



**October 2024 Keynote with Dr. Linda Karges-Bone**

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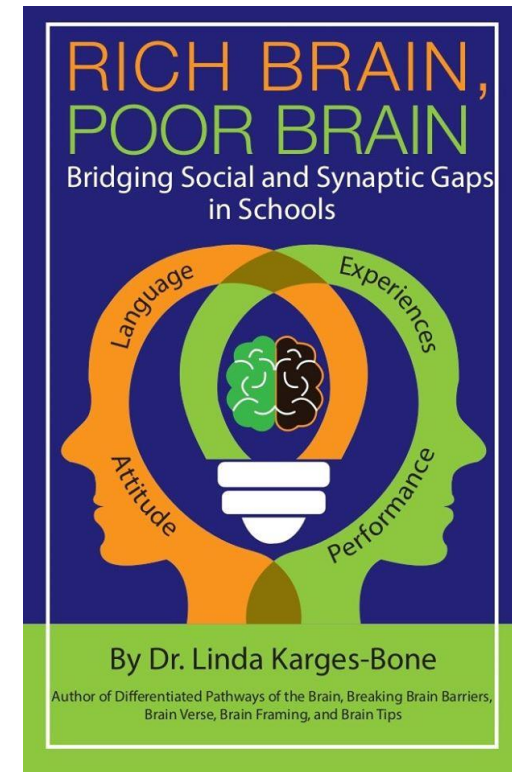
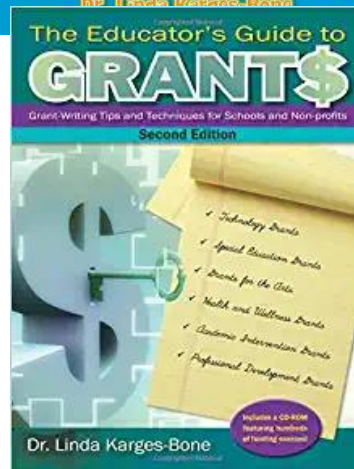
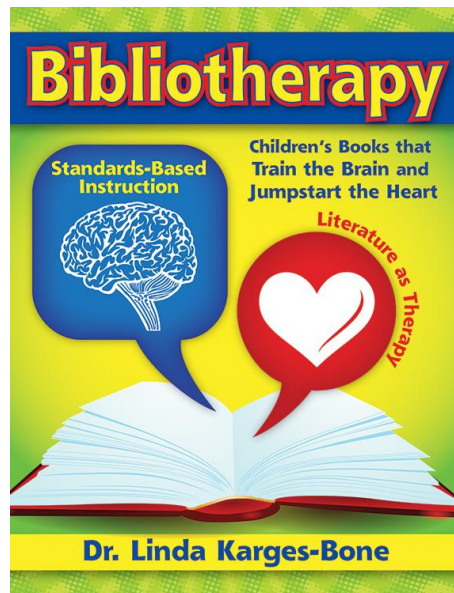
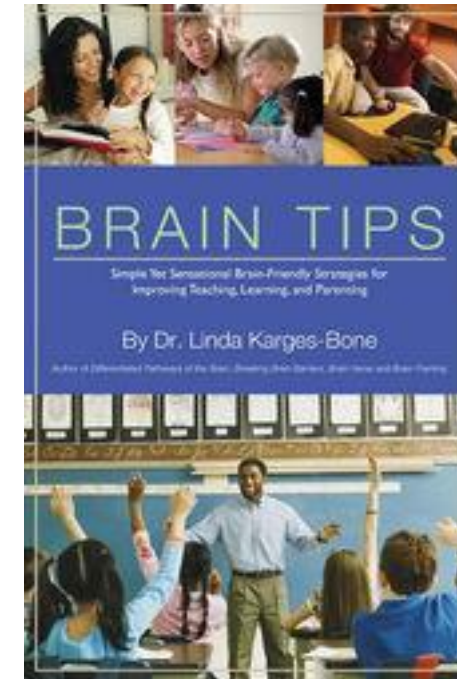
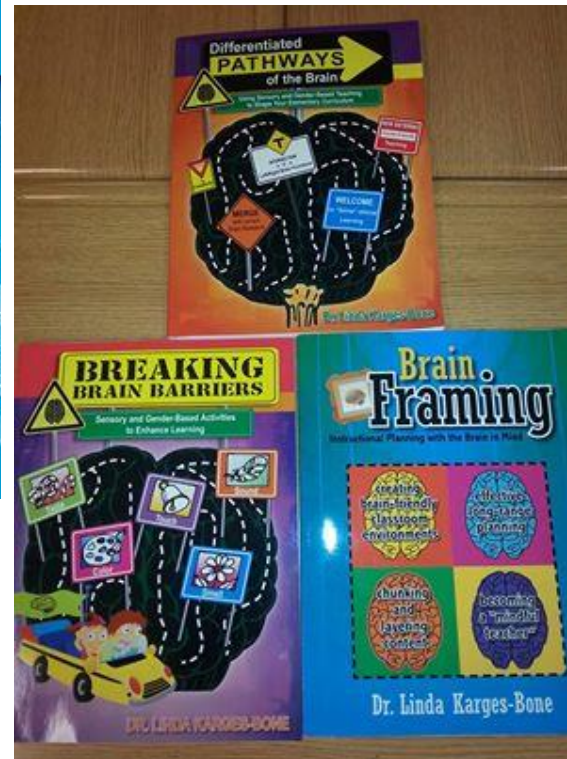
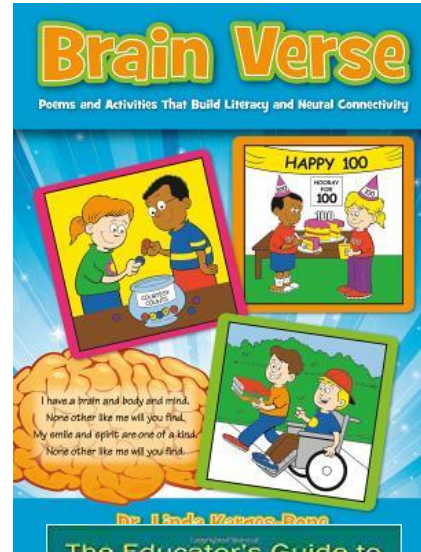
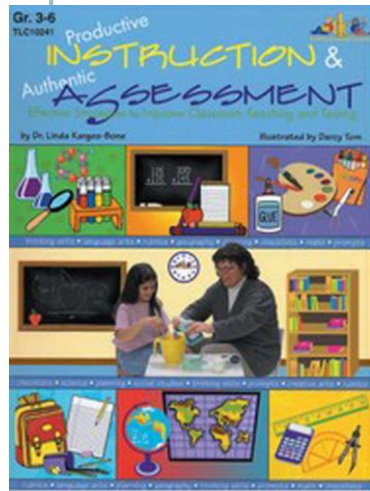
# MANAGING THE MICRO-STRESSORS: A EDUCATOR'S GUIDE TO REGAINING PASSION AND POWER

Dr Linda Karges-Bone

[www.educationinsite.com](http://www.educationinsite.com)

