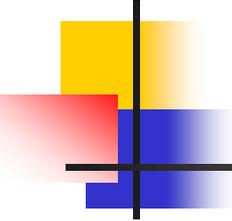


Alice Miller, PhD  
Retired Middle School  
Administrator  
Physical Education Coordinator  
Email: [miller.alice@wgmail.org](mailto:miller.alice@wgmail.org)

# Brain Breaks

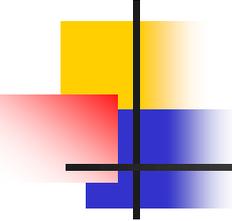




## Learning Goals: Participants will

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- ❖ Understand the importance of Brain Breaks and recognizing when one is needed.
- ❖ Begin to recognize the importance of crossing the mid-line when performing Brain Breaks.
- ❖ Partake in Brain Breaks.
- ❖ Realize the integral role Mindfulness plays.
- ❖ Will realize the vital connection between brain breaks and their relationship to academic performance.

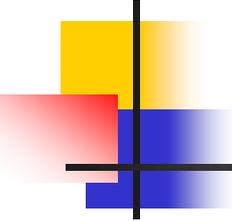


## What are Brain Breaks?

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Brain Breaks are/should:

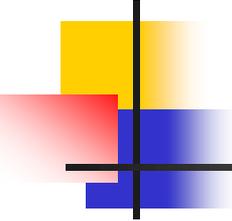
- Simple fun exercises to help students take a quick break and refocus.
- Fully engage the students mentally and physically.
- Be playful and challenging.



## How Do You Know You Need a Brain Break??

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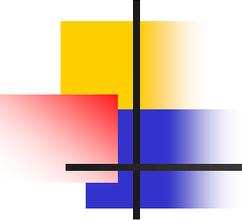
- You are fidgeting instead of concentrating.
- Your class or group has that glassy look in their eyes.
- You have rewritten or just read the same sentence over three times.
- You just called on a student and they do not know the answer.
- Your students/you have been sitting in one place for too long.
- You can not remember anything the speaker just said.



# Time for a Brain Break!!

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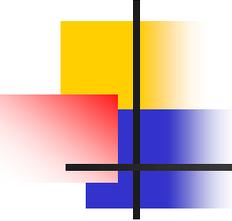
- Inch worm
- Let it rain
- Gotcha
- Thumb Wars
- Butterfly Hugs



# Why are Brain Breaks Beneficial?

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- Improves focus
- Increase motivation
- Calm nervous system
- Regulates mood and behavior
- Exercise grows brain cells
- Increases learning and memory systems
- Physical patterns and skills challenge the cerebellum and it grows quicker
- Physical activity can positively affect the blood flow and oxygen to the brain
- Improves connections between nerves in the brain, helping to improve attention information-processing



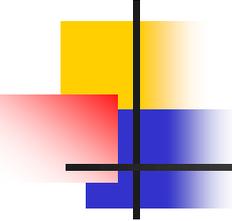
## When can students do brain breaks?

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- Before reading, math class
- Student presentations
- MAP testing

Another reason why Brain Breaks are Beneficial:

- 1 out of every 3 American children is either overweight or obese.
- 1 out of every 3 could become the first generation to have a shorter life-span than the previous generation.



## Left & Right Brain Theory

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- Proposes that the two hemispheres process information differently.
- The left hemisphere specializes in sequences, logic, language, and parts of a whole.
- The right hemisphere specializes in art, music, visuals and the big picture.

### [Michael Kuczala Ted Talk](#)

- Brain/Body connection-learning from the feet up.
- Kids who are physically fit, do better academically.

I AM THE  
LEFT BRAIN

Decisive!  
011001011 LOGIC

Accurate  
ANALYTIC

REASON  
1 2 3 4 5 6 7  
2 4 5 8 9

PRACTICAL  
Strategic

CONTROL

SCIENCE  
Realistic

WWW.CARTOONADAY.COM



I AM the  
Right Brain!

Intuition  
Love LOVE love

you art  
Poetry

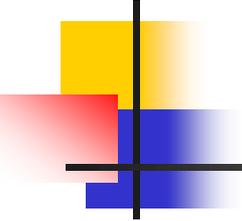
FREEDOM

Passion  
vivid

creative

YEARNING

PEACE



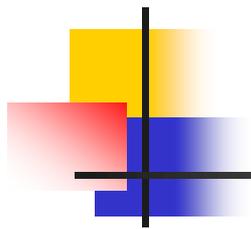
# Are you Creative or Analytical

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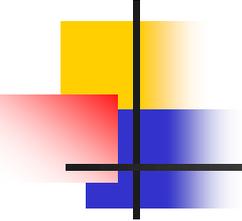
- Our brain has two halves – the right and the left.
  - People using the left part of the brain are usually logical and analytical.
  - People using the right part of the brain are usually creative, innovative and imaginative.

Now try this:

- Read aloud, as quickly as possible, the color in which the words are written but not the actual words!



