



Pure Community

Thank you for joining us!

Session 4: The Neuroscience of Stress, Part 1
Trainer: Michelle Kelsey Mitchell


Getting Started:

1. If you have any questions, please type them into the Q&A box.
2. Place a pen/pencil/paper nearby to jot down your thoughts.
3. At the end of this session, when you leave the meeting, there will be a link that will pop-up asking you to complete the Session Quiz / Feedback Form.
4. You will receive a follow-up email within 24 hours of this session. That email will serve as your confirmation of attendance record for this session.

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Website: www.pureedgeinc.org

Email: getmoving@pureedgeinc.org




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Culture of Care Series: Session 4

The Neuroscience of Stress, Part 1



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Welcoming Activity

Respond to the poll to share your response with our group.

Describe Your Mood Today



Sunshine Rainy Thundery Cloudy Rainbow



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Introductions

Michelle Kelsey Mitchell
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Director of Partnerships &
National Trainer



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Who We Are

Pure Edge, Inc. (PEI) is a private operating foundation that provides direct service to organizations through professional development & strategy thought partnership.

PEI also provides grants to national organizations that advance the work of whole child development & SEL.



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Learning Objectives

- ❖ Explore the link between Stress and Allostatic Load.
- ❖ Describe the neuroscience of stress.
- ❖ Recognize the physiological response to stress.
- ❖ Analyze the affects of the stress response on the educational environment.
- ❖ Illustrate the interconnectedness of SEL and self-care.
- ❖ Practice and Implement Breathe, Move, and Rest Strategies for Self-awareness and Self-management.
- ❖ Identify CASEL competencies.
- ❖ Acquire Skills to train colleagues in SEL, evidence-based curricula.



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Self-care



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Breathe

Move

Rest



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HW Check-in: Session 1

Self:

Choose 1 Breathe, Move, and/or Rest Brain Break to practice independently.

Online Class:

Register for your SEL curriculum account at pureedgeinc.org

Together in Class:

Identify one thing that you are already doing related to CASEL's three signature practices (Welcoming Activity, Engaging activity, and Optimistic Closure.)



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HW Check-in: Session 2

Self:

Think about an area of your life that evokes strong emotions. Identify and list 3-5 practical ways you can apply emotional regulation in this area of your life.

Online Class:

- ❖ Plan a 2-5 minute introduction for:
- ❖ "The Power To Be Calm" Grades 3-5
- ❖ "The Power of Brain-Body Connection" Grades 6-12

Together in Class:

- ❖ Log into the Pure Edge SEL curriculum account that you created.
- ❖ Click on Pure Power Curriculum
- ❖ Click on Pure Power 3-5. Review Unit 2.8: The Power to Tame Your Temper
- ❖ Practice the STOP technique 3-5 times before our next class.



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HW Check-in: Session 3

Self:

Schedule a Mindful Minute every morning.

Online Class:

- ❖ Identify two breathing Brain Breaks we practiced together and implement them during your online class with students.
- ❖ Implement one at the beginning of class (Welcoming Activity) and one right before the end of class (Optimistic Closure.)

Together in Class:

Identify 1 Brain Break that can be used daily for stress management with your students.



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Engaging Activity: Alternate Nostril Breathing



Notes:

*The hand movements will take some practice to feel comfortable.

*If thumb and pinky are too hard for learners to coordinate, you could use right thumb to close right nostril and left thumb to close left nostril.

*Once your learners have mastered the hand movements, helpful verbal cues are: inhale right, close, exhale left. Inhale left, close, exhale right.

*This exercise can take 1 to 3 minutes.

1. Let's start with a few deep breaths through the nose.
2. Inhale, close the right nostril by pressing the side of the nose with the right thumb.
3. Exhale out the left nostril.
4. Inhale through the left nostril.
5. Close the left nostril by pressing the side of the nose with your right pinky and fourth finger. At the same time, take your thumb off of your right nostril.
6. Exhale out the right nostril.
7. Inhale through the right nostril.
8. Close the right nostril with your thumb again and exhale through the left (removing the pinky and fourth finger).
9. This is one round. Complete 2 or 3 rounds by repeating steps 2-8. End on a left exhalation.
10. Take a few regular breaths.
11. Notice how you feel.