ESEA 2024

# I WRITE FOR AND ABOUT BRAINS AND LEARNING



# KEY VOCABULARY

1. Amygdala
2. Anxiety
3. Buffers
4. Cortisol
5. HSP
6. Micro-Stressors
7. Ripple Effect



# CREATE THE POSSIBILITIES



# OUR JOURNEY BEGINS.....

The Current Situation

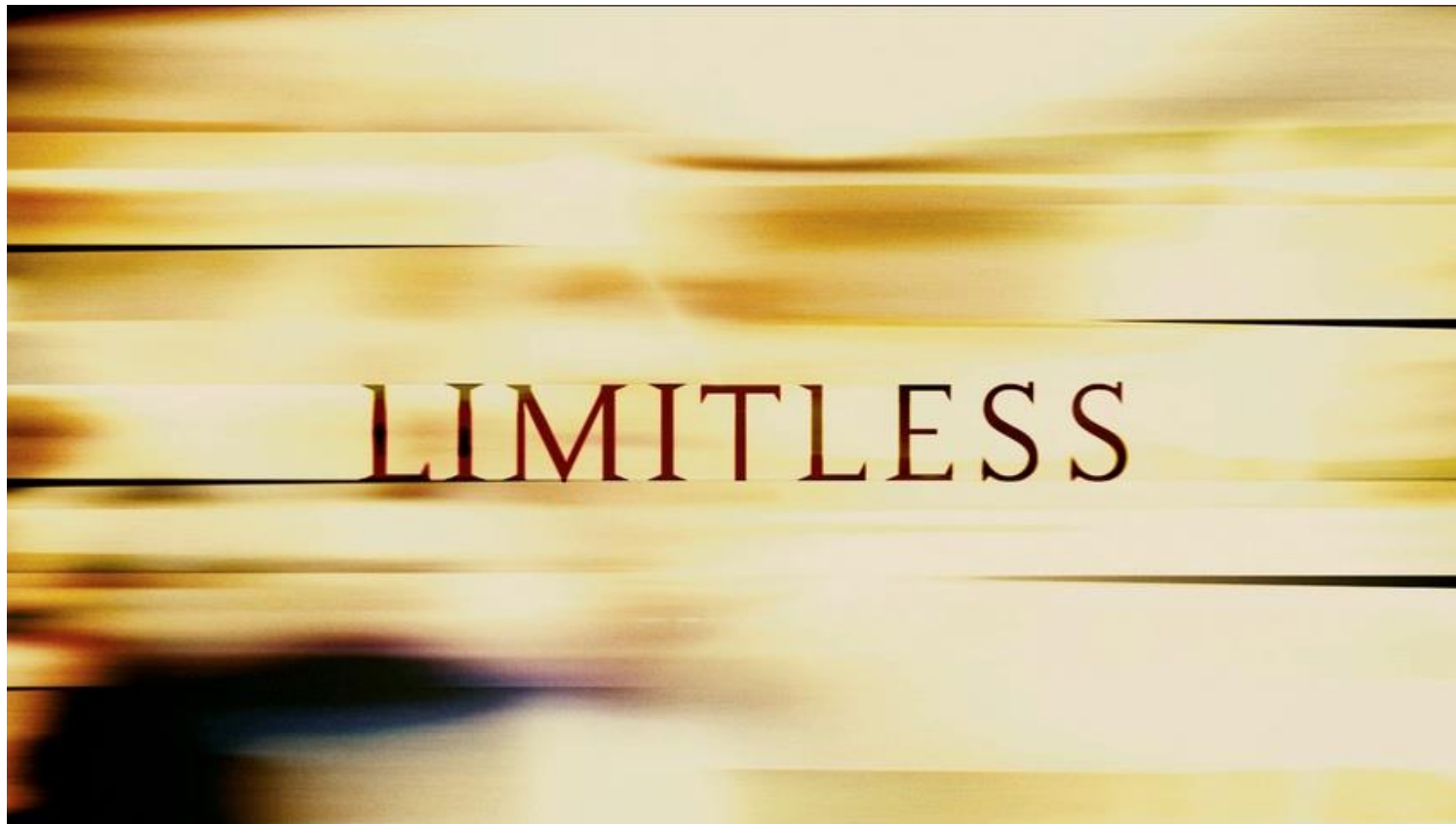
The Challenge

The Solutions

The Future

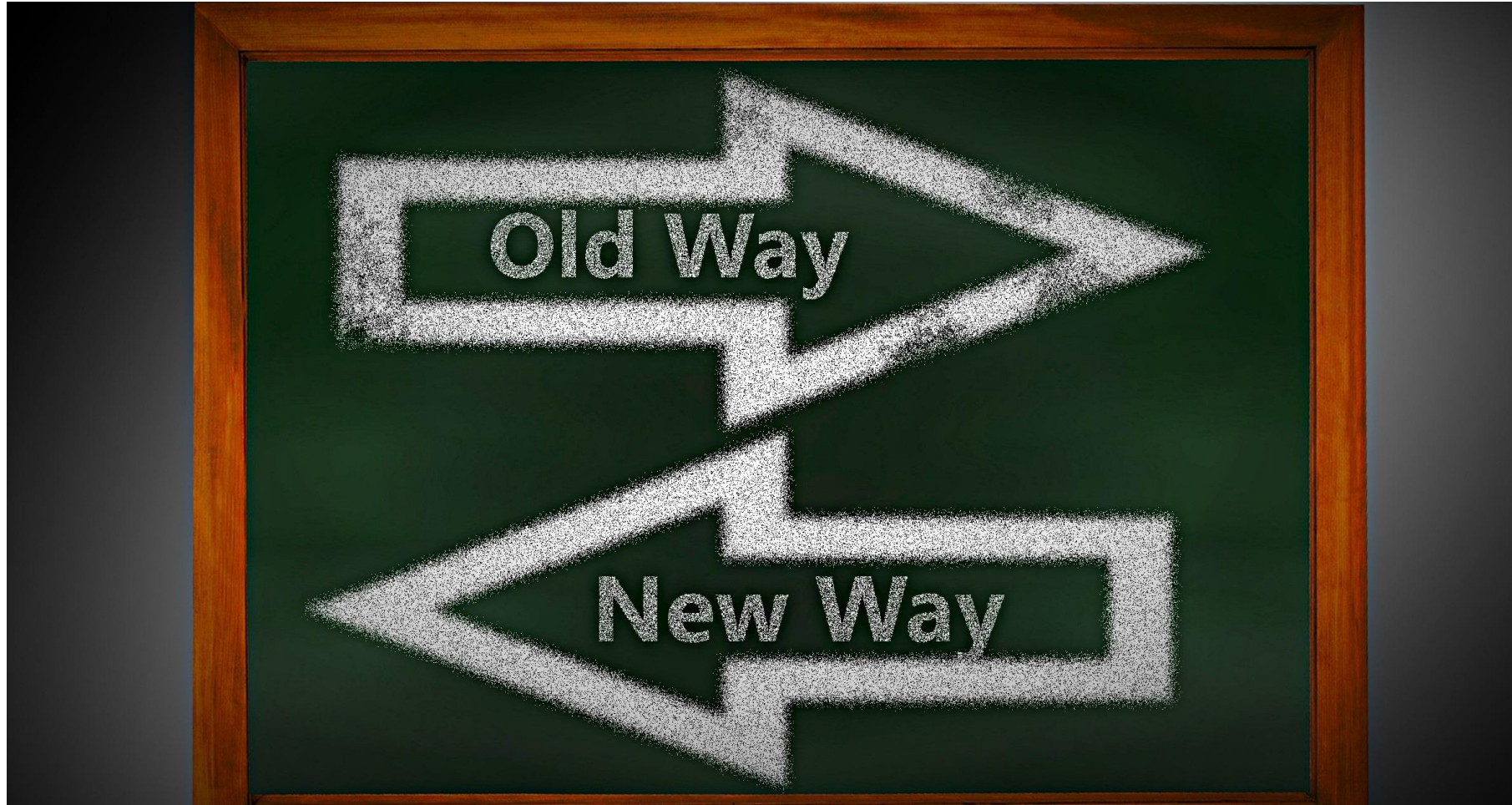


OUR ABILITY TO CHANGE LIVES FOR  
CHILDREN IS.....





TO MAKE THIS HAPPEN, WE MUST CREATE A NEW  
WAY OF EMBRACING OUR WORK....

