Pure Edge

Success Through Focus

6–12 POWER Curriculum

Writers
Eddie Stern
Courtney McDowell
Melanie Jane Parker
Barbara Verrochi

With Special Thanks to
Dr. Deepak Chopra
Dr. Murali Doriaswamy
Dr. Marshall Hagins
Dr. Jan Magee
Sharon Salzberg

Design and Illustration
Kristen Copham
Reflection Journal Design and Original Artwork

Courtney McDowell
Reflection Journal Concept and Original Artwork

Cam Vokey
Textbook Design, Layout and Original Artwork

Betsy Bell
Textbook Design, Layout and Original Artwork

Photography
Michael Halsband
Dana Meilijson
Robert Moses
Picture Farm
Barbara Verrochi

With Thanks to the following Creative Asset Producers
Denise Bentulan
Brainflower and Moonflower fonts

Caleb Kimbrough
textures from Lost and Taken

Unsplash photography

Freeimages.com photography

Franz Jeitz
textures and brushes from fudgegraphics

Folkert Gorter
photography from Superfamous

Vecteezy
general vectors and graphics

Pure Edge
Success Through Focus

6–12 Power Curriculum

Printing
Printed in the United States of America.

Table of Contents

Introduction
Pure Edge, Inc.

Pure Edge, Inc. offers children and adolescents a chance at happy, healthy lives by bringing health and wellness practices to schools and communities.

Pure Edge, Inc. Power Curriculum provides young people with skills that minimize stress, lower incidence of bullying and violence, and improve school attendance and academic performance. Program offerings consist of best practices in health and wellness, including exercises based on yoga, mindfulness practices, and nutrition education.

Through partnerships with educators, Pure Edge, Inc. supports parents, teachers, and community leaders in their efforts to provide students with the tools they need to gain success through focus.

Philosophical Orientation

The full Pure Edge, Inc. curriculum reflects the philosophical orientation and instructional recommendations advocated by the Joint Committee on National Health Education Standards and best practices for health and wellness, including exercises, physical therapy, mindfulness, and nutrition.

Effective health and wellness education promotes critical thinking in students and encourages them to make connections between concepts around healthy living and personal experience. Young people need to be reflective decision-makers. They must learn to identify and analyze how culture, media, and technology shape their everyday physical, mental, and emotional health.

Taught through a sequential, coordinated, and interdisciplinary curriculum, this program addresses a variety of topics aligned with national standards, and can be tailored to meet any state standards. In addition, it can be adjusted to degrees of complexity appropriate to students' developmental levels as they move from middle childhood to adolescence and then to young adulthood. The health and wellness instructor is trained to define the intellectual level and depth of instruction most appropriate for students.

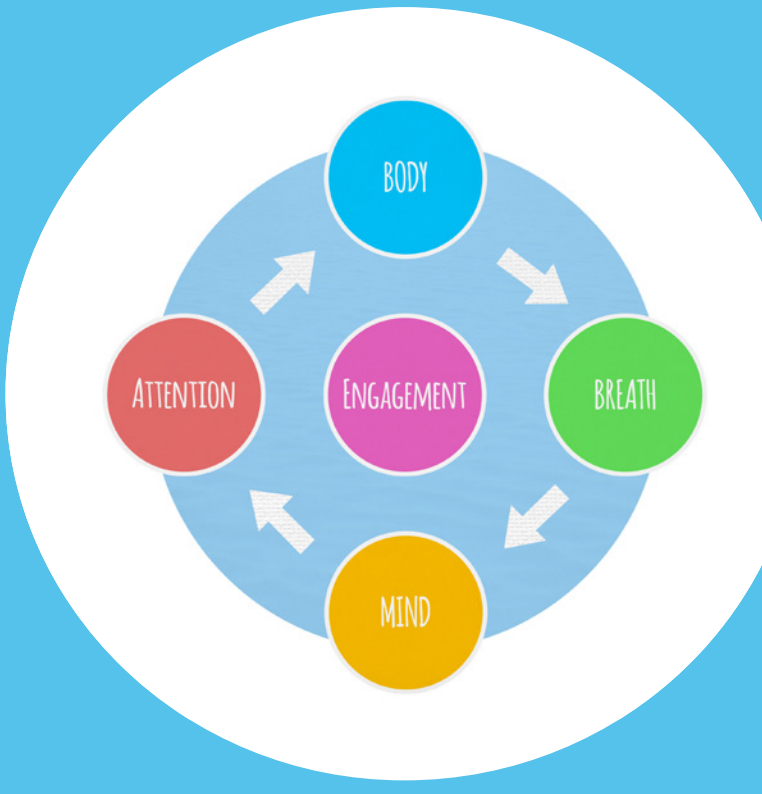
Research completed by the National Association for Sport and Physical Education (NASPE) and Centers for Disease Control and Prevention (CDC) reveals that there is a direct relationship between academic achievement and fitness. Movement and exercise enhance the learning state for memory retention and retrieval. Therefore, physical activity is a catalyst for learning in all content areas and should be an essential element of students' daily routines.

The knowledge that students gain through this program enhances their own health and wellness, as well as the health and wellness of their peers and community. The program promotes a supportive environment where individuals' similarities and differences are acknowledged and accepted.

The Five Principles of Health and Wellness

Our philosophical orientation is put into practice through the application of our Five Principles of Health and Wellness.

1. **Body:** Through wellness exercises, we teach the abilities to energize, strengthen, and stretch the body.
2. **Breath:** Through regulated breathing exercises, we teach the ability to calm the nervous system through impulse control, ways to identify stressful situations, and coping mechanisms.
3. **Mind:** By observing the mind, we teach the skill of "slowing down" so that students are able to reduce stress, identify habits, and navigate strong emotions.
4. **Attention:** Through the use of coordinated practices of body, breath, and mind, we teach the ability to focus in a coherent direction. We often ask students to "pay attention," but they don't know what attention is, or where to pay it. Attention is not a thing; attention is a state. In an active state of attention, students can steer their actions in the direction of their choosing. Teachers can also use these tools in order to help focus their students, for classroom management, and for effectively imparting instruction.
5. **Engagement:** Through the achievement of relaxation and attention, we teach students how to engage with their own decision-making processes and improve their aptitude for perceiving the most beneficial choices with regard to the demands of education, as well as the demands of life at home and in social situations. Full engagement may allow improvement in handling stressful experiences, such as test-taking or peer pressure.



Program Objective

To provide students with skills that have been shown to help them

- Minimize stress
- Self-soothe
- Improve focus
- Become more attentive, confident learners
- Actively participate in their own physical, emotional, social, psychological, and environmental wellness
- Lower incidence of bullying and violence
- Increase school attendance and academic performance

Course Description

A typical health and wellness course will emphasize

- **Movement and Rest**
- **Breath**
- **Relaxation**
- **Attention**
- **Engagement**
- **Discussion**
  - **—Character development**
  - **—Values**
  - **—Self-care**
  - **—Self-awareness**
  - **—Emotional regulation**

Unit 1
Power To Shine

Unit Description and Outline

Power To Shine introduces general course material and establishes the idea that students are active participants in their own health and wellness. Students will learn that, through critical thinking, they are able to make healthy living choices, both personal and social. This unit commences with creating an organized environment with agreed-upon routines and procedures. Physical postures, intentional breathing, and focused attention (mindfulness) are introduced. Each of these ingredients helps students begin to understand how physical health directly correlates to emotional and mental states, and learn to skillfully apply these techniques. The unit guides students through the process of combining the components of posture, breath, and focused attention, in order to gather awareness, build stability, and create balance in the body and mind at any moment.

Essential Questions

What is health and wellness?

How can health and wellness practices help us identify how to make healthy living choices?

How can health and wellness practices help us develop positive mental and emotional states?

Enduring Understandings

We can be active participants in our own health and wellness.

Overarching Objectives

To understand and actively implement health and wellness practices.

Learning Objectives

Students will be able to do the following...

1.1 The Power To Shine

Content

- Understand and implement basic classroom routines, procedures, and agreements.
- Define health and wellness.

Posture

- Demonstrate the breath and movement patterns of Arms Up/Arms Down and Cat/Cow.

1.2 The Opening and Closing Sequences

Content

- Understand that Opening Sequence A provides an efficient and well-rounded movement- and breath-oriented practice.

Posture

- Demonstrate the breath and movement patterns of Opening Sequence A.

1.3 Move, Breathe, Rest, Repeat

Content

- Understand that we are active participants in our own health and wellness.

Posture

- Demonstrate Big Toe and Triangle independently.

1.4 Proprioception

Content

- Understand the sense of proprioception.

Posture

- Demonstrate Surfer, Wave, and Side Angle.

1.5 Ocean Breath

Content

- Demonstrate Ocean Breath.
- Verbally list the benefits of nasal breathing.

Posture

- Independently demonstrate Windmill 1 and 3, as well as one other pose of their choice.

1.6 Breathing Benefits

Content

- List three benefits of nasal breathing (two physical and one emotional).

Posture

- Independently demonstrate Sport Stretch and Boat.

1.7 The Mind Goes Where the Eyes Go

Content

- Explain how our attention follows the movement of our eyes and how to choose where and how we wish to focus our attention through the eyes.

Posture

- Independently demonstrate Seal 1 and Bow.

1.8 The Tripod

Content

- Understand that the three components of body, breath, and gaze used together create balance.
- Understand how to create stability at any time of day through the use of body, breath, and gaze.

Posture

- Identify and apply strategies to help maintain physical balance in at least one balance pose.

Unit 1 Standards

SEL

- 1.1A: Identify and manage one's emotions and behavior.
- 1.1B: Recognize personal qualities and external supports.
- 1.1C: Demonstrate skills related to achieving personal and academic goals.
- 2.2A: Recognize the feelings and perspectives of others.
- 2.2B: Recognize individual and group similarities and differences.
- 2.2C: Use communication and social skills to interact effectively with others.
- 2.2D: Demonstrate an ability to prevent, manage, and resolve interpersonal conflicts in constructive ways.
- 3.3A: Consider ethical, safety, and societal factors in making decisions.
- 3.3B: Apply decision-making skills to deal responsibly with daily academic and social situations.
- 3.3C: Contribute to the well-being of one's school and community.

NHES

- 1.8.1: Analyze the relationship between healthy behaviors and personal health.
- 1.8.2/1.12.2: Describe the interrelationships of emotional, intellectual, physical, and social health in adolescence.
- 1.8.3/1.12.3: Analyze how the environment affects personal health.
- 1.8.5: Describe ways to reduce or prevent injuries and other adolescent health problems.
- 1.8.7: Describe the benefits of and barriers to practicing healthy behaviors.
- 1.12.1: Predict how healthy behaviors can affect health status.
- 1.12.5: Propose ways to reduce or prevent injuries and health problems.
- 1.12.7: Compare and contrast the benefits of and barriers to practicing a variety of healthy behaviors.

National PE

- Standard 1: The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.
- Standard 2: The physically literate individual applies knowledge of concepts, principles, strategies and tactics related to movement and performance.
- Standard 3: The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.
- Standard 4: The physically literate individual exhibits responsible personal and social behavior that respects self and others.
- Standard 5: The physically literate individual recognizes the value of physical activity for health, enjoyment, challenge, self-expression and/or social interaction.

NYSHE

- HE 1.1: Students will understand human growth and development and recognize the relationship between behaviors and healthy development. They will understand ways to promote health and prevent disease and will demonstrate and practice positive health behaviors.
- PE 1.1: Students will perform basic motor and manipulative skills. They will attain competency in a variety of physical activities and proficiency in a few select complex motor and sports activities. Students will design personal fitness programs to improve cardio respiratory endurance, flexibility, muscular strength, endurance, and body composition.
- HE 2.1: Students will demonstrate personally and socially responsible behaviors. They will care for and respect themselves and others. They will recognize threats to the environment and offer appropriate strategies to minimize them.
- PE 2.1: Students will demonstrate responsible personal and social behavior while engaged in physical activity. They will understand that physical activity provides the opportunity for enjoyment, challenge, self-expression, and communication.
- FCS 2.1: Students will know the basic principles of home and community safety. They can demonstrate the skills necessary to maintain their homes and workplaces in a safe and comfortable condition. They can provide a safe and nurturing environment for themselves and others.
- HE 3.1: Students will understand the influence of culture, media, and technology in making decisions about personal and community health issues. They will know about and use valid health information, products, and services.
- PE 3.1: Students will be aware of and able to access opportunities available to them within their community to engage in physical activity. They will be informed consumers and be able to evaluate facilities and programs.
- FCS 3.1: Students will understand and be able to manage personal resources of talent, time, energy, and money and make effective decisions in order to balance their obligations to work, family, and self. They will nurture and support positive relationships in their homes, workplaces, and communities. They will develop and use their abilities to contribute to society through pursuit of a career and commitment to long-range planning for their personal, professional, and academic futures. They will know and access community resources.

1.1 Vocabulary

Agreements
Health
Shine
Wellness

Lesson 1
The Power To Shine

1.1 Objectives

Students will be able to do the following:

- **Content**
  - — Understand and implement basic classroom routines, procedures, and agreements.
  - — Define health and wellness.
- **Posture**
  - — Demonstrate the breath and movement patterns of Arms Up/Arms Down, Cat/Cow.

1.1 Guiding Questions

- *Why do we want to create a safe, respectful, and productive space for learning?*
- *In your experience as a student, what are some school routines you've grown accustomed to?*
- *Do you find rules and routines helpful in structuring your daily life? Why? Why not?*
- *What does health mean to you?*
- *What does wellness mean to you?*
- *Why would we want to live healthy lives?*
- *When and where do you feel you are able to truly shine as yourself?*
- *How might classroom agreements contribute to your ability to shine?*
- *How might health and wellness support your ability to shine?*

1.1 Connect

Welcome to health and wellness. This class is a little different than your other classes. Your other classes primarily focus on external subjects, such as math, English, or history. In this class, however, you will not be learning about an external subject. In this class, the central subject is you.