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Guiding Question

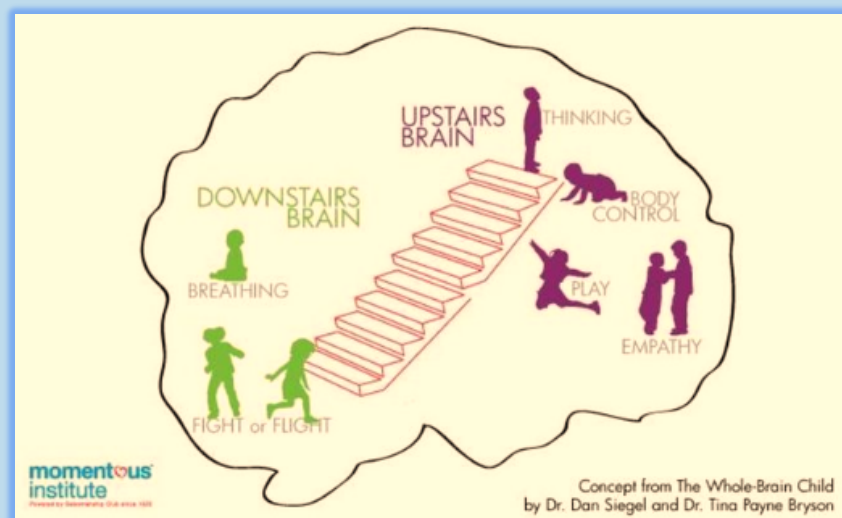
What does the expression
“flip your lid” mean?



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Neuroscience of Stress

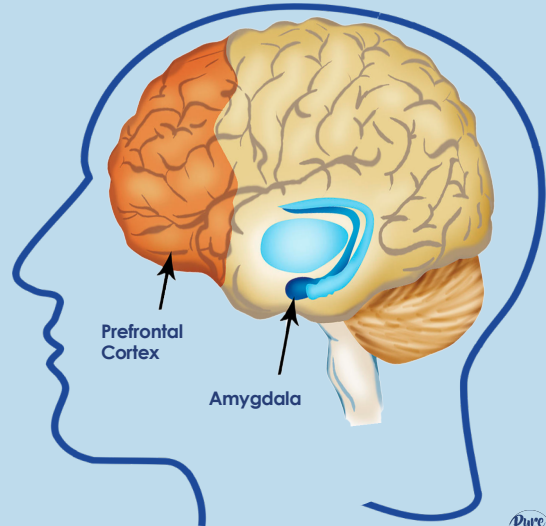


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Neuroscience of Stress

- ❖ The rational part of the brain, the Prefrontal Cortex, isn't fully developed until age 25 or so.
- ❖ Adults think with the prefrontal cortex, the brain's rational part. This is the part of the brain that responds to situations with good judgment and an awareness of long-term consequences.
- ❖ Children, teens, and young adults rely on the amygdala to process information; the emotional part of the brain.



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Neuroscience of Stress

Integrating upstairs downstairs strategies:

1. **CONNECT, THEN REDIRECT:** Be present with your child's feelings, help them get into the "green zone."
2. **Breathing** will help bring the prefrontal cortex ("upstairs brain") back online.
3. **Move** it or lose it: Get child moving and their mood will change.



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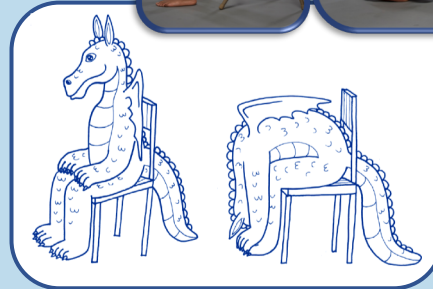
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Engaging Activity: Seated Forward Bend

1. Sit in Seated Mountain Pose with feet flat on the floor. Inhale and sit tall, making your back as long as possible.
2. Exhale, reach both feet slightly out in front of you and fold over your legs, sliding your hands down your legs towards your shins. Take 2-3 breaths here.
3. Inhale and come back up to Seated Mountain Pose.
4. Repeat as required.

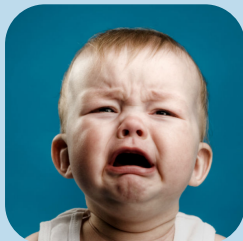
*Use this move as a quick pick-me-up or to restore when energy seems to be low.



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Stress Response



"Gas Pedal"

Sympathetic Nervous System:
Fight or Flight



"Brake"

Parasympathetic Nervous System:
Rest and Digest



<https://www.health.harvard.edu/staying-healthy/understanding-the-stress-response>
Image Sources: <https://www.shutterstock.com/video/clip-22377115-tired>, <https://ggia.berkeley.edu/practice>



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Compassion Fatigue

Secondary Trauma






- ❖ 1 in 5 adults in America experience a mental illness.
- ❖ Nearly 1 in 25 (10 million) adults in America live with a serious mental illness.
- ❖ Approximately 10.2 million adults have co-occurring mental health and addiction disorders.