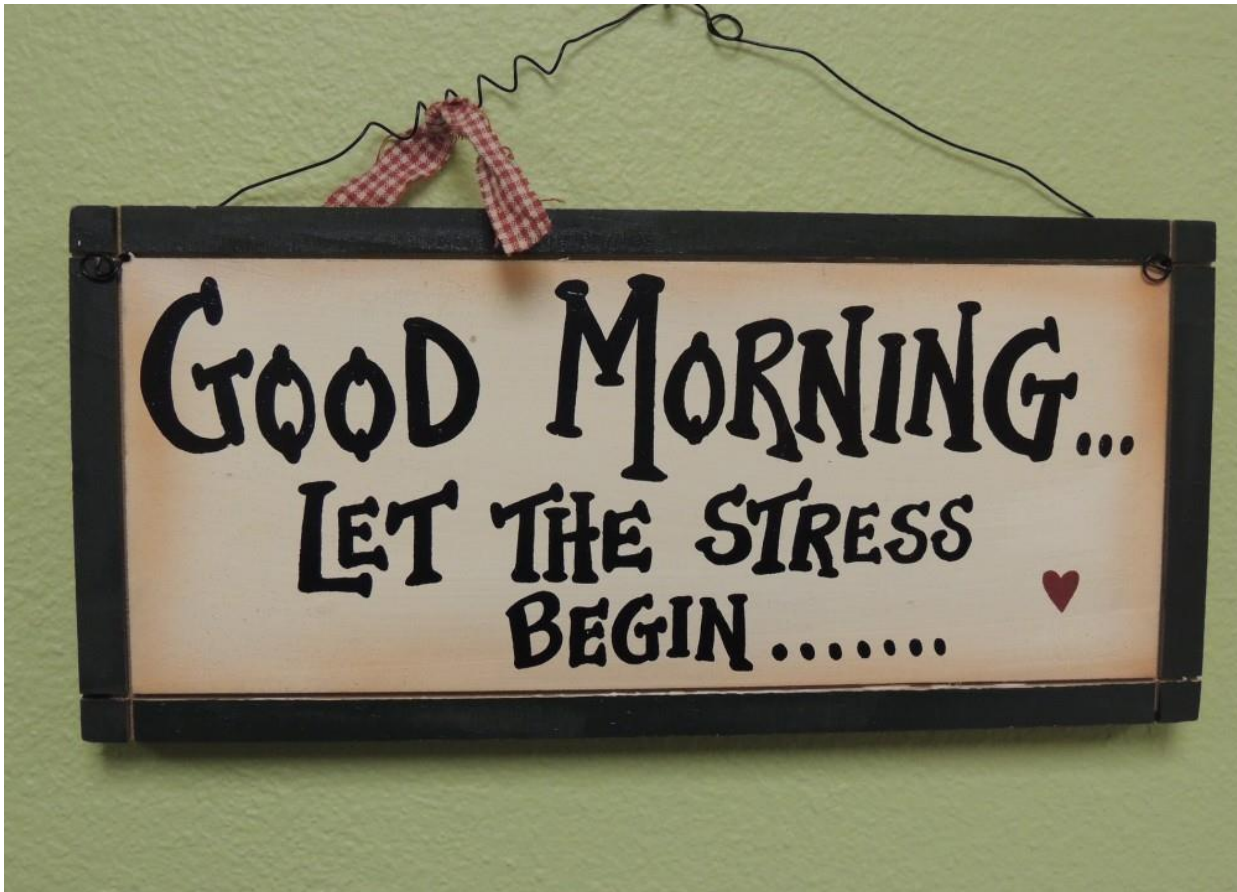


WE MUST GO HEAD TO HEAD WITH THE  
CHRONIC, ANNOYING, DAMAGING REALITY OF....



**MICRO-STRESSORS**

WHY ARE YOU FEELING ANXIOUS....IF NOTHING  
BIG HAS HAPPENED?



BECAUSE MICRO-STRESSORS ARE THE SMALL,  
CUMULATIVE, CHRONIC ATTACKS



Sneaky

MICRO-STRESSORS TRIGGER A CASCADE OF BAD FEELINGS AND CONSEQUENCES. THIS IS THEIR POWER

# The Ripple Effect



ONE SMALL CHANGE  
CAN HAVE AN ENORMOUS IMPACT

**MY PROPOSAL  
TO REVERSE THE RIPPLE EFFECT WITH POSITIVE  
CHOICES AND VOICES**



# **BUT FIRST....CONSIDER THIS**

*Between 60-80% of all doctor visits are for stress-related disorders, yet the insidious nature of micro-stress means we might be totally unaware of the main sources of our anxiety. You can't begin to address the problem until you're aware of it – so what are the main drivers of micro-stress?*



# LET'S ASSESS YOUR MICRO-STRESS THREAT LEVEL





# GIVE YOURSELF 2 POINTS FOR EVERY YES

1. I have frequent headaches. Y....N

2. I check messages as soon as I get up and before I go to sleep. Y....N

3. I pride myself on the ability to multi-task. Y....N

4. I am a perfectionist. Y....N

5. I worry constantly about those closest to me. Y....N

6. I get annoyed when a colleague stops me to chat or check in . Y....N

7. I feel anxious when I cannot control everything. Y....N

8. I describe myself as highly sensitive or high achieving. Y....N

9. I am prone to hanging onto negative emotions. Y....N

10. I am a thermometer not a thermostat. Y....N

# WHAT IS YOUR THREAT LEVEL?

14 to 20 Points.....Volcanic

8 to 14 Points.....Volatile

4 to 8 Points.....Versatile

0 to 4 Points.....Vibrant



# WHAT DOES YOUR ASSESSMENT SUGGEST?



LET'S TALK SOLUTIONS  
WHAT REALLY WORKS?