"Health" is everything related to your body—your muscles, bones, internal organs, and brain. We will be paying special attention to how we can tune in to certain functions of the brain. "Wellness" is everything related to thoughts and emotions, understanding how they arise, and understanding how we can use them constructively to achieve success in our lives.

1.1 Teach

To begin, we are going to establish our foundation with classroom routines in order to create a safe, respectful, and productive work space. We want to treat this space and this time as special. This means arriving on time and ending on time, moving through each section of the class efficiently, and treating one another well.

We will begin every class with a brief, mindful check-in, then progress to guided movement, breathing, and rest. We will learn postures and movements based on yoga, cardio, and strength training. These exercises will strengthen the body, calm the mind, and help us manage our emotions. We will always emphasize movement, and we will always do breathing practice. Deep breathing gives us both energy and focus. In every class, we will rest. Rest is an opportunity to restore our minds and bodies. In fact, this might be the only class where you get to lie down and rest for 5 to 10 minutes. After rest, we will take part in a group conversation about the theme or concept of the day/week.

1.1 Active Engagement

Explain to students that you are going to lead them in a sequence of movements, culminating in rest. Encourage them to follow along to the best of their ability.

1.1 Link

Today we initiated our study and practice of health and wellness. Take a moment to consider how you felt (physically and mentally) before you arrived on your mat and how you feel now that you've learned these simple exercises. How do you feel now, after rest?

Introduce Agreement 1: *Safety—for yourself, your classmates, and the space around you.*

Now that we've had our first practice session together, can you think of ways we can continue to create a safe, respectful, and productive space for learning?

1.1 Closing Routine

Thank the students for their effort and attention. Give clear, step-by-step instructions for exiting the room.

1.1 Home Practice

Throughout the rest of the [day/week], notice where, when, and with whom you feel safe and secure. Identify what it is about the place you are in or the people you are surrounded by that helps you feel safe and secure.

Movement

Warm-up:
–Seated Wave
–Seated Twist
–Seated Sunset
Mountain into Arms Up Arms Down × 2–3
Half Opening Sequence A × 2–3
Cat/Cow × 2–3
Plank into Push-up into Sleeping Crocodile × 2–3
Cobra into Child
All Fours into Downdog
Tree
Closing Sequence
–Seated Sunrise
–Seated Sunset
–Seated Mountain
Mindfulness Practice:
–Even In, Even Out
Guided Rest: Body Scan

*Dark blue denotes new postures for the lesson.

1.2 Vocabulary

Bookend
Efficient
Invest
Purposeful

Lesson 2

The Opening and Closing Sequences

1.2 Objectives

Students will be able to do the following:

- **Content**
  - Understand that Opening Sequence A and Closing Sequence provide an efficient and well-rounded movement- and breath-oriented practice.
- **Posture**
  - Demonstrate the breath and movement patterns of Opening Sequence A and Closing Sequence.

1.2 Guiding Questions

- *What is a sequence?*
- *Can you identify another sequence of actions or events in your daily life?*
- *What are some noticeable effects of Opening Sequence A?*
- *What are some physical benefits of Opening Sequence A?*
- *What are some noticeable effects of Closing Sequence?*
- *Why do we want to create a respectful space for learning?*

1.2 Connect

In our first lesson, we began to explore how investing in our own health and wellness can give us the power to shine. One of the ways we invest in our own health and wellness in each and every class is by performing conscious movement, or movement that is performed with steadiness, focus, and care.

1.2 Teach

In this lesson, we will learn a series of connected postures we call "Opening Sequence A." Opening Sequence A is an efficient, well-rounded exercise for the whole body. It massages the muscles, boosts heart rate and circulation, engages the breath, and calms the mind. It is a comprehensive practice that can be considered a low-impact cardio exercise that builds strength, increases flexibility, promotes deep breathing, and improves focus.

Closing Sequence, which we began practicing in our first lesson, helps prepare us for rest. After flowing through multiple active poses, it is easier to settle the body and cool the mind, which can help us feel better prepared for all the work that we do through the day.

Throughout this class, we are going to take note of our own heartbeats. I want you to check your heartbeat by placing one hand on your chest before we begin Opening Sequence A, and then again after we've completed a round. We'll do another heartbeat check-in after Closing Sequence. The change you feel in your heartbeat is called "heart rate variability," which is an indication of good health. We'll talk more about this, and heart health, as the year goes on.

1.2 Active Engagement

1.2 Link

Today we established the practices that bookend each movement portion of class: Opening Sequence A and Closing Sequence. Can anyone explain why Opening Sequence A could be considered good cardio? Can anyone identify which parts of Opening Sequence A might build strength? Which parts might increase flexibility? Did you notice that your breathing became stronger or faster? Did you find that you were focused on the movements that you were doing when you were doing them, and not so much on other thoughts?

Introduce agreement 2: *Respect—for yourself, your classmates, and the space around you.*

Let's define respect and discuss how we can demonstrate respect for ourselves, for one another, and for our practice space.

1.2 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

1.2 Home Practice

Throughout the rest of the [day/week], try to notice where, when, and with whom you feel respected. Identify what it is that helps you feel respected. Notice when and why you feel respect for someone else.

Movement

Warm-up
Mountain into Arms Up/Arms Down x 2–3
Half Opening Sequence A x 2–3
Cat/Cow x 2–3
Plank into Push-up into Sleeping Crocodile x 2–3
Cobra
Updog into Child
Opening Sequence A x 2–3
Tree
Forest
Rolling Rock into Butterfly
Supine Twist
Closing Sequence
Mindfulness Practice
Guided Rest

1.3 Vocabulary

Conscious
Endurance
Participation
Repetition

Lesson 3

Move, Breathe, Rest, Repeat

1.3 Objectives

Students will be able to do the following:

- **Content**
  - Understand that we are active participants in our own health and wellness.
- **Posture**
  - Demonstrate big toe and triangle independently.

1.3 Guiding Questions

- *How does it feel to rest after you've been active?*
- *How does it feel to rest after you've been sedentary?*
- *Why do we repeat things in order to learn something?*
- *What are some basic functions our body cycles through during the day?*
- *Why do we need proper rest?*
- *Why do we need to move periodically throughout the day?*
- *How can moving periodically throughout the day keep our energy up?*
- *When does breathing happen?*
- *Can breathing help clear our thoughts?*

1.3 Connect

In our last class, we learned that Opening Sequence A, along with Closing Sequence, are complete practices for breathing, moving, and resting. They build strength, flexibility, and endurance, and increase our capacity to focus.

1.3 Teach

Today we are going to repeat them and add new poses, building on the idea of conscious, or purposeful, breathing and movement. One of the ideas that this class is centered around is practice. Whenever we learn something new, whether it's the alphabet or multiplication tables, we have to repeat it. By definition, practice is the repeated performance of an activity to acquire confidence and proficiency.

Another way we can use repetition is in the formation of new habits. By doing the same thing over and over again for a certain period of time, it becomes yours forever. If you regularly practice some of the things you learn in this class, you'll become an active participant in your own health and wellness.

Benefits of Repetition

- *New patterns of behavior and intentional habits are created.*
- *Strength and flexibility increase.*
- *Steadiness improves.*
- *New patterns in the brain are created.*
- *Memory—mental, physical, spatial, neuromuscular—is strengthened through the increased length of sequences.*

1.3 Active Engagement

1.3 Link

Today we learned about repetition. When we repeat actions, those actions become habits.

Introduce Agreement 3: Participation. Agreeing to participate fully, to the best of your ability and on a consistent basis, will help form new habits. You'll also be able to exert a measure of control over your body, mind, and emotions.

1.3 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

1.3 Home Practice

Now that you've started to become more familiar with our wellness exercises, try teaching one or two postures to someone at home. You can even try to lead a friend or family member through Opening Sequence A or Closing Sequence.

Movement

Mountain
Opening Sequence A × 2–3
Mountain into Chair × 2–3
Big Toe
Star into Triangle
High Lunge
Warrior 1
Warrior 2
Tree and Forest
Dolphin Dive × 2–3
Butterfly
Rolling Rock into Floating Lotus × 2–3
Seal 1 and 2
Child
Supine Twist
Closing Sequence
Mindfulness Practice
Guided Rest

1.4 Vocabulary

Balance
Proprioception

Lesson 4
Proprioception

1.4 Objectives

Students will be able to do the following:

- **Content**
  - Understand and experience the sense of proprioception.
- **Posture**
  - Demonstrate Surfer, Wave, and Side Angle independently.

1.4 Guiding Questions

- *What is balance?*
- *Why can we do certain things without watching our hands?*
- *What are some activities you can do without actively thinking about doing them?*
- *How does your body know where it is in space?*

1.4 Connect

In our last lesson, we learned about how we can be active participants in creating new habits, achieving goals, and being healthy. One of the ways we do this is by repeating the lessons we have learned so that they stick in our bodies and minds.

1.4 Teach

Today we are going to learn about an internal mechanism of the body that is involved in being able to perform different actions. It's called "proprioception." (Write "proprioception" on the board, along with its definition: Proprioception: the sense of one's body parts as they are positioned and/or moving in relation to one another.)

Let's try a game. Close your eyes and extend your arms out to the sides. See if you can touch your index finger to the tip of your nose. The reason you can do this is because of your body's innate sense of knowing where your limbs are moving in space. Your muscles and joints are constantly sending messages to your inner ear, where your sense of balance is located, and then those messages travel to your brain. The ability to know where you are without looking is all thanks to proprioception.

One of our goals in this class is to begin sensing our bodies and minds. This lesson focuses on our natural ability to sense our bodies as they are in space. Once we begin to consciously sense where our bodies are in space, we can move more mindfully. We are going to explore how to move mindfully through space. Trying some of the poses with your eyes closed will help to strengthen your sense of proprioception.

1.4 Active Engagement

1.4 Link

Today we learned that the body has its own sense of balance and the ability to know where it is in space. Its joints and muscles send messages to your inner ear, and then this information is relayed to your brain. We can strengthen our sense of proprioception by doing balance poses or standing on one leg—especially with our eyes closed. Does anyone have ideas as to why proprioception is a good sense to develop? How can proprioception help us in being mindful in our daily lives?

1.4 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

1.4 Home Practice

Throughout the day, experiment with closing your eyes and sensing your body and its parts as they exist in relation to one another and as they move in the space around you.

Movement

Opening Sequence A × 2–3
Twisted Chair into Standing Forward Fold
Big Toe
Triangle
Warrior 1 into Warrior 2
Half Side Angle or Side Angle
Windmill
Tree (try with eyes closed the second time)
L-shape into Seated Forward Bend
Table
Plank into Push-up × 2–3
Superhero 1 and 2
Bow
Child
Garland into Crow
Closing Sequence
Mindfulness Practice
Guided Rest

1.5 Vocabulary

Audible
Internal Organs
Nasal
Oxygen

Lesson 5

Ocean Breath

1.5 Objectives

Students will be able to do the following:

- **Content**
  - — Demonstrate Ocean Breath.
  - — Verbally list the benefits of nasal breathing.
- **Posture**
  - — Independently demonstrate Windmill A and C and one other pose of their choice.

1.5 Materials

- Hoberman sphere

1.5 Guiding Questions

- *How does it feel in your body when you pay attention to your breath?*
- *How often are you aware of the sound and sensation of your breath?*
- *What are some benefits of Ocean Breath?*
- *Why do we emphasize nasal breathing as an important accompaniment to all our wellness exercises?*

1.5 Connect

Last week we learned about how our bodies know where they are in space. The sense that allows you to ride a skateboard, touch your nose when your eyes are closed, or navigate through a dark room without falling over is called proprioception.

1.5 Teach

Today we are going to learn about one of our most important wellness tools. It is a simple activity that will help you focus, calm down, and relax, but it is also allows you to "hack in to" your nervous system and your brain by teaching you how to override strong emotions, like anger or fear. Can anyone guess what it is? The answer: breathing.

Breathing is, without a doubt, the one thing we do all the time that we rarely think about. We breathe 15 times per minute, which means we breathe 21,600 times per day. Some people say they don't know "how to breathe," but breathing happens automatically and effortlessly, just like proprioception. It is occurring all the time. To help focus your breathing, we are going to learn a technique called Ocean Breath. We will start using this particular breathing technique in all of our wellness exercises.

What are some of the benefits of Ocean Breath?

- *Full, deep breathing brings oxygen to all parts of the lungs. Most of the time we only breathe into the bottom portion of the lungs.*
- *Fuller inhalations allow oxygen exchange to happen over a greater surface of the lungs and within the bloodstream.*
- *Full exhalations help remove carbon dioxide from red blood cells.*
- *When your blood is more oxygenated, all of your internal organs become better oxygenated too, which in turn provides your body with more energy.*

1.5 Active Engagement

Exercise 1:

Inhale through your nose. As you exhale, whisper the sound "ahhh" out through your mouth. Repeat two or three times. On the second or third time, close your mouth, exhale, and send the whisper sound through your nose.

Exercise 2:

Fogging the mirror: Pretend that you are fogging a mirror while breathing through your mouth. Then pretend you are fogging a mirror while breathing through your nose.

Exercise 3:

Bring your hands to your ears. Press gently so that outside sounds are muffled. Concentrate on the sound of your breath as you inhale and exhale through your nose. You might notice that what you hear is similar to the sound of a seashell. Fun fact: The cochlea is the part of your ear that enables you to hear this sound. The name is derived from the Latin for "snail shell," because it is spiral-shaped, like a snail shell!

Excercise 4—Hoberman Sphere:

The Hoberman sphere represents the rib cage, moving outward on the inhale and moving inward on the exhale. It can be used to demonstrate how to make the inhale and exhale the same length.