GREEN YELLOW BLUE ORANGE  
WHITE RED GREEN BLUE ORANGE  
YELLOW WHITE GREEN RED BLUE  
WHITE GREEN ORANGE YELLOW  
ORANGE BLUE GREEN RED WHITE  
YELLOW RED BLUE YELLOW  
ORANGE RED WHITE BROWN WHITE



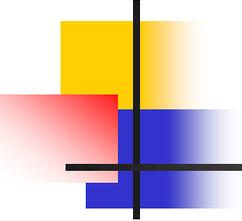
## So how did you do?

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- If you read the word more often than said the color you were using more of your right brain!

If you said the color more often than read the word  
**you're using more of your left brain!**

- It is not better to be either right brain or left brain dominate. You need both kinds of thinking to function well. While a person may have a dominant style of thinking, we all use both sides of our brain everyday.



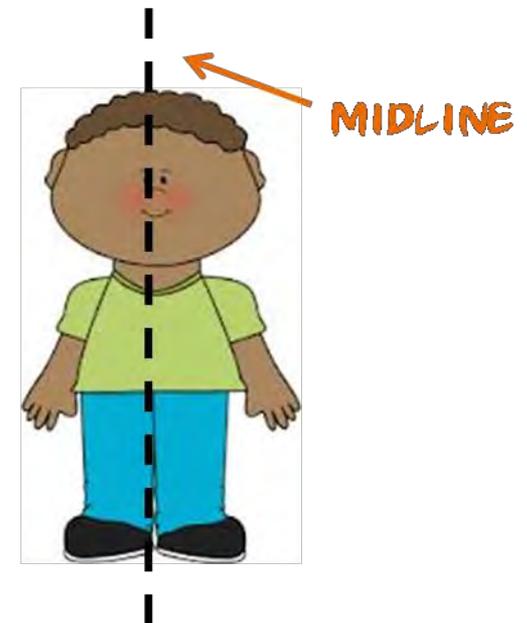
## Brain Break time!!

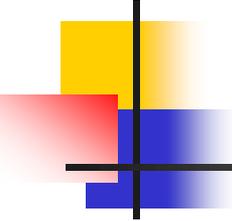
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1. Rub your palms together fast. Feel the heat.
2. Rub your ears in circles. Squeeze your earlobes between your thumb and finger.
3. Rub the back of your head with your pointer fingers, moving from your eyebrows to the top of your cheekbones and back up along the side of your nose.
4. Rub big circles around your eyes with your fingertips, moving from your eyebrows to the top of your cheekbones and back up along the side of your nose.

# Brain Break time!!

- 5. Rub the sides of your nose using your pointer finger.
- 6. Act like you're washing your whole face with your palms.
- 7. Stomp your feet on the floor.



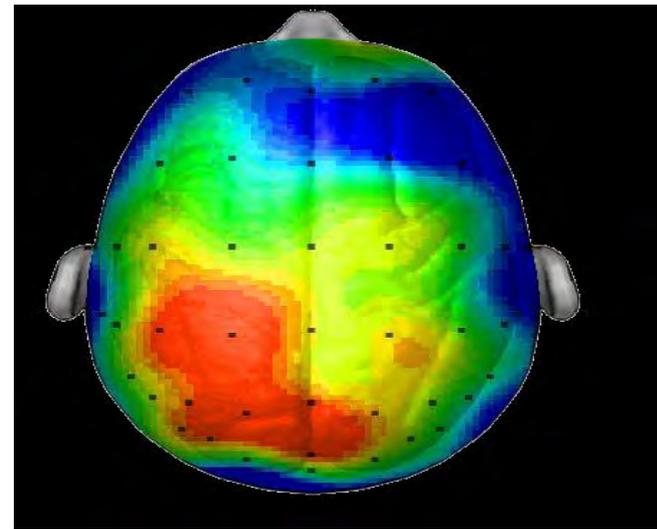
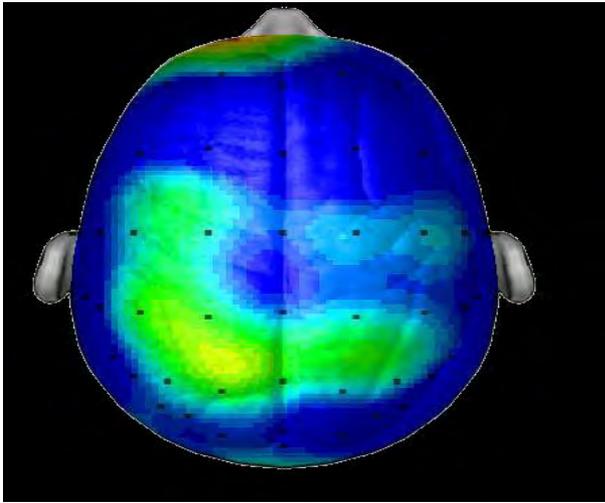


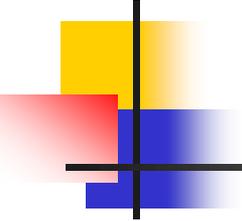
## Crossing the Midline:

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- Most of the brain breaks will cross the midline of your body. This helps both sides of the brain engage.
- Example: bend your right knee while touching your left elbow to your knee. Repeat with the opposite knee and elbow. This elbow to knee promotes movement and crosses the midline.