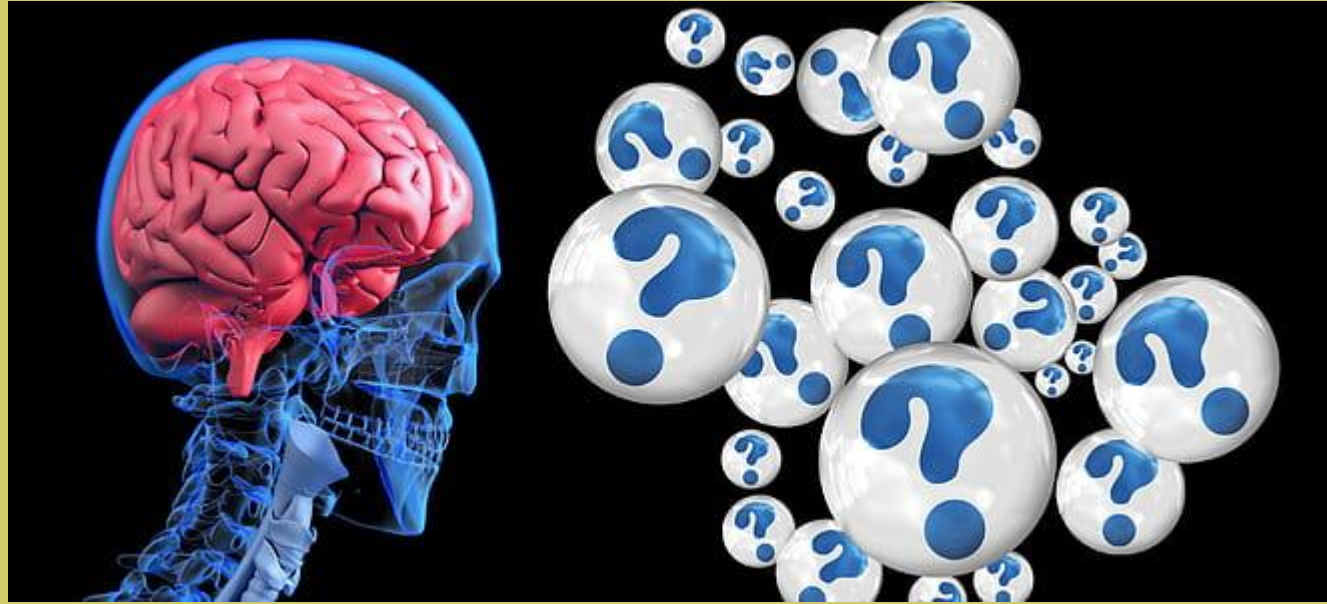
# CONSIDER THE 3 B'S



Buffers

Boundaries

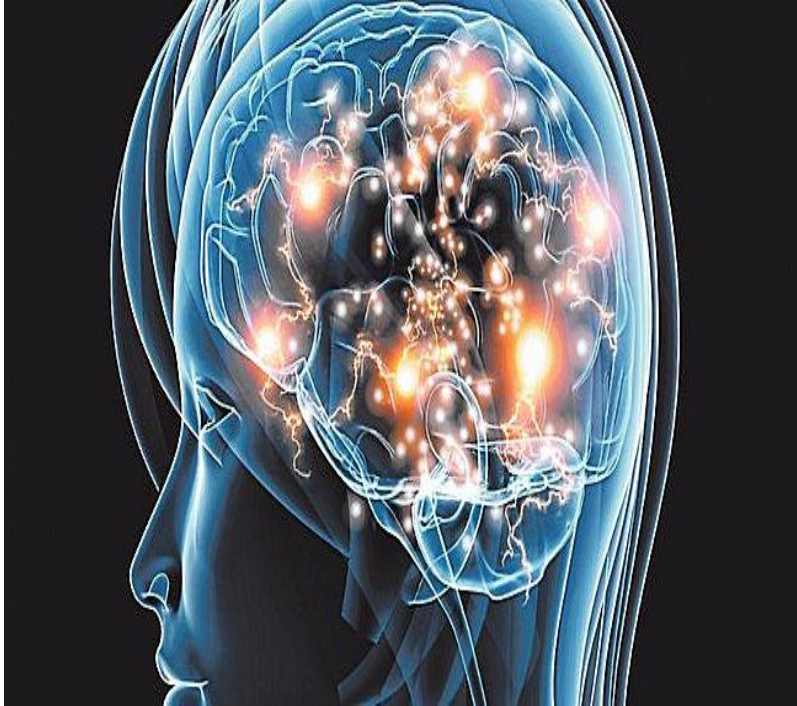
Balance



**TO UNDERSTAND THE IMPORTANCE  
OF BUFFERS, BOUNDARIES, BALANCE**

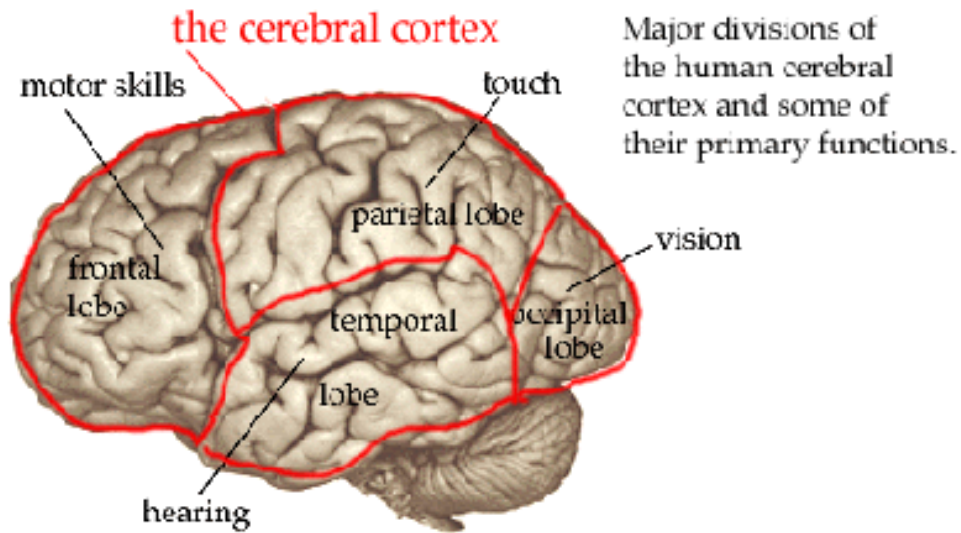
**Let's take a quick look  
at our brains and  
potential attacks from  
Micro-Stressors**

# WHAT IS THE CURRENT SITUATION?



1. We start with capable brains.
2. We believe that every child can learn and grow and be successful. And that every teacher is capable of metacognition.
3. Then....life gets in the way.

# THE GRAY MATTER: CEREBRAL CORTEX



Spread out, it is about the size of a linen dinner napkin.

But, if you were to count the synapses at the rate of 1 per second, you would finish 32 million years after you began!

Sylwester, Bright Air, Brilliant Fire





# TRAUMA BLOCKS ACCESS



32 Million Years of  
connections are  
**available.**

But, not **accessible.**

Can you spell A-M-Y-G-D-A-L-A? If not, now is the time to learn. Dr. B will introduce you to this important brain structure that triggers a potentially damaging flow of cortisol and adrenaline that can impede learning and creativity. As caregivers, there is much one can do to detox and regulate the impacts of stress on both brain and body and do it with fun, simple, effective strategies.



## Amygdala

A new study has found a link between PTSD and the size of the amygdala, which is connected to impulse control and fear response.

# CORTISOL IS THE “DEVIL”!



Cortisol triggers inflammation.

Inflammation triggers weight gain, fatigue, pain, and a multitude of illnesses.

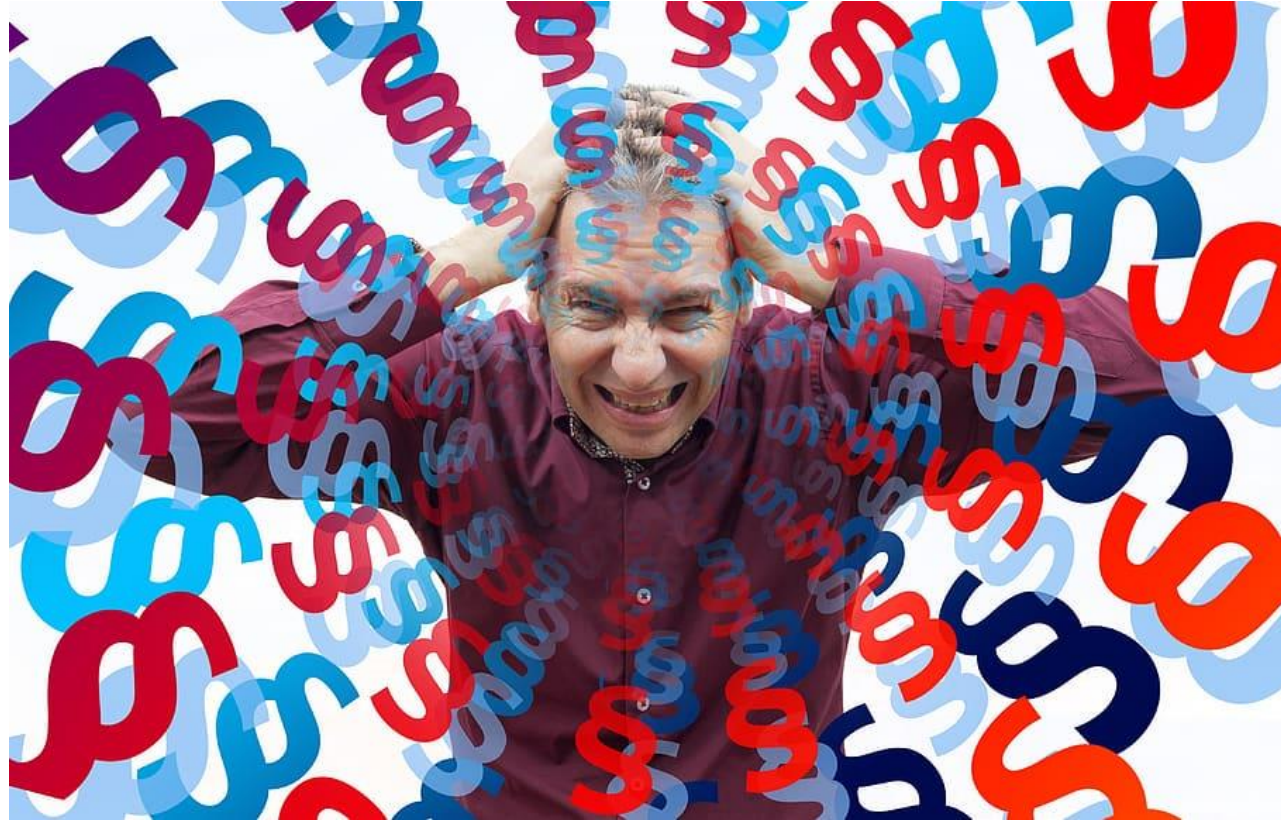
Have you noticed a weight gain of 10-15 lb. right around the middle since you have been in this high stress profession?