Movement

Opening Sequence A × 2–3 (see if you can use Ocean Breath while moving)
Half Opening Sequence B × 2–3
Warrior 2 into Reverse Warrior 2 into Side Angle
Low Lunge
Upward Lunge into Twisted Low Lunge
Windmill
Intense Stretch
Figure Four
Seated Forward Bend
Jump Back/Jump Through (can be added in between seated postures)
Table or Inclined Plane
Seated Tree
Boat into Floating Lotus × 2–3
Butterfly
Twisted Garland into Crow
Bridge
Knees into Chest
Closing Sequence
Mindfulness Practice
Guided Rest

1.5 Link

Ocean Breath is a new tool for us. We are going to use it in all of the upcoming postures that we learn this year. In our next lesson, we are going to learn more about the benefits of deep breathing.

1.5 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

1.5 Home Practice

Breathing is one thing you do all day, every day, without any effort. This is why you can practice Ocean Breath anywhere, any time—in class, on the bus, at home, etc. Try finding your Ocean Breath wherever you are, and notice how you feel, in your body and in your mind, when you choose to zero in on the sound and sensation of your breath.

1.6 Vocabulary

Diaphragm
Oxygenate

Lesson 6
Breathing Benefits

1.6 Objectives

Students will be able to do the following:

- **Content**
  - Verbally list three benefits of nasal breathing: two physical and one emotional.
- **Posture**
  - Independently demonstrate Sports Stretch and Boat Pose.

1.6 Materials

- Hoberman sphere

1.6 Guiding Questions

- *What are some of the differences between nasal and mouth breathing?*
- *Why is nasal breathing important?*
- *Why do we use Ocean Breath when we practice wellness exercises?*

1.6 Connect

Last week we learned about breathing through the nose when doing our wellness practices. We learned that we breathe about 15 times per minute and that fuller, longer breathing oxygenates the blood more fully, as breathing deeply allows oxygen to reach a greater surface area of the lungs.

1.6 Teach

Today we are going to learn about some other benefits of deep breathing—specifically, deep breathing through the nose.

- *Nasal breathing filters dust and impurities from the air.*
- *Nasal breathing warms air to body temperature.*
- *The diaphragm, which is a sheet of muscle underneath the lungs that serves as the primary muscle of breathing, is more easily controlled.*
- *When the breath is long and slow, you can calm the nervous system and focus your mind.*
- *Extending the exhale induces relaxation, as does relaxing the tongue and surrounding facial muscles.*
- *When you breathe short, quick breaths, the nervous system gets overexcited and you can begin to panic, just like when you are upset, angry, or crying.*
- *Breathing through the nose stimulates the production of nitric oxide (NO), which kills bacteria and expands blood vessels.*
- *Conscious breathing gives you control over a part of your brain that is normally on automatic. You can begin to hack your own brain and nervous system by regulating your breathing.*
- *Slowing the breath can help relieve stress and control anger or other strong emotions. It can help us stop and think before we act.*

1.6 Active Engagement

1.6 Link

What can your breath and your posture tell you about your current emotional or mental state? How can you use your breath to boost your energy? During the day, notice how your breath changes depending on the circumstances. For our next class, come prepared with some examples of when during the day you found yourself breathing fast or slow or were able to use your breath to calm yourself down in a stressful situation.

Mid-Unit Assessment

- Split class into two groups, arranged in two lines facing one another with space between the lines. Students stand in Mountain.
- Teacher asks questions of the whole group. If the answer is yes students will step forward and mindfully move into a pose. (Teacher shares and models the pose before each question.)

Example:

1. *Step forward into Warrior 1 if the answer is yes.*
   —Do you like to dance? (Three slow breaths in pose before returning to Mountain.)
2. *Return to Mountain.*
3. *Step forward into Warrior 1 with your other foot if the answer is yes.*
   —Do you have any brothers or sisters? (Three slow breaths in pose before returning to Mountain.)
4. *Return to Mountain.*

1.6 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

1.6 Home Practice

Over the course of your day, practice noticing when you breathe quickly or slowly. If you find yourself worried or stressed, see if you can use steady breathing to release tension and ease your mind. Additionally, share the Ocean Breath technique with a friend or family member. Teach him/her how to breathe with intention.

Movement

Opening Sequence A
× 2
Opening Sequence B
× 2
Big Toe into
Hands Under Feet
Triangle
Warrior 2 into
Reverse Warrior 2 into
Side Angle
Twisted Low Lunge or
Rotated Side Angle
Intense Stretch
Dancer
Butterfly
Jump Back/Jump Through
Seated Tree
Boat into Floating Lotus
× 3
Garland into Crow
Bridge or Wheel
Knees into Chest
Supine Figure Four
Closing Sequence
Mindfulness Practice
Guided Rest

1.7 Vocabulary

Attention
Concentrate
Gaze

Lesson 7

The Mind Goes Where The Eyes Go

1.7 Objectives

Students will be able to do the following:

- **Content**
  - Explain how our attention follows the movement of our eyes and how to choose where and how we wish to focus our attention through our eyes.
- **Posture**
  - Independently demonstrate Seal and Bow.

1.7 Guiding Questions

- *Do you notice a difference in your state of mind when you work on focusing your eyes in a particular direction or on a particular object?*
- *What is the relationship between the gaze and attention?*
- *When do your eyes feel wide open and alert?*
- *When do your eyes feel heavy and tired?*
- *Can you name some activities that require you to concentrate carefully with your eyes?*

1.7 Connect

Last week we learned about some of the physical benefits of breathing through the nose, such as increased production of nitric oxide, the filtration of airborne debris, and how we can "hack" our brains through conscious breathing. Can anyone remember any of the other benefits of nasal breathing? Did anyone try nasal breathing outside of health and wellness class or teach the technique to a friend or family member?

1.7 Teach

This week we are going to start experimenting with how our attention follows the movement of our eyes. If we look out the window, our minds will wander out the window. When we want to focus on something, we have to look at the thing that we are focusing on. But sometimes we look at something and we don't really see it. We might read and reread the same sentence on a page and still not know what we are reading. Sometimes that happens because we are tired, but sometimes it happens because we are not linking our attention to the direction of our eyes. Today we are going to learn how to build balance, focus, and attention with the use of our eyes.

When a basketball player is shooting a free throw, where does he/she look? Or a baseball player at bat—where will his/her eyes be? When we focus on the thing that is in front of us, whether it's a ball or a person, we invest our attention in that one thing. And what happens when you make an investment? Your investment grows. When we invest attention, what do we get back? Energy, focus, confidence, knowledge, and clarity of intention.

When we are distracted, we feel off balance, scattered, overwhelmed, and stressed, and it's difficult to rest or focus. Usually this can be remedied by choosing one thing to pay attention to. If your room is a mess, and you feel that it's too much to deal with, start by picking up one shirt and putting it away. Before you know it, your room will be tidy. If there are many dishes in the sink, start by washing one glass. Before you know it, all the dishes will be done.

Today we are going to learn how to apply that same principle to our wellness exercises. We are going to add new balance poses to our familiar roster of poses. Before we do each pose, you are going to pick one spot to gaze at to help set your steadiness of mind. If you get wobbly in a pose, you are going to find one spot to look at again, on the floor or wall in front of you, to regain your balance.

Movement

Opening Sequence A x 2 (Opening Sequence A has nine movements and three gazing points: thumbs, navel, and nose)
Opening Sequence B x 2 (Opening Sequence B has seventeen movements and three gazing points: thumbs, navel, and nose)
Triangle
Warrior 2 into Side Angle
Wide Angle 1 and 3
Intense Stretch
Dancer and Partner Dancer
Forearm Plank
Seated Forward Bend
Table/Inclined Plane
Snail
Boat into Butterfly x 3
Low Lunge into Quad Stretch
Bow
Child
Shoulder stand (Legs up the Wall)
Plow
Knees to Ears
Fish
Closing Sequence
Mindfulness Practice
Guided Rest

1.7 Active Engagement

Before we do the postures today, we are going to try some eye exercises. Rub your palms together vigorously to create heat. Then place the heels of your hands over your eyes. Feel how this simple gesture relaxes the eyes and brain. Soften the outer corners of your eyes as you open them. Describe what this feels like.

1.7 Link

What can our eyes tell us about how we pay attention? As you move through the day, see if you can focus yourself, and your attention, not only on where *you look, but on how you look (at people, at your surroundings, at objects). How we look is as important as where we look. Sometimes we can look at something or somebody with a hardness, or with anger. But even in a challenging situation, we can still try to look at people with kindness and understanding.*

1.7 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

1.7 Home Practice

Find your soft, gentle gaze as often as you can, whether you are at school, at home, or walking down the street. Arrive to our next meeting prepared to discuss what it felt like to look around at your world from this relaxed vantage point.

1.8 Vocabulary

Alert
Disperse
Stable
Tripod

Lesson 8
The Tripod

1.8 Objectives

Students will be able to do the following:

- **Content**
  - Understand that the three components of body, breath, and gaze are used together to create balance.
  - Understand how to create stability at any time of day through the use of body, breath, and gaze.
- **Posture**
  - Identify and apply strategies to help maintain physical balance in at least one balance pose.

1.8 Guiding Questions

- *What are the three legs that constitute the tripod we use while practicing our wellness exercises?*
- *What does it feel like when you concentrate your body, breath, and gaze simultaneously?*
- *How can we apply the idea of the tripod to everyday life?*

1.8 Connect

Last week we learned about some of the physical benefits of breathing through the nose. Can anyone name a physical benefit of nasal breathing (e.g., air filtration, increased control over length of breath, increased lung capacity)*? Did anyone try doing this over the past week?*

1.8 Teach

As we arrive at the end of our first unit, let's take a moment to think about what we've learned so far: We've learned a variety of physical postures, several breathing techniques, and a special type of gazing. When used together, these three techniques create a heightened state of concentration.

Does anyone know what the most stable shape in nature is? It's a triangle. If you have a table that has four legs, and one leg is shorter than the others, the table will wobble. If your table has only three legs, it will always be stable, even if one of the legs is shorter.

We can look at the three parts of wellness practices like a triangle, or a tripod. The posture is one leg, the breath is the second, and the gaze is the third. If we pay too much attention to how we are doing the pose, we'll lose the breathing and the gazing points; the same is true in either of the other directions. We need to learn how, little by little, to pay attention to each part. When we can do that, we come into a mindful state of attention, and we can start to learn more about ourselves through that attention.

1.8 Active Engagement

As we do the wellness exercises today, I will remind you to pay attention to the three parts of practice: body, breath, and gaze. You want to feel as steady as a tripod while you move through each posture.

1.8 Link

The three main components of wellness exercises are the physical posture, the breath, and the gaze. Later today, notice how your energy gets dispersed through your eyes. Can you focus yourself through your gaze when you need to?

1.8 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

1.8 Home Practice

If you find yourself getting sleepy or distracted during class, see if you can wake yourself up and sharpen your focus by sitting up straighter and directing your eyes toward your teacher or the assignment written on the board. Practice looking in an alert yet relaxed way. If you need to energize yourself, stand up and take a few deep breaths. If you need to calm yourself down, sit quietly and extend your exhale for a few minutes.

Movement

Opening Sequence A x 2
Opening Sequence B x 2
Big Toe or Hands Under Feet Triangle
Side Angle into Rotated Side Angle
Intense Stretch
Figure Four and Partner Figure Four
Warrior 3
Rotated Chair into Big Toe
Side Plank
Snail
Buoy
Quad Stretch
Bridge or Wheel
Supine Figure Four
One-Legged Downdog or Right Angle Handstand or Handstand
Shoulder stand Sequence or Legs up the Wall
Closing Sequence
Mindfulness Practice
Guided Rest

The health and wellness instructor should formulate a unit review based on student comprehension of Essential Questions and Enduring Understandings and fulfillment of Objectives.

Unit 1
Review

Movement Lab and Assessment Activities:

Review and assess students' knowledge.

Possible activities:

- Independent Practice
- Partner Poses
- Student Sequencing
- Inventor's Club: Name It, Draw It, Teach It (Invent a new pose, then teach the steps that lead into and out of the pose.)
- Freeze Dance
- Games

Unit 1
Glossary

A

Agreements: shared opinions, feelings, and understanding

Alert: the state of being watchful for potential danger

Attention: the action of taking special care of someone or something

Audible: able to be heard

B

Balance: an even distribution of weight, enabling someone or something to remain upright and steady

Bookend: positioned at the end or on either side of something

C

Concentration: the action or power of focusing one's attention or mental effort

Conscious: aware of and responding to one's surroundings

D

Diaphragm: a dome-shaped, muscular partition separating the thorax from the abdomen

Disperse: to distribute or spread over a wide area

E

Efficient: to work in a well-organized and competent way

Endurance: the capacity to withstand a difficult process or situation without giving way

G

Gaze: look steadily and intently

H

Health: the state of being free from illness or injury in the body

I

Internal organ: a main organ that is situated inside the body (e.g., the brain, the lungs, the liver, and the heart)

Invest: to expend money or energy with the expectation of achieving a profit or benefit

N

Nasal: of, for, or relating to the nose

O

Oxygen: a colorless, odorless reactive gas, forming approximately 20 percent of the Earth's atmosphere; is the most abundant element in earth's crust

Oxygenate: to supply, treat, charge, or enrich with oxygen

P

Participation: the action of taking part in something

Proprioception: meaning "one's own"; the unconscious perception of movement and spatial orientation arising from stimuli within the body itself (proprioceptors in the joints and muscles, as well as the inner ear canals)

Purposeful: having or showing determination or resolve

R

Repetition: the action of repeating something that has already been said or done

S

Stable: not likely to change or fail; firmly established; not easily upset or disturbed

T

Tripod: a three-legged stand for supporting a camera or other apparatus

W

Wellness: the state or condition of being in good mental and emotional health

Unit 2
Power of Mindfulness

Unit Description and Outline

In Unit 2: *Power of Mindfulness*, we define what mindfulness means in relation to this curriculum, stating that mindfulness is "the ability to notice something that is happening as it is happening." A working understanding of the concept of "mind" is necessary to become mindful. We use the Old English root word "gemynd," which translates as "memory" or "thought," as our jumping-off point. Mindfulness and its practice form the foundation of the entire health and wellness curriculum. In fact, all of the other practices, such as posture, breath, gaze, self-examination, and team-building, become effective only when executed mindfully.

