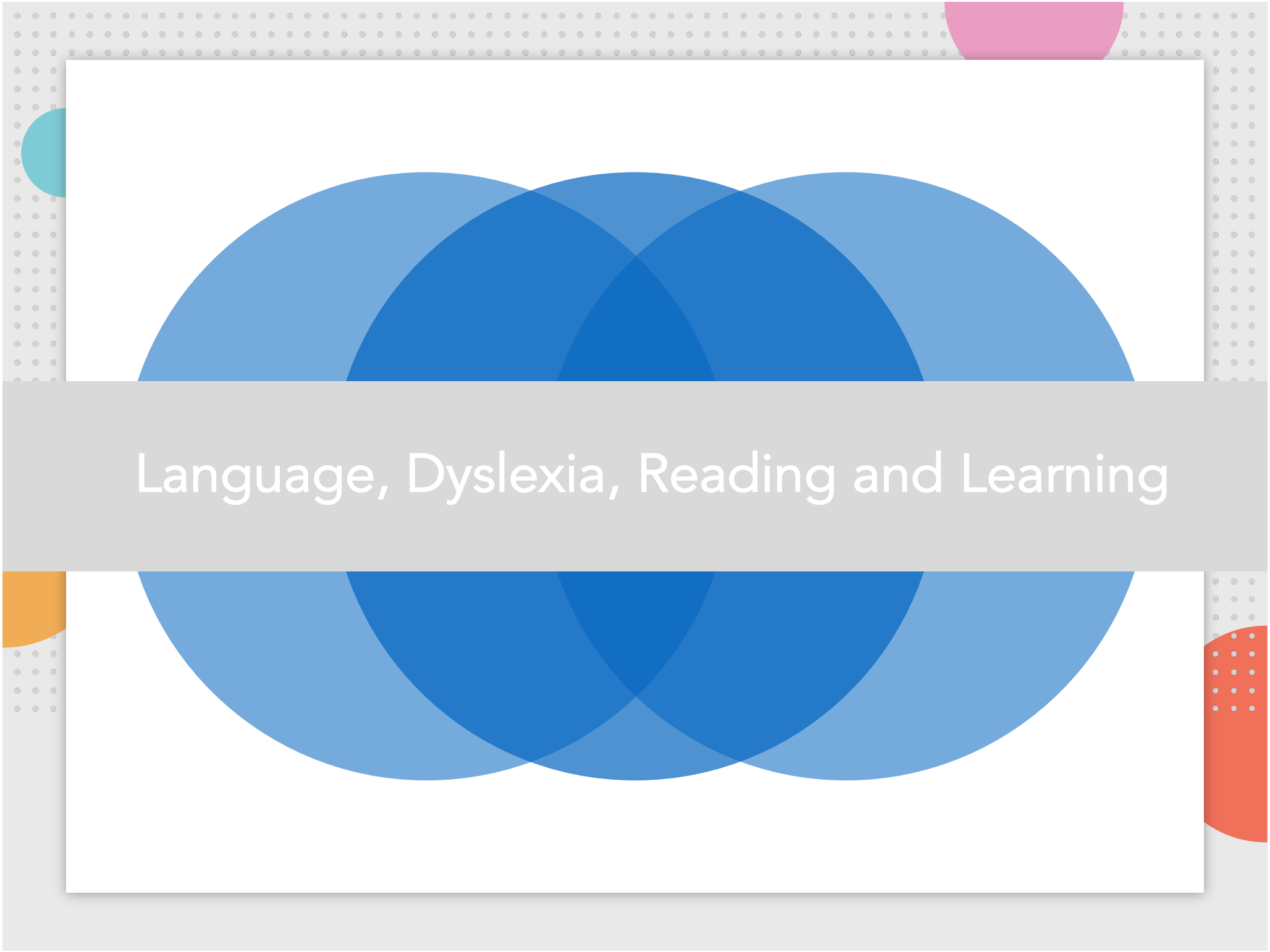
Beanbags and Balls For Alerting and Calming

The "Cognitive Conversation" about Working Memory

Self-Regulation, Response Inhibition, Self-Control and Emotional Modulation

Spotlight to original Cognitive-Visual Motor Language

Rhythm Ball and Heavy Work


Language, Dyslexia, Reading and Learning

Developmental dyslexia is a childhood learning difficulty that is defined as a specific difficulty in reading and spelling that cannot be accounted for by low intelligence, poor educational opportunity or obvious sensory/neurological damage.

The core cognitive difficulty in developmental dyslexia lies with phonology, as measured by the ability to reflect on the sound structure of words (Snowling, 2000).

Children with dyslexia have difficulty in manipulating sound elements in words and in recognizing shared sounds in words (Ziegler & Goswami, 2005; Ziegler et al., 2010, for recent reviews).

They frequently also have difficulties with phonological short-term memory and rapid naming of familiar word forms (Wagner & Torgesen, 1987; Ziegler et al., 2010).

More recent studies show that the phonological difficulties in dyslexia extend **beyond single words to the processing of intonation, syllable stress, speech prosody and speech rhythm** (e.g.Goswami, Gerson, & Astruc, 2010; Goswami & Leong, 2013; Goswami et al., 2013b; Leong, Hämäläinen, Soltész, & Goswami, 2011).