# SOME STRESS IS GOOD....BUT....

The trouble is that some stress hormones don't know when to quit pulling. They remain active in the brain for too long – injuring and even killing cells in the hippocampus, the area of your brain needed for memory and learning. Because of this hierarchical dominance of the SNS over the PNS, it often requires conscious effort to initiate your relaxation response and reestablish metabolic equilibrium.



**ACCORDING TO RESEARCH IN THE US, GREAT BRITAIN AND CANADA, TEACHING IS THE MOST STRESSFUL PROFESSION**



## RESEARCH IN THE US, GREAT BRITAIN, AND CANADA SUGGESTS...

Police officers, deployed military personnel, miners, and yes....teachers make the list of most stressful professions in an ABC poll.

*Why? “Many people think that teachers have good working schedules, but teachers take a lot of work home since there are always lessons to plan, papers to grade and records to keep. The pay isn't much compared to professions with similar educational requirements, and teachers are under constant scrutiny to improve test scores year after year.” Source: ABC News*

# WHAT DOES THIS MEAN FOR YOU?



Aggression or Withdrawal depending on situation, developmental levels, and personalities.

Impulsivity

Sleep Disruption

Weight Gain/Loss

Irritability

Relationship Issues

Anxiety That Interferes with **daily routines.**

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# RIGHT NOW....WHAT DO WE SEE?

Sympathetic =  
Fight or Flight!



A Post-Pandemic Culture and wide spread learning loss among kids have triggered a cascade of stress responses.

These include chronic flow of cortisol and adrenaline.

The brain is in “fight or flight” mode, but the enemy is invisible and there is nowhere to go. Micro-Stressors are relentless.

# AND THE KICKER?

It appears that the **MORE** competent, organized, and creative one is...the greater the **IMPACT** of this crisis. I call this a “brain wreck”.



# THE TRUTH....AS I SEE IT

**The Teacher's Brain is the most important brain in the classroom**

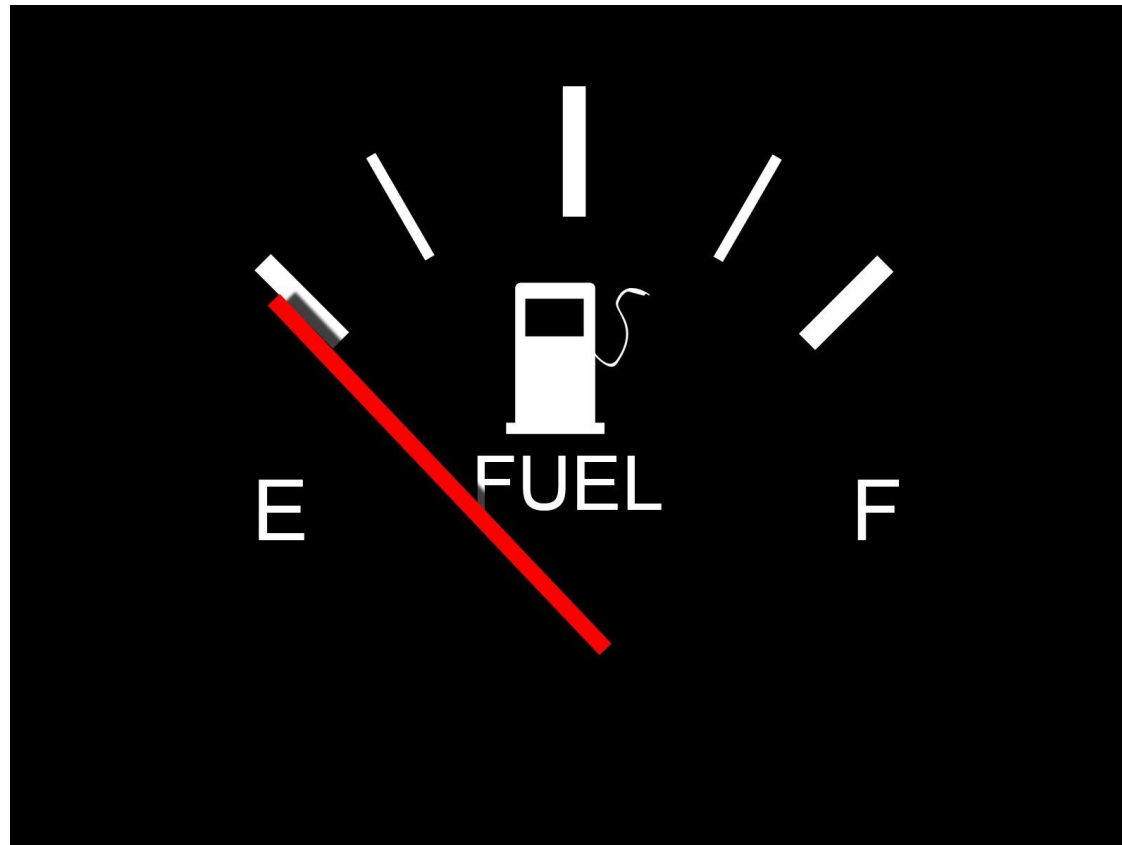
**His or her "Mirror Neurons" set the tone for everything that happens with Trauma Informed/SEL**

**Taking care of teachers will ultimately take care of the children.**

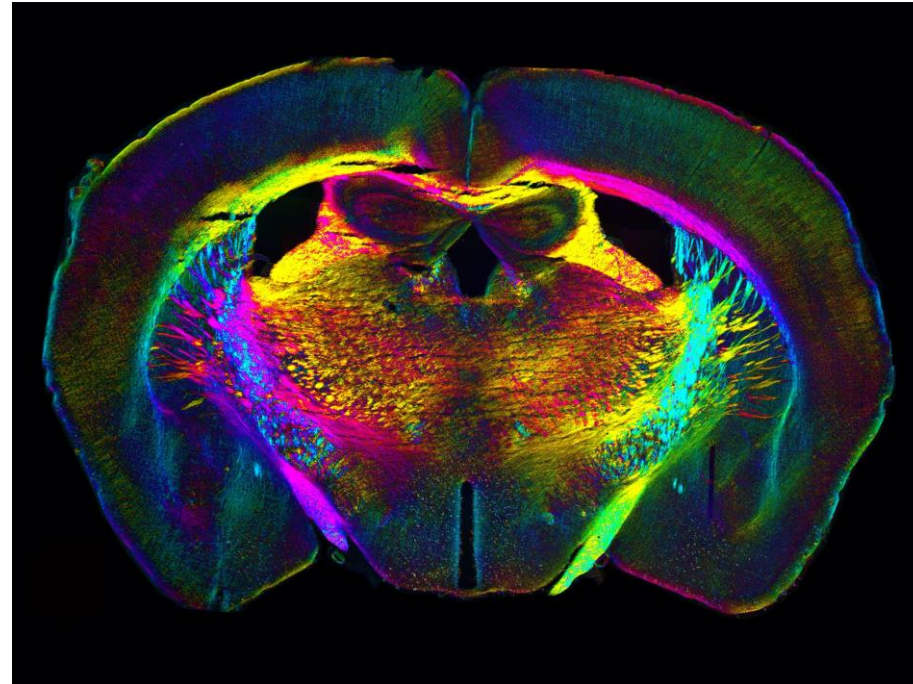
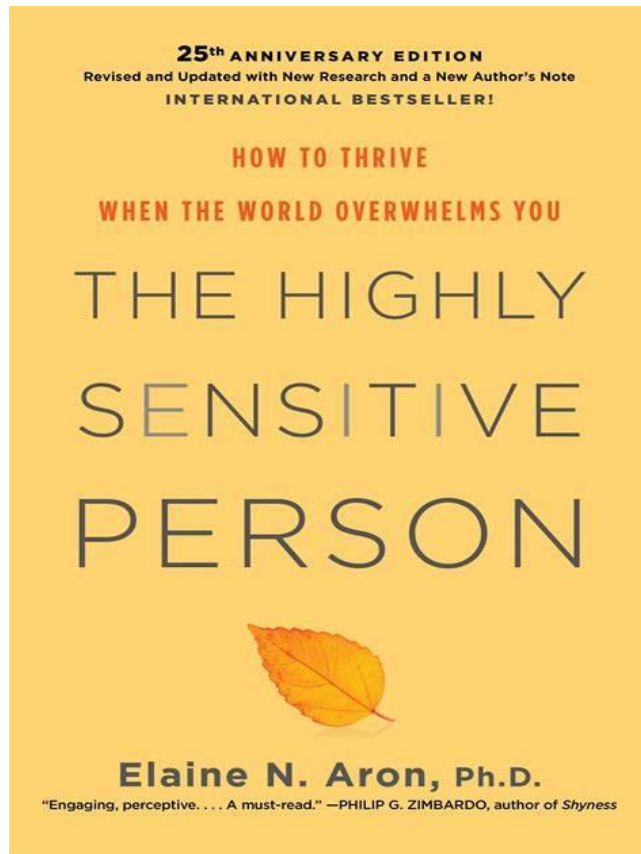
**Build self-care for teachers into every day. Access BUFFERS**