Our minds are full of thoughts, in the form of questions, plans, daydreams, worries, hopes, ideas, emotions, and memories. To notice these mental phenomena as they happen is called "mindfulness." We are usually not aware what we are thinking—or even that we are thinking—until after a thought has passed.

We initiate mindfulness practice by observing sensations and identifying messages within and from our bodies. Students tend to readily identify whether they feel hungry, tired, hot, or cold; awareness of this basic physiological feedback from the body is the foundation of mindfulness. It is typically easier to be mindful of a sensation than it is of a thought.

If one asks, "What are you thinking?" the answer might not be straightforward. But if one asks, "Are you hot or cold? Tired or alert?" the answer will likely be plain and direct. If one is able to articulate a plain and direct answer—"I am tired"—then the question becomes, "How would you describe that feeling?" Observing the perceived experience of tiredness facilitates mindfulness, or what some call "being in the present moment."

Once students have become comfortable identifying physical sensations, they can begin to pay attention to the subtle physical sensation of the breath, first by noticing changes in the body's shape and movement. The chest or abdomen will rise as they inhale, and fall as they exhale. Paying attention to this movement is another way of practicing mindfulness. It tunes us in to the physiological fact that though we breathe an average of 23,000 times per day, we are aware of very few of those breaths. In Lesson 3, students will learn that they can take an automatic function of the body, such as breathing, and use it as a tool for consciously creating a focused, calm state of mind.

In Lesson 4, students will be guided through a process of noticing both what thoughts are forming and how thoughts are forming. From an early age, we learn to think in a habitual, sometimes circular, manner. Repetition, whether mental, behavioral, or physical, lays the groundwork for building a habit. Since habits are routines that have been ingrained via repetition, we can modify, reformulate, add, and subtract habits through intentional repetition. This concept will be carried and recontextualized throughout Units 2, 3, 4, and 5.

Since habits are rooted in the mind, we must observe the mind in order to alter habits. For this purpose, we explore approaches that allow us to catch how, when, and why we tend to create stories around experiences. We use the term "add-on" to identify self-authored stories woven out of ideas, beliefs, memories, and assumptions we inadvertently apply to events in our lives. We also emphasize a technique called "Taking in the Good," which is used to rewire unnecessarily negative mental habits, as well as a technique called STOP, which is used to help meet challenges with a steady mind.

Our negativity bias leads us to sometimes look for or expect danger. Our negativity bias can take the form of conflict with a friend or family member, misplaced frustration or aggression, or chronic negative affect. This ancient survival mechanism is often triggered by high-stress environments and trauma.

Taking in the Good, a mindfulness exercise taught by Dr. Rick Hanson in his book *Hardwiring Happiness*, involves holding a positive thought or good memory in your mind for 20–30 seconds. It takes between 1 and 3 seconds for a negative memory to become stored in your long-term memory, but 20–30 seconds for a positive memory to move into your long-term memory.

This varies slightly from positive thinking methods in which you hope for a particular outcome. Rather, Taking in the Good entails focusing on the positive in what is actually

occurring or has already occurred. We absorb and appreciate the experience of a positive thought or memory in order to cultivate resilience and gratitude.

The second technique, STOP, is loved by many students and teachers. Elisha Goldstein describes this technique in the August 2013 issue of *Mindful Magazine*. STOP is an acronym for **S**top, **T**ake a few deep breaths, **O**bserve your sensations, and **P**roceed with awareness. STOP can be applied whenever a student finds him or herself in a challenging situation and needs an accessible alternative to habitual reactivity.

In the final lessons of Unit 2: Power of Mindfulness, we discuss mindful speech and action and mindfulness in a digital age. When emotions and add-ons get the better of us, we might feel the urge to speak or post harmful words. The consequences of these actions can negatively impact friends, family, ourselves, and—in an increasingly globalized world—people we do not personally know. Mindfulness aims, in part, to reduce harm. To this end, we conclude Unit 2 with the following statement:

One of the goals of mindfulness is to use our awareness for good. You might feel justified in saying mean things to another, especially if the other person has said something mean to you. But when we try to get "even," we are making a futile attempt to square a circle, and we perpetuate a cycle of unmindful speech and action. We are capable of standing up for ourselves and others without hurting another.

Essential Questions

How can we incorporate mindfulness into every area of daily life?

What does mindfulness teach us about the connection between our personal well-being and the well-being of our community?

Enduring Understandings

Mindfulness is the ability to be aware of what is happening as it is happening.

Mindfulness supports our health and wellness by allowing us insight into the intersections between our physical, mental, and emotional experiences.

Mindfulness supports our health and wellness by giving us tools to build caring, compassionate relationships.

Learning Objectives

Students will be able to do the following...

2.1 What Is Mindfulness?

Content

- Define mindfulness.
- Apply mindfulness to in-class posture and breath practices.

Posture

- Apply a working understanding of new standing postures, seated postures, challenge posture, and backbends.

2.2 Mindfulness of Body

Content

- Demonstrate mindfulness of body by locating and naming past or current physical feelings.

Posture

- Demonstrate mindfulness of body by sharing their physical experiences of practice in post–Active Engagement discussion.

2.3 Mindfulness of Breath

Content

- Understand the relationship between breath awareness and mindfulness practice.
- Understand the relationship between physical activity and breath patterns.

Posture

- Physically sense the movement of the breath in the chest and abdomen.
- Notice what postures or sequences tend to alter the rhythm of the breath.

2.4 Mindfulness of Mind, Part 1

Content

- Develop an understanding of mindfulness practice and its application to habitual thoughts.
- Understand the term “add-on.”
- Articulate examples of when they tend to add on to their experiences.

Posture

- Notice and articulate habitual thoughts that occur during Active Engagement.

2.5 Mindfulness of Mind, Part 2: Taking in the Good

Content

- Understand that the human brain has developed a “negativity bias” as a result of long-term conditioning.
- Understand that the Taking in the Good technique can be used to commit positive experiences to long-term memory.

Posture

- Apply an attitude of positivity to working toward achievement of challenge postures.
- Share one positive take-away from the day's movement practice.

2.6 Mindfulness of Body, Breath, and Mind: STOP

Content

- Learn the four steps of STOP.
- Articulate the difference between "responding" and "reacting" to a situation.

Posture

- Practice extending the exhalation.
- Apply STOP to physical movement.

2.7 Mindful Speech and Action

Content

- Articulate the difference between mindful and non-mindful speech and action.
- Explain why it might be useful or beneficial to choose words and deeds carefully.

Posture

- Think of and share (when appropriate) sincere words of encouragement toward classmates during Active Engagement.

2.8 Mindfulness Online

Content

- Understand that online statements or actions can have real-world impact.
- Understand that spending time on devices (e.g., phones, computers) has an effect on the brain, body, and behavior.

Posture

- Notice and articulate how it feels to utilize mindful movement and breath practice as a break from technology.
- Notice and share any technology-related thoughts that occur during Active Engagement.

Unit 2
Active Engagement

Each unit will follow the same format of sequencing, in the following order:

Mindfulness Practice
(at beginning and/or after Closing Sequence)
Warm-up
Opening Sequence A
Opening Sequence B
Standing
Seated
Strength
Backbends
Finishing
Closing
Rest

In each unit you will find poses that are expected to be covered in order to achieve movement objectives. In Unit 2, these postures are:

Rotated Triangle
One-Legged Balance
Half Moon
Side Forearm Plank
Sport Stretch
Twisted Snail
Side Crow
Pigeon
Flying Pigeon
Half Split or Split

Add in postures from previous units to fill out your sequence. You can gradually add in new postures from the above list or start with simpler versions of all postures to create a sequence. Students will work toward becoming proficient in these new postures by the end of the unit. Toward the end of Unit 2, your sequence might look something like the one below:

Warm-up (optional)
Opening A and B
Windmill
Triangle
Rotated Triangle
Warrior 2 into Side Angle
One-Legged Balance
Half Moon
Side Forearm Plank
Sport Stretch
Snail
Twisted Snail
Rolling Rock into Boat x 3
Side Crow
Pigeon
Flying Pigeon
Quad Stretch
Half Split or Split
Bow
Child
Closing Sequence
Mindfulness Practice: Taking in the Good
Rest

Extensions of Learned Postures

Spend the first two months establishing a clear class structure (routines and procedures) and building a foundational base of postures. Slowly begin to add variety into the movement phase of class.

Adding in extensions (variations on familiar poses) is a way to keep the sequences lively, creative, and exciting while still maintaining structure and routine and emphasizing repetition. Repetition is a critical component of mindful movement practice and supports coordination, strength, flexibility, and body awareness.

Extension postures can also be useful in increasing or maintaining enthusiasm and engagement from second- or third-year health and wellness students or in offering an all-level experience for classes that include beginners and more intermediate or advanced practitioners.

Instructors are encouraged to adhere to unit sequences as closely as possible but also to meet the students where they are. For instance, if students seem tired or lethargic, incorporate more standing postures and positions where the head is lifted, not lowered.

Below are examples of extensions of postures.

Opening Sequence A and B

- Count steps together
- One student leads
- One time independent
- Sleeping or Supine Opening A
- Opening Sequence B
  - Warrior 1 into Warrior 2 into Reverse Warrior 2

Tree

- Side Tree
- Tree into Warrior 3
- Last Tree Standing (Tree Challenge)
- Partner Tree in groups of 2, 3, and 4
- Partner Tree

Downdog

- Downdog Split
- Twisted Dog
- One-Legged Downdog, knee-to-nose plank, x 3 each side
- Donkey Kicks (inhale jump, exhale down)
- Baby Donkey Kicks (start in a little ball, little hops up)
- Horse Kick (one leg at a time)
- Three-legged Dog with Curl-in OR Curling Dog (knee-to-nose and/or knee-to-elbows)
- Downdog to Handstand
- Mountain Climbers or Prancing Dog or Dog on a Bicycle
- Frog (Downdog to Squat to Downdog, repeat)
- Downdog to Plank Twist
- Alternate Arm/Leg Lift
- Cat back from Downdog into Plank

Side Angle

- Half bind with arm around thigh
- Both arms up (difficult)
- Reverse Warrior to Side Angle
- Warrior 1, Warrior 2, Reverse Warrior, Side Angle (hold Side Angle)
- Hand inside or outside foot
- “The Thinker”

Warrior 1

- Hands together
- Hands apart
- Opposite hands on opposite elbows
- Upper body twist with arms in T
- Cactus arms
- Warrior 1 to High Lunge to Warrior 3
- Chair to High Lunge to Warrior 1
- Hands clasped behind back, forward bend, head inside front foot

Lunge

- Low or High Lunge, changing legs by jumping back and forth x 4
- Changing sides, feet to outside of hand

Boat

- Sinking or Half Boat
- Twisted Boat

Child

- Knees apart
- Bent elbows, hands on shoulders
- Extend arms, walk hands to right/left, side bend Child's Pose

Triangle

- Reverse Triangle/Triangle, x 3
- Bound Triangle
- Jumping Jacks in between
- Mountain to Star to Triangle and back

Plank

- One-legged Plank
- Hand-to-shoulder plank
- Inclined Plane
- Plank Push-up (Inhale plank, exhale bend elbows)
- Knees to opposite arms, Mountain Climber
- Supine Plank

Side Plank

- Side Plank 1 and 2
- Side Tree Plank
- Side Tree Plank, one leg lifted
- Seated Tree into Side Plank
- Side Plank (rainbow/tree)

Jump Back/Jump Through

- Rolling into Floating Lotus
- Blocks to lift up

Pointing Dog

- Pointing Dog, knee to nose x 3
- Pointing Dog, right elbow to left knee, both sides x 3
- Half Pointing Dog/Half Bow

Warrior 3 Extensions

- High Lunge with Cow-Face Arms into Warrior 3
- Intense Stretch
- Hands interlaced behind back
- Hands pressed together behind back

Bridge and Wheel

- One-legged Bridge/Wheel

2.1 Vocabulary

Mind
Mindfulness
Mindfulness muscle

Lesson 1
What is Mindfulness?

2.1 Objective

Students will be able to do the following:

- **Content**
  - — Define mindfulness.
  - — Apply mindfulness to in-class posture and breath practices.
- **Posture**
  - — Apply a working understanding of new standing postures, seated postures, challenge posture, and backbends.

2.1 Guiding Questions

- *What is mindfulness?*
- *What is the "mindfulness muscle" and how does it work?*
- *When does your mind tend to race or overflow with thoughts?*
- *When might it be useful or beneficial to exercise the mindfulness muscle?*

2.1 Connect

In our first unit, Power To Shine, we learned how to strengthen and balance our bodies through coordinated breath and movement. We also learned how to focus our attention through deliberate gazing. Together, these tools form the Tripod.

In this unit, Power of Mindfulness*, we will learn how to strengthen and balance our minds through a wellness technique known as "mindfulness."*

2.1 Teach

The word "mind" developed from the Old English word "gemynd," translates to "memory" or "thought." Our minds are full of thoughts, in the form of questions, plans, daydreams, worries, hopes, and ideas. Research shows that the average person has 50,000 to 70,000 thoughts per day. Often we are too busy or distracted to actually notice most of these thoughts, but thoughts are the basis of most of what we say and do.

Mindfulness can be defined as "the ability to notice what is happening as it is happening." This sounds simple, but we know from experience that it is not necessarily easy to notice what is happening as it is happening, even if we are just trying to notice what is happening in our own minds.

Mindfulness practice is one way to improve our ability to become more aware of what we are thinking. Through physical practice, we have learned how to exercise different muscles in the body, and now we will begin training our mindfulness muscles.[1]

The mindfulness muscle resides in the mind, and it is just as useful as any actual muscle, since the mind is involved in nearly every aspect of daily life. We work the mindfulness muscle every time we notice what we are thinking. We work the mindfulness muscle every time we realize we have become distracted and make a conscious choice to bring our attention back to a particular point of focus.