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Student Mental Health

	60%	of K-12 students are exposed to a traumatic event.
	17 million	children have untreated mental health diagnoses.
	2nd	most common cause of death among ages 10-24 is suicide.
	95%	of teens have smartphones, while 45% are "online constantly."
	9	hours is the average amount of media consumed each day, unrelated to school, by teens (13-18). The average for ages 8-12 is 6.

52%

is the rate of increase in major depression among youth ages 12-17, from 2005-2017.

6.1 million

children ages 2-17 have received an ADHD diagnosis.

30-40%

of undergrads at Ivy League institutions seek mental health services, up 20% per year over the last 6 years.

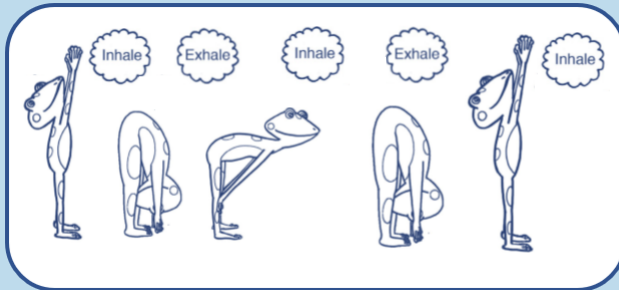
<https://www.cdc.gov/nchsddd/adhd/data.html>
<https://health.usnews.com/wellness/for-parents/articles/2019/04/22/teen-depression-is-on-the-rise>
<https://sci.org/articles/entry/five-ways-to-advance-conservation-entrepreneurship>

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Engaging Activity: Recharge Sequence



1. Begin standing in Mountain with feet slightly apart, hands at your sides.
2. Inhale, take your arms overhead and look up.
3. Exhale and fold over your legs, bending the knees slightly to allow the hands to rest on the shins, the feet or the floor.
4. Inhale, place hands on shins, straighten legs and look up.
5. Exhale and fold over the legs once more.
6. Inhale, come all the way up to standing, arms overhead and look up.
7. Exhale, return to Mountain.

*This sequence can be done behind or in front of desks/chairs. It's useful to re-energize learners when they get tired.



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Blue Zone



Red Zone



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Green Zone



Image source: <https://www.goodnewsnetwork.org/get-drunk-happiness/>



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Engaging Activity: Even In – Even Out

1. Start in Seated Mountain with a tall spine, relaxed shoulders, and eyes gently closed.
2. Breathe naturally through the nose.
3. We are going to focus on making our inhales and exhales even.
4. Inhale deeply through the nose and exhale through the mouth for a count of one.
5. On the next breath, lets count to two on the inhale and the exhale.
6. Repeat, continuing to extend the breath up to a count of five.



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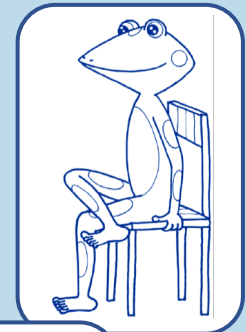


Engaging Activity: Seated Figure Four



1. Begin in Seated Mountain Pose.
2. Inhale, cross the right ankle over the left thigh, just above the knee. Place the right hand on the right thigh and left hand on the right foot.
3. Exhale, fold torso forward and relax the head down. Take 2-3 breaths here.
4. If it's easier, you can hold the legs of the chair as you fold forward.
5. Inhale, come back to Seated Mountain Pose.
6. Switch legs and repeat on the other side.

*Use this sequence to release the back which can get tired from sitting.



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Engaging Activity: Guided Rest / Body Scan

1. Lie down on the floor on your back. Spread your feet apart. Turn your palms up to face the ceiling and close your eyes.
2. Put your attention on your forehead. Feel your forehead relax.
3. Put your attention on your eyes. Feel your eyes relax.
4. Put your attention on your cheeks and jaw. Feel your cheeks and jaw relax.
5. Put your attention on your neck. Feel your neck relax.
6. Put your attention on your shoulders. Feel your shoulders relax. (Repeat for arms, wrists, hands, fingers.)
7. Put your attention on your chest. Feel your chest relax.
8. Put your attention on your back. Feel where your back touches the floor (or the chair).
9. Put your attention on your belly. Notice how the breath moves the belly softly up and down.
10. Put your attention on your hips. Feel your hips relax. (Repeat for legs, knees, ankles, feet, toes.)
11. Bring your awareness to your breathing and notice where you feel the breath in your body. Maybe you notice it in your nostrils. Maybe you feel it in your chest. Maybe you feel it in your belly.
12. See if you can get really quiet. Maybe you will even feel your heart beating inside your body.
13. Let learners rest in silence for a few moments.
14. Ring chime.
15. Slowly start to wiggle your fingers and toes. Take a deep breath in and stretch your arms overhead. As you exhale, relax.
16. Open your eyes and slowly return to a seated position.
17. Notice how you are feeling.