Source: Bishop-Liebler et al. 2014

DYSLEXIA

- **1 in 16** public school students have IEPs for specific learning disabilities (SLD) or other health impairments (OHI), which covers ADHD. Source: NCLD
- Dyslexia affects an estimated 5%-17% of schoolchildren, depending on the cutoff reading score used to diagnose the disorder.
- It is estimated that 30% of those with dyslexia have coexisting ADHD (primarily inattentive type). Source: IDA
- Over 80% of children with ADHD and 60% of children with a Reading Disability meet the criteria for at least one additional diagnosis (Willcutt & Pennington, 2000a, 2000b).
- Intervention is most successful if it begins before 4th grade, although people with dyslexia can successfully receive treatment into adulthood.
- If the student is below the 38th percentile nationally in reading, lifelong challenges may result.

Literacy Ladder

Reading For Comprehension

Reading Fluently

Decoding Skills (Sound Symbol & Phonics Instruction)

Phonological Processing

Phonemic Representations

Wellington-Alexander CENTER
DYSLEXIA ASSESSMENT & INTERVENTION

The building blocks of Phonemic Awareness

Laying a strong foundation for reading

12 **Rhyme one-syllable words**
(*cart, part, smart,* and *art*)

11 **Blend two-syllable words**
(blend the sounds /b - ă - s - k - ĕ - t/ into *basket*)

10 **Isolate the medial vowel sound**
(identify /ĕ/ as the medial sound in *nest*)

9 **Change the final sound to make new words**
(change *met* into *mess, men*)

8 **Isolate the final sound**
(identify /k/ as the final sound in *block*)

7 **Change the initial sound to create new words**
(change *cat* into *that, hat, pat*)

6 **Isolate the initial sound**
(identify /b/ as the first sound in *build*)

5 **Segment one-syllable words**
(segment *cat* into /k - ă - t/)

4 **Recognize and distinguish between similar sounds**
(Notice the similarities and differences between /th/ in *thin* and /TH/ in *then*)

3 **Blend one-syllable words from an auditory prompt**
(blend the sounds /b - ŭ - g/ into *bug*)

2 **Blend two words into a compound with an auditory prompt**
(blend the words *rain* + *bow* into *rainbow*)

1 **Develop a kinesthetic awareness of sounds**
(Say /p/. What is your mouth doing? What do your lips do? Can you feel air coming out?
Say /b/. What is the same? What is different? Place your hand on your throat. What do you feel?)

Dyslexia: Early Intervention is Key

- **Dyslexia** is a specific learning disability that is **neurobiological** in origin.
- Research has shown that brain plasticity decreases through childhood. It takes 4 X as long to intervene in fourth grade as it does in late kindergarten (NICHD) because of brain development and due to the increase in content for students to learn as they grow older.
- Children at risk for reading failure can be reliably identified even before kindergarten.
- "Deficits in phonological awareness, rapid automatized naming, verbal working memory and letter knowledge have been shown to be robust precursors of dyslexia in children as young as age three" (Gaab, 2017). Extensive evidence exists that supports the fact that early intervention is critical.
- Struggling readers who do not receive early intervention tend to fall further behind their peers (Stanovich, 1986).

Early Intervention: Detect Earlier

- Know to look for the signs and symptoms of Dyslexia, ADHD and DCD
- Be mindful of 40%+ comorbidity
- Refer students for Dyslexia screening if the following are present:

		Never/ not at all	Rarely/ a little	Sometimes	Frequently/ quite a bit	Always/ a great deal
1.	Has difficulty with spelling	1	2	3	4	5
2.	Has/had difficulty learning letter names	1	2	3	4	5
3.	Has/had difficulty learning phonics (sounding out words)	1	2	3	4	5
4.	Reads slowly	1	2	3	4	5
5.	Reads below grade level	1	2	3	4	5
6.	Requires extra help in school because of problems in reading and spelling	1	2	3	4	5

- Support a full dyslexia intervention if it is needed
- Use gestures and visual supports
- Maximize time outdoors for play + recess
- Add 5 minutes of cognitive-motor movement to your classroom every 45 minutes
- Look into Whole Brain Teaching

Why is Rhyming Important?

1. Rhyming teaches children about timing and meter in speech.
2. Rhymes help children begin to learn prosody, speaking and reading with expression.
3. Rhyming helps children make predictions related to speech sounds.
4. Rhyming while reading engages the visual and auditory centers of the brain.
5. Rhyming is fun and leads to social entrainment.

Musical Patterns & Sequences

Musical tempo, rhythm and timing are among the first patterning experiences children have, beginning when we play simple hand games like “Peek-a-boo” and “Pat-a- cake” as toddlers. We then move on to hiding games like “Where is thumbkin”? Next, songs and simple nursery rhymes like “I’m a little teapot,” and “Itsy bitsy spider” introduce patterns in language and movement combined with response inhibition, attention and working memory.

Rhythm Matters in Reading

•Rhythm plays an organizational role in the prosody and phonology of language, and children with literacy difficulties have been found to demonstrate poor rhythmic perception, Lundetræ & Thompson, 2018

•Size and synchronization of the auditory cortex promotes musical, literacy, and attentional skills in children, Seither-Preisler et al, 2014.

•Rhythmic cues provide a regular temporal scaffolding supporting motor coordination Cochen De Cock et al, 2018.

•Responding to music helps improve self-control, as students anticipate changes in rhythm and tempo engaging their ability to wait, listen and respond Antonietti, 2018.

•Music provides structure to help students manage their internal timing according to variations in the external time of music while they synchronize behavior with external stimuli, Antonietti, 2018.