1: Sharon Salzberg, *Real Happiness*, 2010.

2.1 Active Engagement

As we move and breathe, I'll keep reminding you to 1) Notice when your mind has wandered away from a point of concentration (the posture, the breath, and/or the gaze); and then to 2) Bring your mind back to that point of concentration. It is not bad or wrong for your mind to wander. Mindfulness is not about determining whether what you are thinking is right or wrong. In this practice, we are simply noticing that the mind has wandered or that the mind is filled with thoughts, and then gently guiding it back to where we want or need it to be.

2.1 Link

Today we became acquainted with the basic definition of mindfulness, which is the ability to become aware of what is happening as it is happening. In our next lesson, we will continue to develop mindfulness by paying close attention to the body.

2.1 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

2.1 Home Practice

Until we meet again, set a goal of noticing ten thoughts a day (a mere 0.0002 percent of 50,000 and .000143 percent of 70,000!). Simply notice what you are thinking. If you are trying to focus on a conversation, a task, or a project, notice when your attention wanders from that conversation, task, or project. Then flex your mindfulness muscle and bring your attention back.

2.2 Vocabulary

Sensation

Lesson 2
Mindfulness of Body

2.2 Objectives

Students will be able to do the following:

- **Content**
  - Demonstrate mindfulness of body by locating and naming past or current physical feelings.
- **Posture**
  - Demonstrate mindfulness of body by sharing their physical experiences of practice in post-Active Engagement discussion.

2.2 Guiding Questions

- *When do you notice your body's messages?*
- *How do you usually respond to your body's messages?*
- *How can mindfulness of the body support personal wellness?*

2.2 Connect

In our last lesson, we became acquainted with the basic definition of mindfulness, which is the ability to become aware of what is happening as it is happening. In this lesson, we will continue to flex our mindfulness muscles by paying close attention to the body.

2.2 Teach

In our first unit, we studied the Tripod—posture, breath, and gaze. Remembering the Tripod will be particularly useful as we develop mindfulness of body.

Our bodies send us messages throughout the day. Can you name one message your body has sent you so far today (e.g., hunger, fullness, tiredness, alertness, warmth, cold)*? Name one thing you are feeling in your body right now.*

When we become mindful of the body, we notice the state of the body as it is right now. There is no right or wrong way to be mindful of the body, and there is no right or wrong way to feel in the body. Our objective is simply to grow our awareness of what we are experiencing as we are experiencing it.

The body is our most concrete tool in mindfulness practice. Our breath and our thoughts are slightly more ephemeral. But the muscles, bones, organs, and nervous system are all part of an intelligent, complex feedback loop that is inextricable from our intellectual and emotional lives. Gradually, over time, as we observe the state of the body, we begin to more clearly observe thoughts and feelings as well.

2.2 Active Engagement

As we move through the physical postures, listen carefully to my cues. I'll ask you to notice sensory or motor activity occurring in different parts of the body. Bringing yourself back to the essential components of the Tripod—posture, breath, gaze—is excellent strength- and resilience-training for the mindfulness muscle.

2.2 Link

Just as we began our study of the Tripod with a focus on physical postures and then progressed to conscious breathing, we will spend our next lesson on the body and breath awareness.

2.2 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

2.2 Home Practice

Throughout your day, try bringing more of your attention to how and what your body is feeling. Choose specific times of the day to check in—once in the morning, once in the afternoon, and once in the evening, ideally. Note whether your physical sensations change from check-in to check-in. Note whether your physical sensations do or do not seem influenced by or connected to external inputs (e.g., weather, food, sounds, smells, activity, social interactions).

2.3 Vocabulary

Cardiovascular
Digestive
Involuntary
Musculoskeletal
Nervous system

Lesson 3
Mindfulness of Breath

2.3 Objectives

Students will be able to do the following:

- **Content**
  - Understand the relationship between breath awareness and mindfulness practice.
  - Understand the relationship between physical activity and breath patterns.
- **Posture**
  - Physically sense the movement of the breath in the chest and abdomen.
  - Notice what postures or sequences tend to alter the rhythm of the breath.

2.3 Materials

- Images (for projection or distribution) of physiological systems supported by and involved with breathing (listed in the Teach section)

2.3 Guiding Questions

- *When do you tend to notice your breath?*
- *How does mindful breathing factor into a well-rounded health and wellness practice?*

2.3 Connect

Just as we began our study of the Tripod with a focus on physical postures and then progressed to conscious breathing, we will spend this lesson on the body and breath awareness.

2.3 Teach

Before we begin, close your eyes or look down at the floor. Bring one hand to your chest and one hand to your lower belly. Breathe in and feel the movements of the chest and belly. Breathe out and feel the movements of the chest and belly. As you inhale, the chest and belly move outward. As you exhale, the chest and belly move inward.

The average person takes approximately 23,000 breaths per day.[1] How many of your 23,000 daily breaths do you notice? Breathing is an involuntary function, which means the body will breathe whether or not the brain is deliberately directing it to do so. This is fortunate—if breath was not automatic, we wouldn't have any time to think about doing, saying, or feeling anything else. It also means that it takes a degree of effort and practice to experience our breath in a conscious way. When do you tend to notice your breath?

The breath is directly connected to the nervous system (brain, spinal cord, and peripheral nerves), as well as the cardiovascular, digestive, and musculoskeletal systems. Every cycle of inhalation and exhalation supports circulation of blood and hormones, proper breakdown of food and waste, and the structural health of muscles and bones. There is no separation between the quality of the breath and the health of the physical body. (Project or distribute images of physiological systems mentioned herein.)

1: Walker Meade, "Every Breath You Take," *The Herald Tribune*, 2010. http://www.heraldtribune.com/article/20100112/ARTICLE/1121008.

In health and wellness class, we learn how to breathe in specific ways in order to achieve a particular effect. For example, Ocean Breath boosts circulation and warms the muscles, which helps us move through any number of physical postures with increased ease. We have also learned how to breathe in and out evenly, how to extend our exhalation, and how to catch the split-second gap between inhale and exhale, exhale and inhale. These are all techniques for building a relationship with breath that is always with us and yet rarely on our minds.

Mindfulness of breath helps us pause and observe the state of the body and the state of the mind. The sound, feeling, and movement of your breath can offer insight into how you are reacting or responding to thoughts, feelings, and external stimuli. Your mindfulness muscle grows each and every time you simply recognize that you are inhaling and exhaling. Over time and with repetition, noticing and interpreting the breath will become easier and, possibly, more interesting.[1]

2.3 Active Engagement

Health and wellness practice is centered around breath awareness. As we move, I will continually remind you to initiate each physical action with either an inhalation or an exhalation. I will also encourage you to use your breath as a barometer for how much effort you are expending. What postures or sequences cause your breath to alter its rhythm? Furthermore, I will ask you to keep returning to your breath, especially when your mind begins to wander beyond the immediacy of the pose.

1: Feldman, Greeson, Senville, "Differential effects of mindful breathing, progressive muscle relaxation, and loving kindness meditation on de-centering and negative reactions to repetitive thoughts." http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2932656/

2.3 Link

We have learned to notice feelings in the body and the quality of the breath. In our next lesson, we will begin an extended investigation into what is in our minds. We will discover that the body, the breath, and the mind are in constant conversation, and that mindfulness is the stethoscope that allows us to listen in.

2.3 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

2.3 Home Practice

Throughout your day, try bringing more of your attention to how and what your breath is doing. Out of your 23,000 breaths, how many can you become aware of? Choose specific times of the day to check in—once in the morning, once in the afternoon, and once in the evening. Note whether your breath patterns change from check-in to check-in. Note whether your breath does or does not seem influenced by or connected to external inputs (e.g., weather, food, sounds, smells, activity, social interactions).

2.4 Vocabulary

Add-on
Emotion
Habit

Lesson 4

Mindfulness of Mind

PART I

2.4 Objectives

Students will be able to do the following:

- **Content**
  - — Develop an understanding of mindfulness practice and its application to habitual thoughts.
  - — Understand the term "add-on."
  - — Articulate examples of when they tend to add-on to their experience.
- **Posture**
  - — Notice and articulate habitual thoughts that occur during Active Engagement.

2.4 Guiding Questions

- *How are mental habits helpful? Harmful?*
- *When and where do you tend to add-on to your experience?*

2.4 Connect

We have learned to notice thoughts in the mind, feelings in the body, and the quality of the breath. Now we are going to advance from noticing what we are thinking to noticing how we are thinking.

2.4 Teach

Can you define the word "habit" (e.g., something you do regularly and, usually, without much conscious thought)*. Can you name one habit you've noticed in your own life?*

Practical habits, whether they are useful or not, are not the only habits we develop over the course of our lives. We also develop habitual ways of thinking. This means that, for example, we might develop a habit of thinking negatively about ourselves whenever we receive critical feedback from someone like a teacher, a friend, or a family member. Can anyone give an example of a negative thought you've had about yourself after receiving a lower grade than you expected or after a teacher asked you to revise a paper?

There's a nifty term for this kind of cyclical or repetitive thought: add-on.[1] *Our minds are brilliant storytellers, sometimes to a fault. Often we have an experience, and our minds immediately begin to weave narratives based on that experience. For example, your friend lets you know that s/he is offended that you didn't invite her/him to the movies this weekend. You find yourself imagining the decline and fall of your friendship. Perhaps you even start behaving as though this outcome is inevitable, and you miss the opportunity to instead acknowledge your friend's feelings and have a conversation about the situation. When and where do you tend to add-on to your experience?*

Conversely, we can also develop a habit of flipping critical feedback into useful information for growth and learning (which we will explore more in our next lesson). In both scenarios, the situation remains basically the same. The outcome is often affected, however, by our state, or habits, of mind.

1: Sharon Salzberg, *Real Happiness*, 2010.

2.4 Active Engagement

Optional Large or Small Group Activity: Draw a two-column T-graph. Label the left column "What is Happening" and the right column "Add-on." Ask students to contribute simple, relevant scenarios for the "What is Happening" column ("Had a fight with best friend," "Scored low on exam"). Then ask students to generate a list of add-ons, drawn from actual experience, under the "Add-on" heading.

Movement and Breath

As we move through today's sequence, please pay particular attention to any habitual thoughts that pop up. Maybe there is a posture that you have had difficulty with in the past and you find yourself assuming that today will be no different. If and when you arrive at a thought of this nature, see if you can breathe past it. Take a moment to notice if your experience of the posture changes.

2.4 Link

We have learned to notice thoughts in the mind, feelings in the body, and the quality of the breath. In our next lesson, we are going to continue noticing nuances in how we think. We will also learn a technique for establishing positive mental patterns.

2.4 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

2.4 Home Practice

Until we meet again, continue to work on your ability to detect instances of adding on. Consider whether there are particular areas of your life that provoke more adding-on than others (e.g., relationships, school assignments, self-image)*. Sometimes simply noticing your fluctuations in mood can be enough to settle your mind.*

2.5 Vocabulary

Bias
Hypothesis
Negativity
Negativity bias

Lesson 5

Mindfulness of Mind

PART II: TAKING IN THE GOOD

2.5 Overarching Learning Objective

Students will be able to do the following:

- **Content**
  - — Understand that the human brain has developed a negativity bias as a result of long-term conditioning.
  - — Understand that the Taking in the Good technique can be used to commit positive experiences to long-term memory.[1]
- **Posture**
  - — Apply an attitude of positivity to working toward the achievement of challenge postures.
  - — Share one positive take-away from the day's movement practice.

2.5 Materials (Optional: see Active Engagement)

- Markers or pens
- 5 x 7 ruled or graph paper
- Large sheet of ruled or graph paper
- Journal

1: Sharon Salzberg, *Real Happiness*, 2010.

2.5 Guiding Questions

- *What is Taking in the Good?*
- *What is a bias?*
- *What is a negativity bias?*
- *When and why might a negativity bias be helpful? Unhelpful?*

2.5 Connect

In our last lesson, we began a discussion around mindfulness of mind, which entails noticing not only what we are thinking but how we are thinking. The nature and quality of our thoughts can have an impact on what we say, what we do, who we think we are, how we relate to others, and how we see the world. In other words, the way we think can become the way we live.

2.5 Teach

Today we are going to learn a technique called Taking in the Good. This is a technique for building positive thought patterns.

A bias is an inherent or learned prejudice against a thing, person, or group when compared with another. We all have biases; some are useful and some are harmful. Nearly all humans share a negativity bias, which is our tendency to hold on to or collect negative information in the form of memories or impressions.

Neuroscientist Rick Hanson said, "The brain is like Velcro for negative experiences and like Teflon for positive ones." This means that unpleasant experiences stick to the brain's long-term memory, while pleasant experiences are less likely to stay put. It takes 2–3 seconds for your brain to remember something unpleasant, and about 20–30 seconds for your brain to remember something pleasant.

Our negativity bias can be attributed to our brains' brilliant instinct for safety and survival. Knowing how and when to identify danger or a threat is highly important, but sometimes our negativity bias can become overactive. In the modern world, our negativity bias can take the shape of excessive worry, anxiety, frustration, aggression, or judgment.

2.5 Active Engagement

In this class, we get to play with different mindfulness techniques and see which ones work for us as individuals. In today's session, we will work on bringing our attention to a positive thought or memory for an extended period of time. This supports the brain's ability to transfer a positive thought or impression into long-term memory. Research shows that mindful concentration on a positive thought or memory can have a favorable impact on our mental, emotional, and physical health and wellness.[1]

Now let's put this idea into practice. (This activity can be practiced seated or lying down, at the beginning and/or end of physical practice.) *Think of one thing from the day that you feel good about, and be specific—for example, you listened, you were more creative, you lent a helping hand, or someone smiled at you, etc. Hold on to that memory for 30 seconds, and allow the feeling associated with the memory to sink in your mind. Act as a sponge, absorbing the memory and the feeling together.*

Optional Group or Pair-Share Activity: After practicing Taking in the Good, have students describe in detail (with either whole group, small group, or partner) the positive memories they chose to work with. If materials are on hand and time allows, students can document or visualize their respective memories on individual pieces of paper, on a large sheet of paper (to be posted in the classroom), or in a journal (if available).