BUT KNOW THIS. ORDINARY BUFFERS MAY NOT  
BE ENOUGH FOR AN HSP EDUCATOR'S BRAIN



# MICRO-STRESSORS ARE MIGHTIER IN THE HSP BRAIN



# MANY OF “THE BEST” TEACHERS ARE PROBABLY HSP. WHICH IS BOTH GOOD. AND BAD.

## THE GOOD PART OF HSP

YOU FEEL DEEPLY AND INTUIT ORGANICALLY.

YOU FEEL RESPONSIBLE FOR “FIXING” PROBLEMS.

YOUR ABILITY TO CONNECT TO INDIVIDUALS AND TO EMPATHIZE WITH THEIR PAIN ALLOWS YOU TO TEACH FROM A METACOGNITIVE STATE.

YOU ARE RESPECTED FOR YOUR INSIGHTS.

YOU ARE FIERCLY DEVOTED TO YOUR WORK.

## THE BAD PART OF HSP

YOU MAY NOT BE ABLE TO STOP ALL THE FEELINGS.

YOU CANNOT FIX EVERYTHING NOR EVERYONE.

YOU SUCK IN THEIR PAIN AND IT EXHAUSTS YOU.

THESE KEEN INSIGHTS MAY INTIMIDATE OTHERS.

YOU ARE PRONE TO BURN-OUT AND NEGLIGENT ABOUT YOUR OWN SELF-CARE.

# MANY EDUCATORS PRESENT AS HSP AND THAT'S A GOOD THING

Highly Sensitive Person, or HSP, is a term coined by psychologist Elaine Aron. According to Aron's theory, HSPs are a subset of the population who are high in a personality trait known as *sensory-processing sensitivity*, or SPS. Those with high levels of SPS display increased emotional sensitivity, stronger reactivity to both external and internal stimuli—pain, hunger, light, and noise—and a complex inner life.

HSP'S TEND TO FILL THAT ADVISOR ROLE. WRITERS, HISTORIANS, JUDGES,  
ARTISTS, THERAPISTS, RESEARCHERS, THEOLOGIANs, AND TEACHERS!  
WE THINK ABOUT ALL THE POSSIBLE EFFECTS OF A DECISION.  
WE STOP AND THINK AND USE OUR ENERGY FOR CREATIVE INVENTIONS,  
EXPLORATION, AND **PROTECTION OF THE PLANET AND THE  
POWERLESS.**

HSP drives your style  
BUT IT CAN ALSO DRIVE YOU CRAZY  
WITHOUT BUFFERS, BOUNDARIES, BALANCE



# CONSIDER THE 3 B'S



Buffers

Boundaries

Balance

# What Is Buffer ???

- A buffer is a solution (or a substance) that has the ability to maintain pH and bring it back to its optimal value by addition or removal of hydrogen ions



# BUFFERS

Goal: To protect the brain from surges and seeping of cortisol and adrenaline.

Strategies: Exercise, Diet, BDNF, Sleep, Mood Foods, Mind-Set



# THE BRAIN NEEDS SLEEP!



- Sleep helps the brain to plant new information in the memory banks.
- Exercise ( which lifts the brain out of depression) can also aid healthy sleep. A “double dose”.
- New research suggests that kids with ADHD display disrupted sleep patterns. Adult brains show signs of this disruption as well.

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# LACK OF SLEEP SLOWS THE BRAIN



- Study: University of Pennsylvania, 2003
- People who shortchange sleep actually accumulate a “sleep debt”.
- Affects attention, reaction time, memory.
- Less than 6 hours per night creates a “sleep debt”.

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“OUR BRAINS LOOK AT THE WORLD FOR  
A WHILE AND THEN SHUT OUT NEW  
INPUT AND SORT THROUGH WHAT THEY  
HAVE SEEN.” WSJ 3/23/13



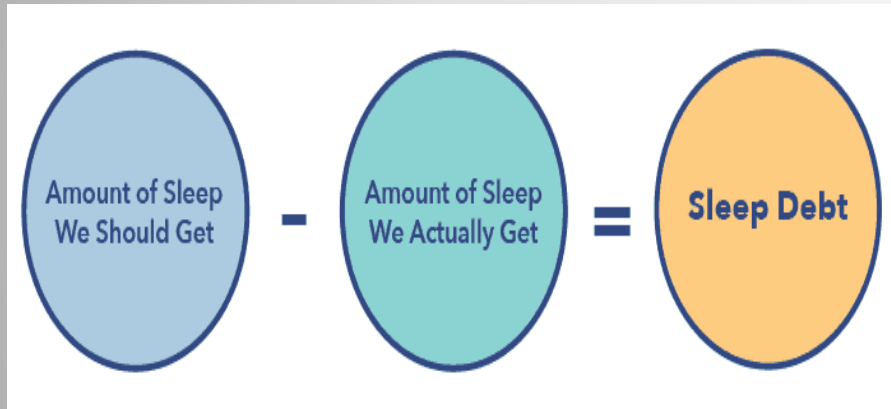
Sleep helps the brain to plant new information in the memory banks. Exercise ( which lifts the brain out of depression) can also aid healthy sleep. A “double dose”.

# Sleeping Makes Us Smarter



- New studies show that 8-11 year olds who get adequate sleep remember information almost perfectly, while those who did not “forgot” half.  
2013

# Sleep as a Buffer from Micro-Stressors



## Common Sleep Deprivation Symptoms

- fatigue
- mood changes
- difficulty concentrating
- memory problems
- paranoia
- hallucinations

verywell



# MAINTAIN A MINDSET THAT PRIORITIZES OPTIMISM



- Hanging onto negative mood from small daily stressors prolongs their effect.
- Those of us who move on quicker from a negative event have better day-to-day mood and higher well-being.
- An area of the brain called the amygdala plays a role. The amygdala alerts us to threats and can become overactive.
- There are simple things you can do to help yourself let go and move on from daily hassles.

# NEW RESEARCH ON OPTIMISM

Optimism is a choice, not a personality trait.

Decide to be optimistic part of the time. That is doable.

Control social media. Stop “doomscrolling.”

Set goals each day. Small ones.

Write yourself a positive letter.



# BE OPTIMISTIC. IT IS A CHOICE.

Be aware of negative forecasting. So much negative energy surrounds our profession now. It is easy to become sick from the fumes. Put on your mask.