# Average composite of 20 students brains taking the same test



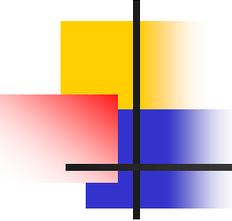


# Action Based Learning

## Jean Blaydes Madigan

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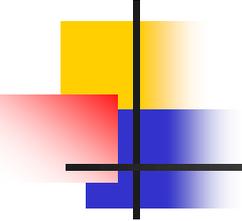
- [www.actionbasedlearning.com](http://www.actionbasedlearning.com)
- The brain is only as healthy as the body that carries it.
- ABL uses brain based kinesthetic teaching strategies to teach academic concepts.
- She has done brain research that supports physical movement and its relationship to academic performance.



# Brain Break time!

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- Sid Shuffle
- Finger and thumb switch
- Punctuation Shuffle:
  - period/stop walking
  - question mark/hands on your head
  - exclamation mark/jump up
- Rock, paper, scissors math addition
- Twisted



# Mindfulness for the Classroom

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## What is Mindfulness?

- Being present in the moment aware of your thought/emotions and what is going on around you.
- Paying attention in a particular way.

## “Flipping Your Lid” analogy for students

- Frontal Cortex-thinking part of the brain, solving problems, attention, good choices.
- Cerebral Cortex.
- Amygdala-responds to stress.

## ORBITOFRONTAL CORTEX



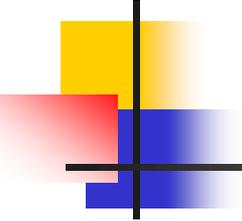
Place your thumb in the middle of your palm as in this figure.

## CEREBRAL CORTEX



Now fold your fingers over your thumb as the cortex is folded over the limbic areas of the brain.

FIGURE 5

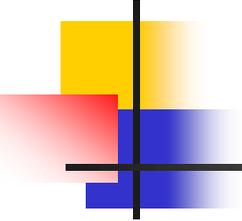


## What to do for tight schedules:

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Schedules sometimes are extremely tight and teachers wonder how they will fit everything in. Here are a few things that may help:

- 1 minute transition time moves-classroom/hallway.
- 5 minute moves-helps students when they have been sitting for longer periods of time by combining a couple of exercises.
- Waiting transitions.



## Data Information

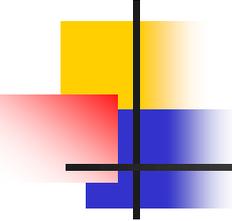
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More and more data confirms what the Greeks said thousands of years ago: that mind and body are connected.

Current brain research is helping us to understand that exercise can change and grow brain tissue in the developing brain of a child.

Aerobic (using oxygen), increases brain cells.

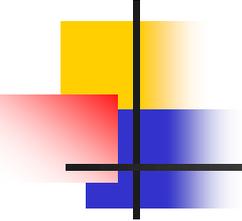
Students learn 10% more when they are standing and moving. (desks, chairs/balls,)



# Resources

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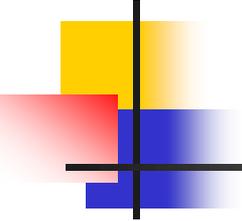
- [Everybody Move!](#) Cira Ontario Human Kinetics
- [Energizing Brain Breaks](#); David Sladkey
- [Achieving Fitness-An Adventure Activity Guide](#); Jane Panicucci
- [Brain Rules, 12 Principles for Surviving and Thriving at Work, Home and School](#);
- [SPARK-Revolutionary New Science of Exercise and the Brain](#); John Ratey, MD.
- [Classroom Fitness Breaks to Help Kids Focus](#); Sarah Longhi
- [The Kinesthetic Classroom, Teaching & Learning through Movement](#); Traci Lengel & Mike Kuczala



# Web Sites

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- <http://www.letsmoveschools.org/>
- [www.actionbasedlearning.com](http://www.actionbasedlearning.com)
- <http://teachtrainlove.com/20-brain-break-clips-fight-the-fidgeting/>
- [www.gonoodle.com](http://www.gonoodle.com)
- [www.youtube.com/user/gonoodlegames](http://www.youtube.com/user/gonoodlegames)

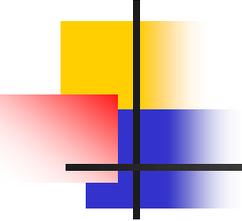


## In Closing

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- “It is exercise alone that supports the spirits, and keeps the mind in vigor”. Cicero (c.65 BC)

**Some people may dispute Cicero’s claim but there is strong evidence from recent neurological research that physical fitness can help our minds grow stronger and increase our ability to deal more efficiently with daily stresses.**



## Quotes

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- **“physical activity sparks biological changes that encourage brain cells to bind to one another. . .exercise provides an unparalleled stimulus, creating an environment in which the brain is ready, willing and able to learn.”**

John Ratey, professor of psychiatry at Harvard Medical School and the author of *Spark: The Evolutionary New Science of Exercise and the Brain* (2008)