1: Rick Hanson and Rick Mendius, "Positive Emotions and Taking in the Good," 2007. http://www.wisebrain.org/PositiveEmotions.pdf

2.5 Link

Taking in the Good takes practice. In our next lesson, we will learn another mindfulness technique that can be used in tandem with Taking in the Good or on its own. It is a brief, easy-to-remember technique called STOP, and it prompts us to pause before we react to what is happening within and around us.

2.5 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

2.5 Home Practice

Until we meet again, try flexing your mindfulness muscle by noticing when your mind veers off on a negative track. Instead of forcing the negative thought out of your mind, invite a positive thought in. Then invest all of your attention in that positive thought for at least 30 seconds. Notice how you feel in your body and in your mind after actively Taking in the Good.

2.6 Vocabulary

Acronym
React
Respond

Lesson 6

Mindfulness of Body, Breath, and Mind

STOP

2.6 Objective

Students will be able to do the following:

- **Content**
  - — Learn the four steps of STOP.
  - — Articulate the difference between "responding" and "reacting" to a situation.
- **Posture**
  - — Practice extending the exhalation.
  - — Apply STOP to physical movement.

2.6 Guiding Questions

- *What is the difference between a reaction and a response?*
- *How do you know, in your body, when you are experiencing a strong reaction to an experience or situation?*

2.6 Connect

In our last lesson, we focused on how to positively rewire our negativity bias with Rick Hanson's Taking in the Good exercise. This week, we'll focus on how to catch and repattern reactive tendencies.

2.6 Teach

STOP is the gap between a reaction and a response. It takes the split second before we say or do something and expands it so that we give ourselves time to make a mindful choice. The letters that make up STOP stand for: Stop. Take a few breaths. Observe the sensations in your body. Proceed with awareness.[1]

When we feel provoked or triggered by a person or situation, our common default is to react.

A reaction can be thought of as an unconsidered or abrupt behavior or action. Often a reaction springs forth from a sudden strong emotion, or an accumulation of strong, unexpressed emotions. In mindfulness practice, we are learning how to identify and work with strong emotions before they become reactions. When we feel intense emotions, we might experience physical clues: shaking, heat in the face, tight muscles, rapid heartbeats, stomachaches, the urge to hit or kick or stomp.

STOP offers us a chance to respond rather than react. When we respond to a situation, it means we are aware of our bodies, our breath, and our minds, and we are better equipped to behave or act in a way that will not cause further confusion, difficulty, or harm.

1: Elisha Goldstein, "Stressing Out? S.T.O.P." *Mindful*, 2013. http://www.mindful.org/stressing-out-stop/

2.6 Active Engagement

Throughout movement practice, I will keep reminding you to bring your attention to how your mind and body react or respond to challenging moments. Whether you find difficulty in a posture that requires strength, balance, or flexibility, see if you can use STOP before giving up or resigning yourself to the idea that you "can't do it." You can also use STOP during rest, if you feel restless or fidgety, or if your mind begins to wander.

2.6 Link

Now that we have added STOP to our tool kit, we'll be expanding our discussion of reaction versus response with next week's conversation on mindful speech and action. We'll play with different scenarios and generate ideas about how our speech and actions can have various potential ripple effects, depending on our tone, words, and motivation.

2.6 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

2.6 Home Practice

This week, keep track of how many opportunities you have to use STOP. These opportunities needn't be big or significant. Maybe STOP comes in handy when you hit a mental wall while working on homework or taking a test, during a tense conversation with a friend or family member, or in the midst of a competitive game when your energy and attention have started to wane. Collect these examples, and be prepared to report back to the class next time we meet.

2.7 Vocabulary

Express
Futile
Motivation

Lesson 7
Mindful Speech and Action

2.7 Overarching Learning Objective

Students will be able to do the following:

- **Content**
  - — Articulate the difference between mindful and non-mindful speech and action.
  - — Explain why it might be useful or beneficial to choose words and deeds carefully.
- **Posture**
  - — Think of and share (when appropriate) sincere words of encouragement toward classmates during Active Engagement.

2.7 Materials (Optional: See Active Engagement)

- Markers or pens
- 5 x 7 ruled or graph paper
- Large sheet of ruled or graph paper

2.7 Guiding Questions

- *How does it feel to say or do something kind? To say or do something unkind?*
- *How does it feel when someone says or does something kind? Says or does something unkind?*

2.7 Connect

Throughout this unit, we have studied many applications of mindfulness. We learned how to become mindful of the body, the breath, emotions, and thoughts. Now we'll further explore how taking a mindful approach to communication can support personal health and wellness, as well as the health and wellness of our relationships. We'll play with different scenarios and generate ideas about how our speech and actions can have various potential ripple effects, depending on our tone, words, and intention.

2.7 Teach

Emotions and thoughts underlie how we speak and act in the world. These two aspects of our inner experience have outward expressions. Have you ever taken an idea and turned it into something tangible (e.g., writing, art, design, game, etc.)? In order to transform a thought or feeling into something others can see, hear, or feel, we use words, images, or actions.

Now, since we are speaking and acting almost constantly, it is easy to speak and act mindlessly. And if it is easy to speak and act mindlessly or reactively, then it is possible to speak and act mindfully or responsively. (Review the difference between "reactive" and "responsive.")

When we practice mindful speech and action, we start to pay attention to the emotions and thoughts that motivate what we say and do. We also start to notice how powerful words can be—what we say and do affects not only how we feel, but how others feel.

Have you ever said something kind and supportive to someone? How did that make you feel? How did it make the recipient feel? Have you ever said something hurtful or critical to someone? How did that make you feel? How did it make the recipient feel?

One of the goals of mindfulness is to use our awareness for good. You might feel justified in saying mean things to another, especially if the other person has said something mean to you. But when we try to get "even," we are making a futile attempt to square a circle, and we perpetuate a cycle of unmindful speech and action. We are capable of mindfully standing up for ourselves and others without hurting someone.

2.7 Active Engagement

Optional Large or Small Group Activity: Brainstorm a few common, relevant social scenarios that involve conflict or disagreement. For each scenario, draw a T-chart. Label the left-hand column "Mindful" and the right-hand column "Unmindful." Then brainstorm different mindful and unmindful words or actions for each scenario. Discuss the possible outcomes of each permutation of scenario and reaction/response.

Movement and Breath

Each of our health and wellness practices is personal, but as individuals we require and thrive on the support and compassion of others. As we move through today's sequence, I'd like each and every one of you to think of sincere words of encouragement you could offer yourself and your peers. What words would you benefit from hearing when you are lacking confidence about a challenging posture? Offer those words to yourself and your neighbors.

2.7 Link

Nowadays we live in two worlds: our physical world that we can smell, touch, and taste, and the digital world that allows us to see, hear, speak, and act beyond our immediate location. Next time, we'll discuss how the principles of mindful speech and action apply to our lives online.

2.7 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

2.7 Home Practice

Until we meet again, pay close attention to your interactions with friends, acquaintances, teachers, and family members. Do your words and actions reflect a mindless (reactive) or mindful (responsive) attitude?

2.8 Vocabulary

Antithetical
Gratification

Lesson 8
Mindfulness Online

2.8 Objectives

Students will be able to do the following:

- **Content**
  - Understand that online statements or actions can have real-world impact.
  - Understand that spending time on devices (e.g., phones, computers) has an effect on the brain, body, and behavior.
- **Posture**
  - Notice and articulate how it feels to utilize mindful movement and breath practice as a break from technology.
  - Notice and share any technology-related thoughts that occur during Active Engagement.

2.8 Guiding Questions

- *How does our use of technology impact our ability to communicate mindfully?*
- *Why is it important to apply mindfulness while online?*

2.8 Connect

Do you spend at least one hour per day on the Internet or social media? Two hours? Three hours? (Give students an opportunity to share estimates of how much of their day is spent online.)

More and more of our time is spent online. Computers, phones, and the Internet are now useful or required tools for school, work, socializing, and commerce. We've become accustomed to investing significant amounts of time, energy, and brainpower in processing all the information we receive from the digital world.

However, as the Internet becomes increasingly ubiquitous (as of 2016, more people living in India have access to cell phones than to toilets),[1] our brains have become more and more dependent on it. Studies show that chronic long-term Internet use can have an impact on our executive functions (e.g., ability to plan, prioritize, organize, and control impulses), and can impair our ability to feel compassion or empathy for others, which is antithetical to our practice of mindful speech and action.[2]

2.8 Teach

The Internet might seem like a neutral space where anyone can say or post anything without consequence, but most of us know from personal experience that this is not true. The Internet provides an experience of "instant gratification"—we can share images, thoughts, and feelings or buy products with a single tap or click. The emotional center of the brain, which we will learn about in depth in our next unit, responds excitedly to instant gratification.[1] When we are driven by the emotional

1: "Greater Acess to Cell Phones than Toilets in India, UN," United Nations University. http://unu.edu/media-relations/releases/greater-access-to-cell-phones-than-toilets-in-india.html.
2: Victoria Dunckley, "Gray Matters: Too Much Screen Time Damages the Brain," Psychology Today. https://www.psychologytoday.com/blog/mental-wealth/201402/gray-matters-too-much-screen-time-damages-the-brain.

brain, we are more likely to act impulsively. Impulsive speech or behavior tends to be less mindful and more reactive than speech or behavior that we have carefully considered.

If research shows that spending multiple hours a day on the Internet (browsing, chatting, or gaming) impedes our ability to listen to, understand, and empathize with others, and yet many of our interactions with other people occur online, how likely is it that we will browse, chat, or game mindfully? Will we be more or less likely to proceed with awareness when we feel provoked to say or do something that will negatively impact ourselves or someone else?

2.8 Active Engagement

Health and wellness practice is an opportunity to take a break not only from the average stresses of everyday life, but from the many stimulations and distractions of our digital age. As we move through today's sequence, notice how it feels for your brain and your body to be offline. Do you notice any urge or desire to pick up your phone? To check text messages, email, or social media? What does it feel like to resist these urges?

1: Steve Bradt, "Brain Takes Itself On Over Immediate vs. Delayed Gratification," *Harvard Gazette*. http://news.harvard.edu/gazette/2004/10.21/07-brainbattle.html.

2.8 Link

In our next unit, we'll be investigating how the ongoing conversation between the brain and the body informs our experience of our inner world and our external environment. In the meantime, keep observing how you are (or are not) practicing mindfulness online.

2.8 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

2.8 Home Practice

Until next time, bring STOP to your online activities. See if you can begin responding to rather than reacting to the information and images that appear on your screen. Excessive use of devices can cause us to forget our bodies and its signals. Remember to breathe and observe sensations as you browse, text, and post. You just might tap into quiet cues that spell out a connection between what you are reading or seeing and how you are thinking or feeling.

The health and wellness instructor should formulate a unit review based on student comprehension of Essential Questions and Enduring Understandings and fulfillment of Objectives.

Unit 2
Review

Movement Lab and Assessment Activities:

Review and assess students' knowledge.

Possible activities:

- Independent Practice
- Partner Poses
- Student Sequencing
- Inventor's Club: Name It, Draw It, Teach It (Invent a new pose, then teach the steps that lead into and out of the pose.)
- Freeze Dance
- Games

Unit 2
Glossary

A

Acronym: an abbreviation formed from the initial components or first letters in a phrase or a word

Add-on: an idea, story, or assumption transposed onto a situation or experience

Antithetical: directly opposed or contrasted; mutually incompatible

B

Bias: prejudice in favor of or against one thing, person, or group compared with another, usually in a way considered to be unfair

C

Cardiovascular: of or relating to the heart and blood vessels

D

Digestive: of or relating to the process of digesting food

E

Emotion: a natural, instinctive state of mind deriving from one's circumstances, mood, or relationships with others

Express: convey a thought or feeling in words or by gestures and conduct

F

Futile: incapable of producing any useful result; pointless

G

Gratification: pleasure, especially when gained from the satisfaction of a desire

H

Habit: a settled or regular tendency or practice

Hypothesis: a supposition or proposed explanation made on the basis of limited evidence as a starting point for further investigation

I

Involuntary: done without will or conscious control

M

Mind: the element of a person that enables them to be aware of the world and their experiences, to think, and to feel; the faculty of consciousness and thought

Mindfulness: the quality or state of being conscious of or aware of something

Mindfulness muscle: an individual's capacity to direct and redirect attention and awareness

Motivation: the reason or reasons one has for acting or behaving in a particular way

Musculoskeletal: relating to or denoting the musculature and skeleton together

N

Negativity: the expression of criticism of or pessimism about something

Negativity bias: the phenomenon by which humans give more psychological weight to bad experiences than good ones[1]

Nervous system: the network of nerve cells and fibers that transmits nerve impulses between parts of the body

R

React: respond with hostility, opposition, or a contrary course of action

Respond: to mindfully engage with a situation or experience

S

Sensation: a physical feeling or perception resulting from something that happens to or comes into contact with the body

1: What is the Negativity Bias?", GoStrengths!: Social & Emotional Learning Revolutionized. http://www.gostrengths.com/what-is-the-negativity-bias/

Unit 3

Power of the Brain-Body Connection

Unit Description and Outline

In Unit 3: **Power of the Brain-Body Connection**, we introduce the structure of the brain, along with simple neuroscience that will help students begin to understand the functions of our brains in relation to our bodies and behavior. In the first two lessons, students will learn how different structures of the brain relate to physiological systems of the body (such as respiratory and cardiovascular) and to the emotional needs of all humans (such as the need to feel safe, to feel content, and to feel connected to something or someone outside of ourselves).

