Culture of Care Series: Session 4

The Neuroscience of Stress, Part 1
Welcoming Activity

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

Describe Your Mood Today

Sunshine, Rainy, Thundery, Cloudy, Rainbow

Your Instructor

Michelle Kelsey Mitchell
michelle@pureedgeinc.org
Director of Partnerships & National Trainer
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.

Learning Objectives

- Explore the interconnectedness of SEL and self-care
- Discuss the neuroscience of stress
- Practice and review breathe, move & rest strategies
Guiding Question

What does the expression “flip your lid” mean?

Self-care
Engaging Activity: Mindful Minute

- Start in Seated Mountain.
- Bring your attention to the present moment. We are going to start by taking a Mindful Minute.
- Start bringing your attention to the breath, noticing its qualities (fast, slow, warm, cool, shallow, deep...).
- Continue to focus your attention on the breath, and notice how you are feeling. Just notice.
Engaging Activity: Alternate Nostril Breathing

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.

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.

Checking In

Self?

- Practice Breathe, Move, Rest Brain Break.
- Consider an area of your life that evokes strong emotions. What are some practical ways you can apply emotional regulation in this area of your life?
- Schedule a Mindful Minute every morning.
Checking In

Online Class?

- Sign up for a curriculum account at: pureedgeinc.org
- Use the two breathing Brain Breaks reviewed for online class.
  - Use one at the beginning of class and one right before the end of class.
- Plan a 5 minute introduction for:
  - “The Power To Be Calm” Grades 3-5
  - “The Power of Brain-Body Connection” Grades 6-12

Checking In

Together in Class?

- Identify one thing that you are already doing related to the three signature practices: welcoming activity, engaging activity, and optimistic closure.
- After signing up for a curriculum account at www.pureedgeinc.org:
  - Click on Pure Power Curriculum
  - Click on Pure Power 3-5 and review Unit 2.8: The Power to Tame Your Temper
  - Apply the STOP technique using the breath
- Plan a daily stress relieving Brain Break for your students.
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, let’s count to two on the inhale and the exhale.
6. Repeat, continuing to extend the breath up to a count of five.

Neuroscience

- 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.
Stress Response

“Gas Pedal”
Sympathetic Nervous System: Fight or Flight

“Brake”
Parasympathetic Nervous System: Rest and Digest

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.
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.
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.

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.
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.
Brain Breaks Review

- **Breathe**
  - Mindful Minute
  - Alternate Nostril Breathing
  - Even In, Even Out

- **Move**
  - Seated Forward Bend
  - Recharge Sequence
  - 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)

**Grades 6-12**

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

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Optimistic Closure: One Word Takeaway

Homework

Self?
Practice Breathe, Move, Rest Brain Break

Online Class?
Try framing / labeling / planning your class using the 3 signature practices

Together in Class?
Identify a point in the day and/or curriculum you and your students can learn the “why” behind a brain break.
Thank you for joining us!

Session 4: The Neuroscience of Stress Pt. 1

Trainer: Michelle Kelsey Mitchell, Director of Partnerships

Follow us @pureedgeinc  
Website: www.pureedgeinc.org  
Email: getmoving@pureedgeinc.org