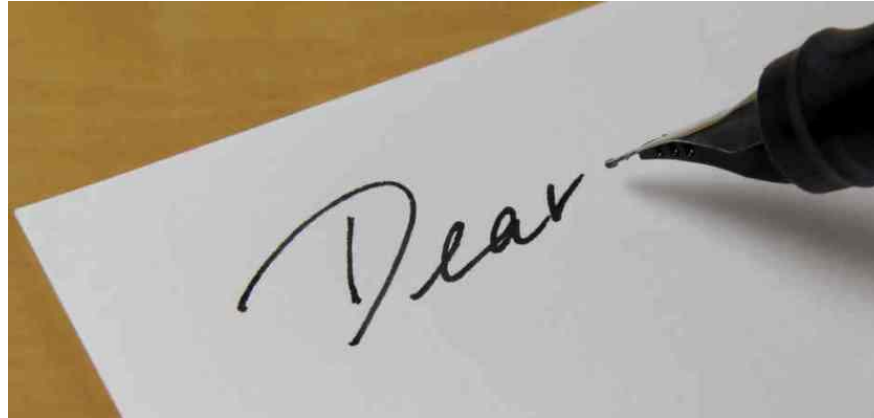


THERE IS POWER IN BEING A CHANGE MAKER. FEW OTHER CAREER PATHS ALLOW ONE SUCH AUTHORITY AND AUTHENTICITY. BUFFERS ALLOW US TO HOLD ONTO THAT POWER.



# OPTIMISM PRACTICE FROM THE EXPERTS

1. Choose a point in the near future, 6 months or so.
2. Write to yourself as an educator.
3. Explain in detail how good everything looks in your educational setting.
4. Write about the steps that you took to make this happen.
5. Think of it as a cognitive roadmap.



Dr. David Snowden's 15 year "Nun Study" suggests that one's attitude toward life may impact the health of one's brain. [Aging with Grace-What the Nun Study Teaches Us About Living Longer, Healthier and More Meaningful Lives.](#)

Analysis of the nuns' early writings gave a glimpse of who would get dementia later ( 85 to 90% accuracy).

"Early education and linguistic ability and the way we look at life seem to indicate what we will be like in the end of life." Snowden, 2001

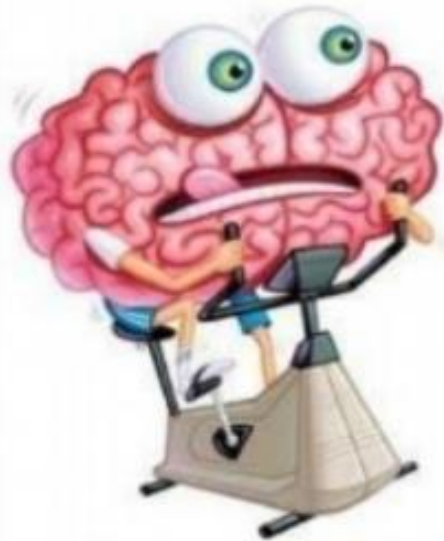
FOR MORE ALZHEIMER'S RESEARCH...CHECK OUT "THE NUN STUDY"



# PROTECT YOUR BRAIN WITH EXERCISE AND BDNF

## Actions of BDNF

- Sustains the viability of neurons (neuroprotection)
- Increases dendritic arborization and the number of synapses.
- BDNF gene is suppressed by stress (via cortisol).
- Decreased BDNF levels lead to neuronal atrophy and neuronal death.
- BDNF levels are low in depression, but increase with antidepressant treatment.
- Exercise increases BDNF levels.



\*MICRO-STRESSORS CANNOT EASILY AFFECT THE BRAIN IF THERE ARE CONSISTENT BUFFERS.

\*DOPAMINE, SEROTONIN, BDNF  
\*EXERCISE IS THE EASIEST, MOST ACCESSIBLE SOLUTION

\*INTERESTINGLY, DAILY EXERCISE ALSO PROTECTS AGAINST EARLY ONSET DEMENTIA AND MANY FORMS OF CANCER

**BUFFER: KNOW YOUR POWER AND POSITION IT  
TO PUSH BACK AGAINST MICRO-STRESSORS**





Dr. Nora Volkow

Research Psychiatrist at National Institute on Drug Abuse

Part of JAMA paper on ADHD Findings

“Try behavioral therapies first. She said her team’s findings underscored the value of having teachers be as engaging as possible.”

Nothing was as impactful as a highly engaged teacher.

[www.dana.org](http://www.dana.org)

**WHAT CHANGES BRAINS? ENGAGING  
EDUCATORS**

# REACH FOR YOUR JOY.



**J**....Just decide to focus on what you can control in your classroom. Your kids. Your lessons. Your attitude.

**O**....Open your mind to the power of Optimism.

**Y**....YES to things that serve you and NO to those that drag you down.

COLLEEN WILCOX

"Teaching is the greatest  
act of optimism."



# CONSIDER THE 3 B'S



Buffers

Boundaries

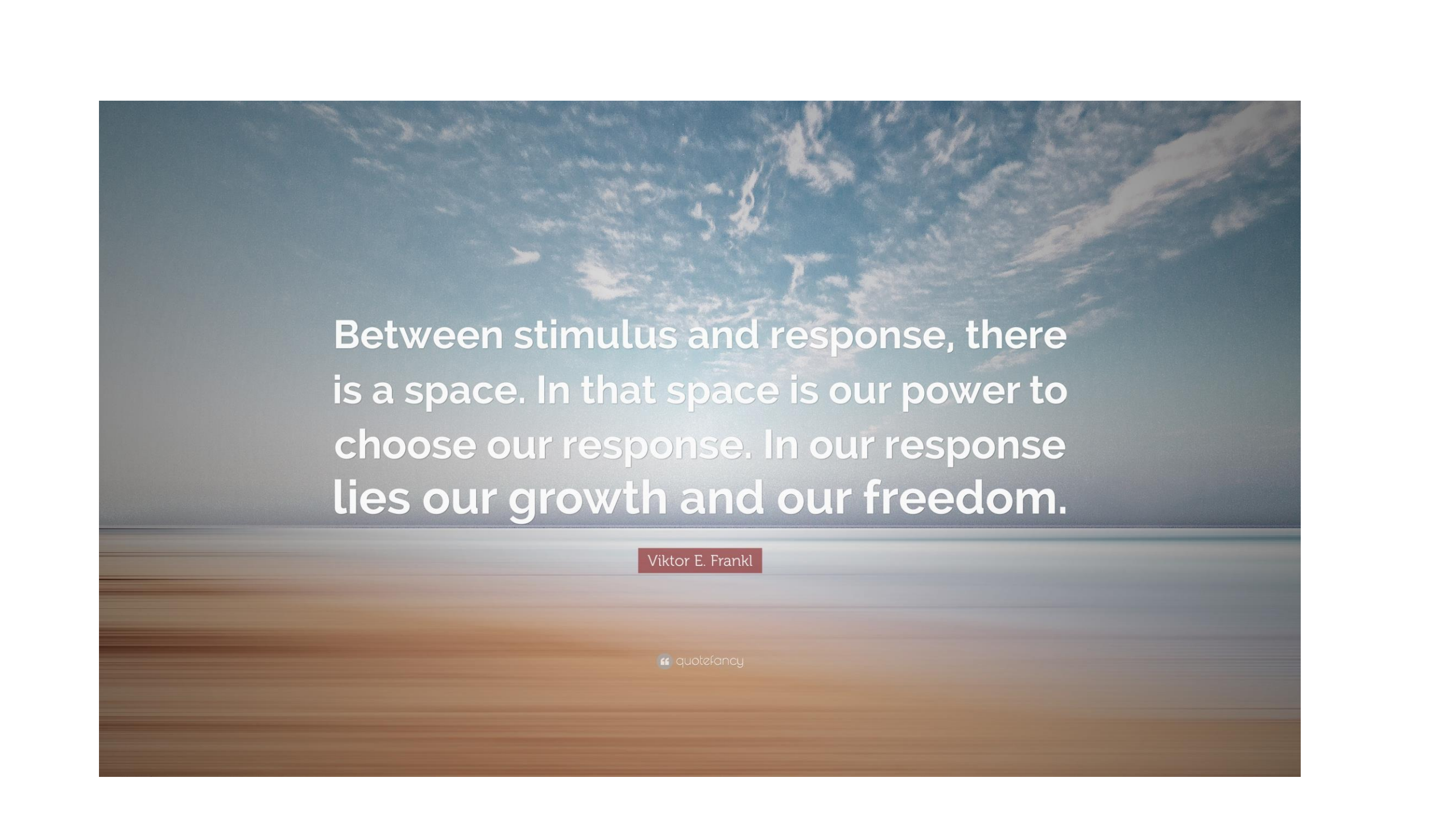
Balance

# BOUNDARIES

## What Is a Boundary?

- ***A BOUNDARY*** is a definite place where your responsibility ends and another person's begins. It stops you from doing things for others that they should do for themselves.
- ***A BOUNDARY*** also prevents you from rescuing someone from the consequences of their destructive behavior that they need to experience in order to grow.