A foundational understanding of various brain functions leads to lessons on the neural network, specifically how messages are passed between the body and the brain. The two branches of the Autonomic Nervous System, as well as the vagus nerve and its extension to the gut and the heart (which has its own neural network) are introduced. Theories of memory and emotion are touched upon, most specifically via the lens of conscious breathing. Through mindful wellness interventions, we learn how some of our unconscious, autonomic nervous system functions can be controlled to some degree—we have the ability to slow our heart rate and our breathing, lower our blood pressure, and improve our digestion.

Through conscious breathing, we learn how to adjust our relationship to one of the major elements of modern life: stress. Stress, defined by Dr. Hans Selye as "the body's response to external stimulus," is framed as neutral in nature. Some stress is good, like the stress that increases bone density or creates excitement during a ball game. Other stress is harmful, like that which accrues due to excess work, responsibilities, and environmental demands. Excess stress takes a toll on our bodies; maladies such as high blood pressure, diabetes, and depression have been linked to unsustainable levels of stress.

Unit 3 concludes with a lesson on turning stress into a positive force through understanding how the sympathetic, parasympathetic, voluntary, and involuntary nervous systems function. The sympathetic nervous system is considered our accelerator, and the parasympathetic is considered our brake pedal. When we become overwhelmed by stress, our brake pedal (parasympathetic) becomes impaired, and the engine keeps revving (sympathetic). Identifying *how* this exchange occurs in the body is a preventative tool when paired with health and wellness techniques that help us slow down and regain control over our vehicle.

Essential Questions

What is the connection between the brain and the body?

How can an understanding of the nervous system help us to manage our physical health and emotions?

What is the impact of mindfulness on the nervous system?

What is the relationship between mindfulness and stress?

Enduring Understandings

The brain and nervous system are integral to every function of the body and mind.

Learning Objectives

Students will be able to do the following...

3.1 Power of the Brain-Body Connection

Content

- Understand that the activities of the four parts of the brain are expressed in every bodily function, as well as in our abilities to think and reason.
- Understand that the brain is made up of four anatomical parts.
- Identify the four parts of the brain (bolded in **"Teach"**).

Posture

- Demonstrate a working understanding of basic Unit 3 sequence.

3.2 Finding Safety, Contentment, and Connection

Content

- Identify our three basic human needs.
- Understand how safety, contentment, and connection are correlated with brain function.

Posture

- Independently demonstrate one new strength pose.

3.3 Three Functions of the Nervous System

Content

- Describe the functions of a neuron.

Posture

- Demonstrate the ability to modify challenging postures when appropriate.

3.4 Emotions and the Vagus Nerve

Content

- Identify the vagus nerve as the nerve that is associated with emotions.

Posture

- Independently demonstrate one backbend posture from the Unit 3 sequence.

3.5 Breathing and the Nervous System

Content

- Identify how breath is interconnected with the nervous system.

Posture

- Identify one Unit 3 pose that is calming and one Unit 3 pose that is energizing.

3.6 Sympathetic and Parasympathetic Nervous Systems

Content

- Characterize and contrast the main functions of the sympathetic and the parasympathetic nervous system.

Posture

- Independently demonstrate one pose that stimulates sympathetic activity and one pose that reinforces parasympathetic activity.

3.7 What Is Stress?

Content

- Identify potential sources of physical, emotional, and social stress.

Posture

- Independently demonstrate one strength posture.

3.8 Wired for Stress

Content

- Understand how the brain and body respond to stress.

Posture

- Demonstrate a cross-lateral movement.

3.9 Turning Stress into a Positive Force

Content

- Understand and articulate the meaning of healthy stress.

Posture

- Apply a reasonable amount of stress to the body and breath in order to increase strength, flexibility, and lung capacity.

3.10 Voluntary and Involuntary Functions

Content

- Define voluntary actions.
- Define involuntary actions.

Posture

- Independently practice Unit 3 sequence.

Unit 3
Active Engagement

Each unit will follow the same format of sequencing, in the following order:

Mindfulness Practice
(at beginning and/or after closing sequence)
Warm-up
Opening Sequence A
Opening Sequence B
Standing
Seated
Strength
Backbends
Finishing
Closing Sequence
Rest

In each unit you will find poses that are expected to be covered. In Unit 3 these postures are as follows:

Brain Balance Hop
Standing Split
Rotated Seated Tree
Cow-Face
Bug
Firefly
Sphinx
Camel
Side Camel
Forearm Downdog or Forearm Stand
(if wall space allows)

Add in postures from previous units to fill out your sequence. You can gradually add in new postures from the above list or start with simpler versions of all postures to create a sequence. Students will work toward becoming proficient in these new postures by the end of the unit. Toward the end of Unit 3, your sequence might look something like the one below:

Mindfulness Practice: Easy In, Extend Out
Opening Sequence A and B
Triangle
Reverse Warrior 2 into Side Angle
Rotated Side Angle
Intense Stretch
Brain Balance Hop
Standing Split
Seated Tree
Rotated Seated Tree
Cow-Face
Boat into Floating Lotus x 3
Bug
Firefly
Sphinx
Superbow
Camel
Side Camel
Child
Forearm Downdog or Forearm Stand
Shoulder stand or Legs up the Wall
Closing
Rest

Extensions of Learned Postures

Spend the first two months establishing a clear class structure (routines and procedures) and building a foundational base of postures. Slowly begin to add variety into the movement phase of class.

Adding in extensions (variations on familiar poses) is a way to keep the sequences lively, creative, and exciting while still maintaining structure and routine and emphasizing repetition. Repetition is a critical component of mindful movement practice and supports coordination, strength, flexibility, and body awareness.

Extension postures can also be useful in increasing or maintaining enthusiasm and engagement from second- or third-year health and wellness students or in offering an all-level experience for classes that include beginners and more intermediate or advanced practitioners.

Instructors are encouraged to adhere to unit sequences as closely as possible but also to meet the students where they are. For instance, if students seem tired or lethargic, incorporate more standing postures, and positions where the head is lifted, not lowered.

Below are examples of extensions of postures.

Opening Sequence A and B

- Count steps together
- One student leads
- One time independent
- Sleeping or Supine Opening A
- Opening Sequence B
  - Warrior 1 into Warrior 2 into Reverse Warrior 2

Tree

- Side Tree
- Tree into Warrior 3
- Last Tree Standing (Tree Challenge)
- Partner Tree in groups of 2, 3, and 4
- Partner Tree

Downdog

- Downdog Split
- Twisted Dog
- One-Legged Downdog, knee-to-nose plank, x 3 each side
- Donkey Kicks (inhale jump, exhale down)
- Baby Donkey Kicks (start in a little ball, little hops up)
- Horse Kick (one leg at a time)
- Three-legged Dog with Curl-in OR Curling Dog (knee-to-nose and/or knee-to-elbow)
- Downdog to Handstand
- Mountain Climbers or Prancing Dog or Dog on a Bicycle
- Frog (Downdog to Squat to Downdog, repeat)
- Downdog to Plank Twist
- Alternate Arm/Leg Lift
- Cat back from Downdog into Plank

Side Angle

- Half bind with arm around thigh
- Both arms up (difficult)
- Reverse Warrior to Side Angle
- Warrior 1, Warrior 2, Reverse Warrior, Side Angle (hold Side Angle)
- Hand inside or outside foot
- “The Thinker”

Warrior 1

- Hands together
- Hands apart
- Opposite hands on opposite elbows
- Upper body twist with arms in T
- Cactus arms
- Warrior 1 to High Lunge to Warrior 3
- Chair to High Lunge to Warrior 1
- Hands clasped behind back, forward bend, head inside front foot

Lunge

- Low or High Lunge, changing legs by jumping back and forth x 4
- Changing sides, feet to outside of hand

Boat

- Sinking or Half Boat
- Twisted Boat

Child

- Knees apart
- Bent elbows, hands on shoulders
- Extend arms, walk hands to right/left, side bend child's pose

Triangle

- Reverse Triangle/Triangle, x 3
- Bound Triangle
- Jumping Jacks in between
- Mountain to Star to Triangle and back

Plank

- One-legged Plank
- Hand-to-shoulder plank
- Inclined Plane
- Plank Push-up (Inhale plank, exhale bend elbows)
- Knees to opposite arms, Mountain Climber
- Supine Plank

Side Plank

- Side Plank 1 and 2
- Side Tree Plank
- Side Tree Plank, one leg lifted
- Seated Tree into Side Plank
- Side Plank (rainbow/tree)

Jump Back/Jump Through

- Rolling into Floating Lotus
- Blocks to lift up

Pointing Dog

- Pointing Dog, knee to nose x 3
- Pointing Dog, right elbow to left knee, both sides, x 3
- Half Pointing Dog/Half Bow

Warrior 3 Extensions

- High Lunge with Cow-Face Arms into Warrior 3
- Intense Stretch
- Hands interlaced behind back
- Hands pressed together behind back

Bridge and Wheel

- One-legged Bridge/Wheel

3.1 Vocabulary

Brain stem
Cerebellum
Cerebrum
Cognizant
Limbic system

Lesson 1

Power of the Brain–Body Connection

3.1 Objectives

Students will be able to do the following:

- **Content**
  - Understand that the activities of the four parts of the brain are expressed in every bodily function, as well as in our abilities to think and reason.
  - Understand that the brain is made up of four anatomical parts.
  - Identify the four parts of the brain (bolded in "Teach").
- **Posture**
  - Demonstrate working understanding of basic Unit 3 sequence.

3.1 Materials

- Image of the brain, with the four parts highlighted and clearly labeled (to be projected or distributed)—see end of lesson

3.1 Guiding Questions

- *What are the four parts of the brain?*
- *How do we use each part of the brain in daily activities and endeavors?*

3.1 Connect

In our last unit, we learned about mindfulness. Mindfulness is our ability to be aware of something that is happening while it is happening, whether it is a physical sensation, a feeling or emotion, or a thought. In our next group of lessons, you'll learn more about how the brain processes physical sensations, feelings, emotions, and thoughts, and how exercise and breathing practices help strengthen the brain and your ability to learn.

3.1 Teach

We have been exploring and discovering the connection between our bodies, our breath, and our thoughts. The main connective network linking these three parts of us is called the nervous system, and the central headquarters of the nervous system is located in the brain.

The human brain weighs about three pounds and is the size of your two fists put together. (Demonstrate and ask students to mimic action with fists.) The brain and spinal cord together make up the Central Nervous System (CNS). The brain is made up of four parts: the brain stem, the limbic system, the cerebellum, and the cerebrum.

These four parts developed over millions of years in response to the human organism's changing environment. The basic needs of our ancestors 20,000 years ago are similar to ours now—food, shelter, and reproduction. But the world we exist in now is significantly different. Can you think of an example of how our modern lives differ from our ancient ancestors' lives?

(Project or distribute illustration of brain with brain stem, limbic system, cerebellum, and cerebrum highlighted and clearly labeled.)

The brain stem houses our survival mechanisms: respiration, heartbeat, blood pressure, digestion, elimination, and reproduction. The limbic system processes emotions and feelings of safety and contentment, or a lack thereof. The cerebellum—literally "little brain"—is largely responsible for movement and stability. The cerebellum maintains muscle control, coordination (how your muscles work together), movement (walking, running), and balance. The cerebrum, also called the "cortex," is where we do all our strategic thinking, long-term planning, and empathizing. A large part of the brain is made up of the cortex, which is a feature that is unique to humans.

The brain and the body are always working together. Knowing the parts of the brain and how they function together allows us to see the relationship between the two seemingly separate, yet inseparable, entities.

3.1 Active Engagement

As you engage your breath in preparation for movement, sense how this is connected to the activity of the brain stem. The pace of the breath affects circulation and heart rate. One of the main purposes of integrating breath and movement is to circulate freshly oxygenated blood to every part of the body. As you work to find balance in these poses, sense how your balance is inextricably connected to the activity in the cerebellum, which governs muscle control, coordination, movement, and balance.

Remembering what comes next in the sequence is a function of your cerebrum. If you were to make up your own sequence, this would also be directed by your cerebrum. During Guided Rest, see if you can soften and calm your whole brain.

3.1 Link

Can you remember the four parts of the brain? They all perform different functions, but are always working together. Health and wellness practices strengthen the brain by activating the brain's main functions.

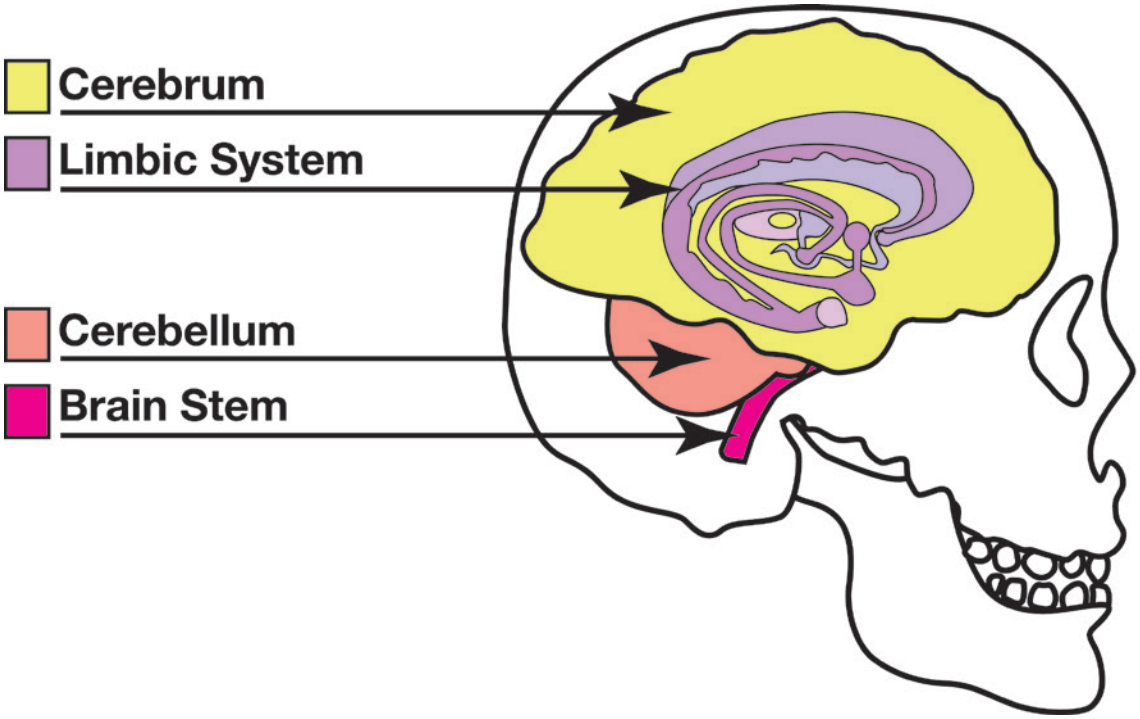
3.1 Closing Routine

Reinforce the Closing Routine established in the first days/ weeks of class.