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Brain Breaks Review



Breathe

- ❖ Alternate Nostril Breathing
- ❖ Even In – Even Out



Move

- ❖ Seated Forward Bend
- ❖ Recharge Sequence
- ❖ Seated Figure Four



Rest

- ❖ Guided Rest/Body Scan



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Modeling and Implementation of SEL



**Welcoming /
Inclusion Activities**
Mood Weather
Check-in

Engaging Strategies
Brain Breaks

Optimistic Closure
One Word Takeaway

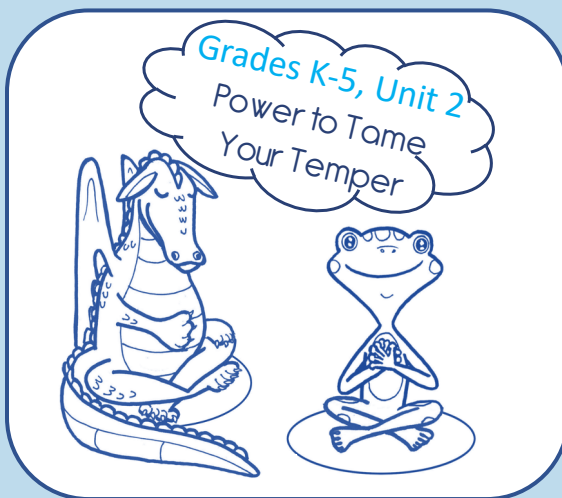
Source: SEL 3 Signature Practices Playbook 2019



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Pure Power Implementation



Grades K-5

- ❖ Unit 2 – Power to Tame Your Temper
 - ❖ Lesson 2.2, Getting to Know Your Brain: Amygdala and Prefrontal Cortex (K-2)
 - ❖ Lesson 2.3, The Brain-Breath Connection: How Mindful Breathing Tamed Dragon's Fire (K-2)
 - ❖ Lessons 2.2-2.4, Getting to Know Your Brain, Parts 1-3 (3-5)



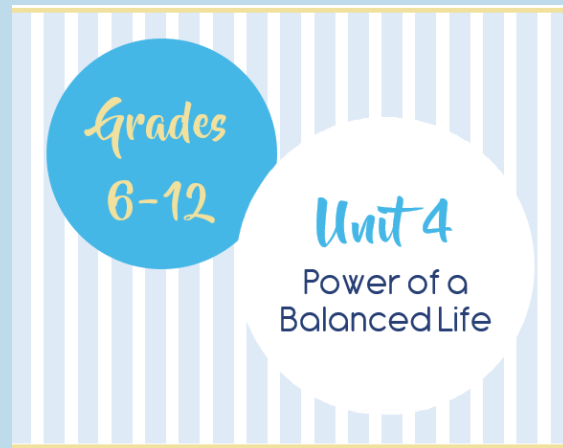
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Pure Power Implementation

Grades 6-12

- ❖ Unit 4 – Power of a Balanced Life
- ❖ Lesson 3, Processing Stress



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Optimistic Closure: One Word Takeaway



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Homework

Self:

Choose 2 Breathe, Move, and/or Rest Brain Breaks to practice independently. Note how you feel before (pre) and after (post) your practice.

Online Class:

Plan one class lesson and explicitly label each of the 3 signature practices within the full lesson.

Together in Class:

Map the "why" of Brain Breaks to your current scope and sequence.



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Evidence-Based Approach
Thoughtful Partnerships
Curriculum & Training

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Online Curriculum

Log Out

+ MENU



breathe

move

rest



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Pure Community

Please Note: You will receive a follow-up email within 24 hours of this session. This serves as your confirmation of attendance. You will not receive a certificate, it will just be the confirmation of attendance email.

Thank you for joining us!

Culture of Care Session 4: The Neuroscience of Stress, Part 1
Trainer: Michelle Kelsey Mitchell, Director of Partnerships

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