1. With your Mindset
2. With your devices
3. With toxic people
4. With your energy
5. With your commitments



Between stimulus and response, there is a space. In that space is our power to choose our response. In our response lies our growth and our freedom.

Viktor E. Frankl

“ quote fancy

*Are you a thermometer or a  
thermostat?*

A thermometer only reflects the  
temperature in its environment,  
adjusting to the situation.

But a thermostat initiates action to  
change the temperature in its  
environment.

**ONE OF THE MOST RESILIENT AND RELIABLE BOUNDARIES**

# DON'T LET **DOOMSCROLLING** DESTROY YOUR JOY!





ESTABLISH YOUR BOUNDARY WITH WORDS.  
WRITE A ONE SENTENCE STATEMENT OF YOUR  
PURPOSE.

You chose this  
profession. It belongs  
to you. Decide that it is  
worth fighting for.



# LET ME HELP YOU WITH PHRASES THAT HELP TO ESTABLISH BOUNDARIES



1. I'm not comfortable with that....
2. Here's what I can commit to...
3. "Yes to this part. No to that part."
4. That doesn't work for my family.
5. I will check my schedule and get back to you with something that makes sense for me.

THE COMMUNITY YOU CREATE FEEDS YOUR SPIRIT  
AND CHANGES THE WORLD. ESTABLISH DISTANCE IN  
ORDER TO PROTECT WHAT YOUR CHERISH.



# CREATE A CIRCLE OF POWER



Collect positive colleagues

Connect with those who reflect your values

Confer with others who speak the truth with love

Create with teachers who share your passion for the classroom and health science

Your vibe  
attracts  
your tribe



# USE STORIES OF GREAT TEACHERS TO SEPARATE YOURSELF FROM MICRO-STRESSORS. I CALL THIS A BIBLIOTHERAPY BOUNDARY

Christy. Catherine Marshall

Courage to Teach. Parker Palmer

Educated. Tara Westover

Marva Collins Way. Marva Collins

Matilda. Roald Dahl

Schooled. Matthew Rockwood

The Water is Wide. Pat Conroy

The Year of Miss Agnes.

Up the Down Staircase. Bel Kaufman

Wonder. RJ Palacio



# CONSIDER THE 3 B'S



Buffers

Boundaries

Balance

# BALANCE: LET GO OF PERFECTIONISM. MAKE CHOICES THAT FEED YOUR SOUL



Use your **BUFFERS AND BOUNDARIES**

To create **BALANCE**

Make appointments for self-care

Make your family time a priority

Make choices about food, sleep, and play with assurance

Make it a point to remember that you chose this profession for a reason.



# BALANCE IS TRICKY BUT WORTH IT



1. Don't be afraid to say "NO" if you cannot complete the task without harming your sense of balance.
2. Practice "making trades". Example: I would love to help with the bake sale but my weekend is booked. I can whip up a cool flyer to send home on email.
3. Use a good old paper day-timer and colored pens to plot out time for exercise, friends, romance. The colors will alert you to imbalances.

# LET GO OF PERFECTIONISM.

And now that you  
don't have to be  
perfect,  
you can be good.

-John Steinbeck

~~What's NEW~~

What-Does-it-all-mean

# TEACHERS: THE REAL MASTERS OF MULTITASKING

1,500

EDUCATIONAL  
DECISIONS MADE BY  
AN AVERAGE TEACHER  
EVERY SCHOOL DAY



4

EDUCATIONAL  
DECISIONS MADE BY  
AN AVERAGE TEACHER  
EVERY MINUTE

The average classroom teacher will make 1,500+ educational decisions every school day.  
In a 6-hour school day, that's more than 4 decisions every minute.  
How multitasking is that? :)

# TEACHERS DO “BRAIN SURGERY” FROM THE INSIDE OUT

---

TEACHERS MAKE MORE MINUTE  
BY MINUTE DECISIONS THAN  
BRAIN  
SURGEONS...AND THAT  
IS WHY YOU'RE GOING HOME  
SO EXHAUSTED EACH DAY.

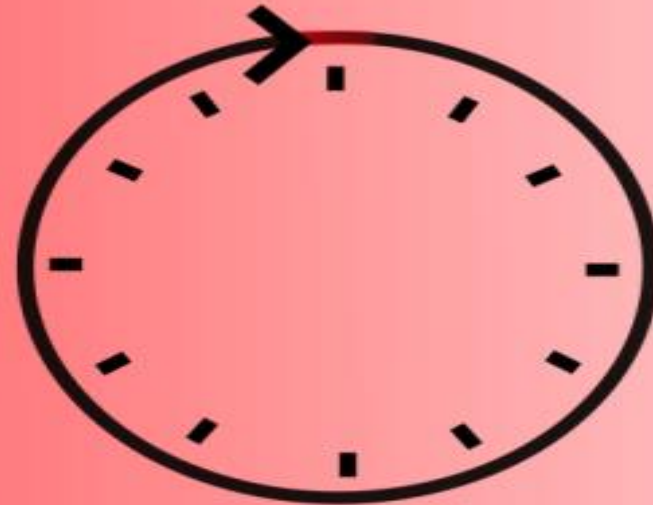
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--DR. TINA BOOGREN

# KEEP YOUR BALANCE WITH A CAREFULLY CURATED AND SACRED SET OF ROUTINES

## ROUTINES

Routines are well-understood structures that encourage discourse, sensemaking, and equity in the classroom. A teacher may have many different types of routines in her toolbelt and utilizes them daily.



# STRENGTHEN BALANCE WITH POLISHED PROCEDURES



# THE SOUND OF SILENCE



New research suggests that silence lowers BP and increases life span.

Periods of silence encourages neurogenesis.

WSJ 3/12/21

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# PRESCRIPTIVE QUIET



Noise cancelling headphones.

Relaxation Apps

Create “Silence Zones” at home and school.

Nature

# YOGA CAN HELP



Participants in the yoga group had significantly increased levels of GABA at the end of the study. Subjectively, yoga participants also noted greater improvement in their mood and anxiety compared to those who <http://psychcentral.com/blog/archives/2010/08/28/walking-yoga-helps-your-brain/> walked.

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# CREATE SEPARATE WORK/HOME SPACES...LITERALLY

## THE ULTIMATE GUIDE TO HYGGE

The Danish concept of **comfort**, coziness, and warmth.



1. Use light, warmth, and color to bring balance to your life.
2. Plants, Pets, and Personal Spaces also balance cortisol and adrenaline levels.
3. Choose scents that balance the impacts of stress. Vanilla, lavender, bergamot, cinnamon, rosemary can be helpful.
4. Hygge ( Hooga)

## WARMING UP THE MIND

[HTTP://ONLINE.WSJ.COM/ARTICLE/SB10001424052702304520804576349213528554824.HTML](http://online.wsj.com/article/SB10001424052702304520804576349213528554824.html)



Feelings of “warmth” literally change one’s cognitive and emotional mindset.

The effect is called “priming” and impacts the “Insula”, or insular cortex.

One of my favorite strategies is to “decorate” for winter....with white lights on my porch, votive lights on the tables, sparkly linens , warm colors,



# STRATEGY: HANDOUTS JUST FOR YOU! IN THE US EDUCATOR PORTAL.

1. Teacher Stress Article
2. Perfectionism Article
3. PDF of these slides
4. Social Capital Article
5. Brain Friendly Recipes
6. A Brain Treat for the Holidays



**MASTERING MICRO-STRESSORS ENABLES US TO ACCESS THE INFINITE  
POSSIBILITIES OF THIS NOBLE PROFESSION**



First images of the Space Telescope July 2022

# FIND MY BOOKS ONLINE OR GET IN TOUCH TO DO A “BOOK STUDY”