3.1 Home Practice

Every time your heart beats, or you feel an emotion, or you balance on one foot, your brain is performing dynamic functions. There is rarely a moment when the brain is not doing many, many things simultaneously. Throughout the day, try to become more cognizant of what is happening in your brain in order for you to carry out any number of tasks or activities.

The Four Parts of the Brain



3.2 Vocabulary

Connection
Contentment
Prefrontal
Safety

Lesson 2

Finding Safety, Contentment, and Connection

3.2 Objectives

Students will be able to do the following:

- **Content**
  - — Identify our three basic human needs.
  - — Understand how safety, contentment, and connection are correlated with brain function.
- **Posture**
  - — Independently demonstrate one new strength pose.

3.2 Materials

- Image of the brain, with the four parts highlighted and clearly labeled (to be projected or distributed)—see end of lesson
- Brain model (if available)

3.2 Guiding Questions

- *What does safety mean to you?*
- *What does contentment mean to you?*
- *What does connection mean to you?*
- *How can mindfulness practice create, support, and enhance our feelings of safety, contentment, and connection?*
- *What factors do you suspect influence brain development?*
- *Do you think it is possible to develop your brain in new ways?*

3.2 Connect

We've learned that the brain has four parts. Do you remember what they are (e.g., brain stem, limbic system, cerebellum, and cerebrum) *and what functions they perform* (e.g., survival, emotions, movement and balance, and planning)*? This week we will discuss the three basic functions that are connected with those particular parts of the brain.*

3.2 Teach

The brain is the uppermost part of our central nervous system, which is a vast network of cells that remains in constant communication with the body, regulating all of our bodily processes and functions, including those of the sense organs, which gather information from the outside world.

The brain stem, the oldest part of the brain, directs our bodily survival mechanisms, such as heart rate, circulation, respiration, digestion, and reproduction. When our survival is secure and these mechanisms are working properly, we feel safe.

The limbic system, the second oldest part of the brain, is a relay station for hunger, thirst, memory, fear, and emotions. When the limbic system is balanced, we feel content.

The prefrontal cortex is the most recent addition to the mammalian brain. "Cortex" means "bark"—the cortex is a thin layer that makes up the outer layer of the brain.[1] The prefrontal cortex makes up the foreground of the cerebrum, which is responsible for thinking, memory, reason, cooperative planning, social responsibility, empathy, reflection, and language. When the prefrontal cortex is functioning well, we are able to connect with ourselves and others.

The functions of these parts show how the brain is more than just an anatomical structure. Rather, it is responsible for addressing the three basic needs all people share: the need for safety, the need for contentment (or satisfaction), and the need for connection (or community).[2]

Can you think of the opposite of safety? Of contentment? Of connection? When we do not feel safe, we tend to feel fear or insecurity. When we do not feel content, we tend to feel as though

1: "Cortex," Merriam-Webster. http://www.merriam-webster.com/dictionary/cortex.
2: Rick Hanson, *Hardwiring Happiness*, 2013.

we are lacking. When we do not feel connected, we might feel rejected or alone.

3.2 Active Engagement

Optional Large or Small Group Activity: Assign each student one of the four parts of the brain. Students are responsible for briefly studying their assigned part's functions. In the style of a guessing game (e.g., Charades, Who Am I?), each student acts out or provides a hint as to his or her respective part of the brain, while the rest of the group guesses.

Movement and Breath

Health and wellness practices help us begin to appreciate the messages our bodies receive from our brains and vice versa. During today's movement practice, simply focus on appreciating how the brain and body coordinate and organize information (my verbal instructions and physical demonstrations) into movement, and how the brain and the body call upon past experience in order to effectively repeat learned postures.

3.2 Link

Now that we have mapped four of the brain's anatomical parts and described their individual and collective functions, we will spend our next lesson traveling farther into the wider nervous system.

3.2 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

3.2 Home Practice

Until we reconvene, continue to check in and identify how each part of your brain is facilitating whatever it is you are doing. For example, if you are solving a problem in math class, you can thank your cerebrum. In the very same moment, the brain stem is working behind the scenes to keep your heart beating and your breath moving effortlessly. Meanwhile, your cerebellum is allowing your hand to steady itself and manipulate your pencil to make legible markings on your piece of paper.

3.3 Vocabulary

Axon
Hippocampus
Neurogenesis
Neuron
Neurological

Lesson 3

Three Functions of the Nervous System

3.3 Objectives

Students will be able to do the following:

- **Content**
  - Describe the functions of a neuron.
- **Posture**
  - Demonstrate the ability to modify challenging postures when appropriate.

3.3 Materials

- See images at end of lesson
  - Image of neuron (to be projected or distributed)
  - Image of axon (to be projected or distributed)
  - Image of brain with hippocampus highlighted and clearly labeled (to be projected or distributed)
  - Illustration of neurogenesis (to be projected or distributed)

3.3 Guiding Questions

- *What is a neuron? An axon?*
- *Can the human nervous system grow new neurons?*
- *What is neurogenesis?*
- *What is the best time of life to learn a new habit, and why?*
- *What is the relationship between neurogenesis and mindfulness?*

3.3 Connect

In our last lesson, we learned that safety, contentment, and connection are three fundamental human needs. Today we are going to look at how messages move through our nervous system, letting our brains and bodies know what to do and what and how to feel.

3.3 Teach

We have been exploring and discovering the connection between our bodies, our breath, and our thoughts. As we learned last week, everything from breathing to sleeping to empathizing is related to and impacted by the function of our nervous system.

The nervous system is made up of millions of microscopic cells called neurons. Our body's messengers, neurons link up with one another via microscopic branches called axons.[1] When we are born, our brains have been formed with almost all the neurons we will ever have, but these neurons are not all connected. Neurons forge connections through experience, repetition, and conditioning.[2]

Child and teenage brains are the most "plastic," meaning childhood and adolescence are the best periods of life for establishing positive, beneficial habits. Adults can generate new neurons,[3] but the number is typically low. One area of the brain where neurons are created into adulthood is the hippocampus,[4] which is related to learning and memory. As we learn and grow, neurons connect with each other to create pathways. The creation of new pathways is called neurogenesis.[5] For example, everything you have learned to do up until this very moment required some degree of neurogenesis.

1: "Axon," Science Daily. https://www.sciencedaily.com/terms/axon.htm
2: Eric H. Chudler, "Neuroscience for Kids," University of Washington, 2016. https://faculty.washington.edu/chudler/cells.html.
3: Gage, Fred H. "Neurogenesis in the Adult Brain," *The Journal of Neuroscience*, 2002. http://www.jneurosci.org/content/22/3/612.full.pdf
4: "Memory, Learning, and Emotion: the Hippocampus," PsychEducation, 2014. http://psycheducation.org/brain-tours/memory-learning-and-emotion-the-hippocampus/.
5: Maurice A. Curtis, Monica Kam, and Richard L. Fall, "Neurogenesis in Humans," *European Journal of Neuroscience*, 2011. http://www.culturacientifica.org/textosudc/neurogenesis/neurogenesis_humans.pdf.

Acquiring and maintaining knowledge or skill requires an ongoing upkeep of the pathways you've already established.

3.3 Active Engagement

Do you remember when Opening Sequence A felt confusing and disjointed? Hopefully, Opening Sequence A now feels clearer and more coordinated. This is just one small example of neurogenesis in action.

Throughout practice, keep in mind that every posture that now feels comfortable was once a brand-new shape. If a pose still seems confusing, pay close attention to the steps required to move into and out of it, as well as how your breath feels while you are holding the posture. Over time, with practice and determination, the brain and the body will absorb a distinct impression of the pose, and it just might become more natural.

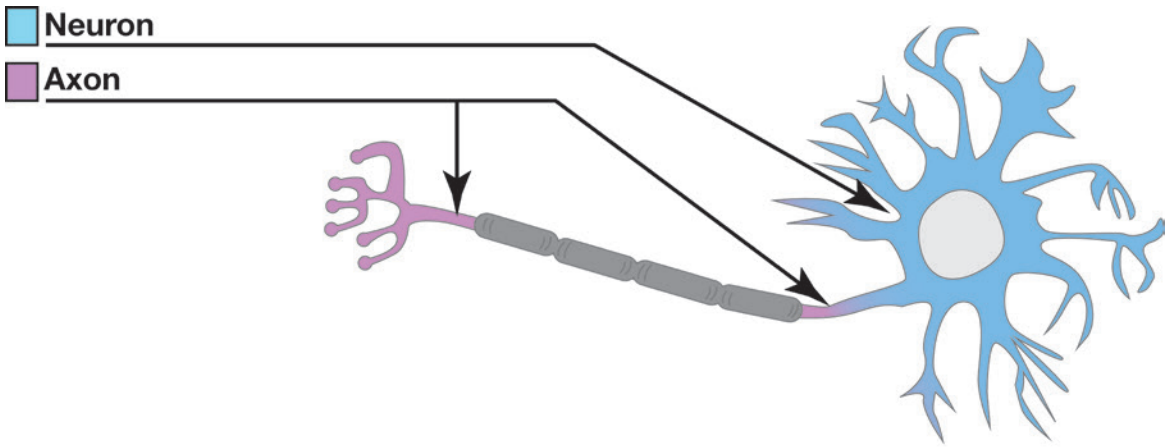
3.3 Link

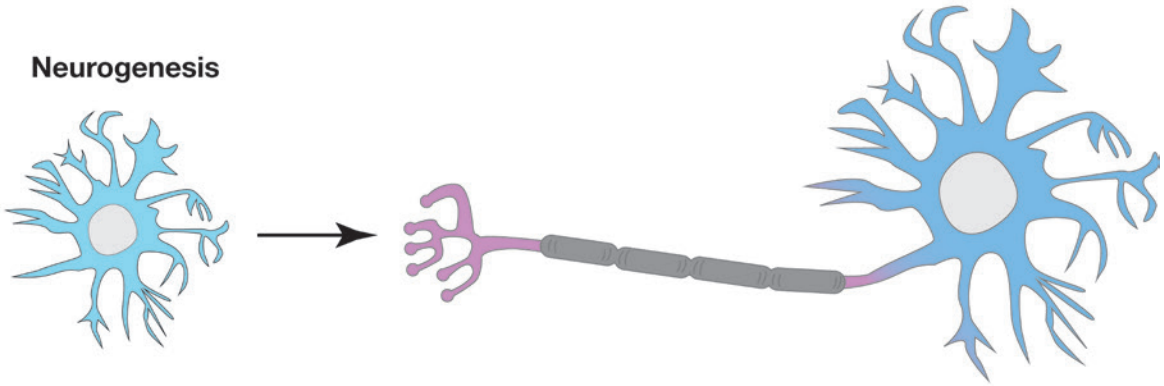
When you think about neurogenesis as the wiring that underlies your thoughts, habits, and skills, it becomes possible to imagine that you can truly participate in your brain's ongoing development. By mindfully choosing and cultivating the habits and skills you desire, you begin to mold your brain to be the kind of instrument that works best for you. In our following lesson, we will learn about another special aspect of our brilliant neurological instrument: the vagus nerve.

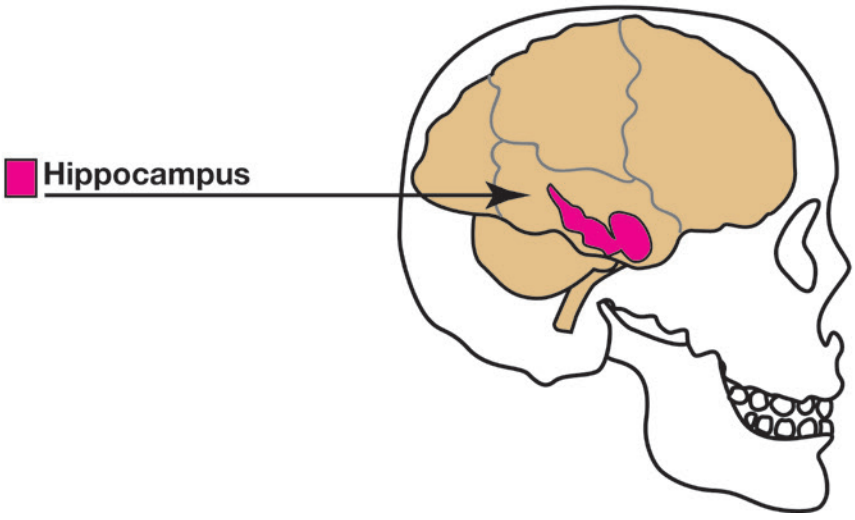
3.3 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

Unit 3
Lesson 3 Handout







3.4 Vocabulary

Vagus

Lesson 4

Emotions and the Vagus Nerve

3.4 Objectives

Students will be able to do the following:

- **Content**
  - Identify the vagus nerve as the nerve that is associated with emotions.
- **Posture**
  - Independently demonstrate one backbend posture from the Unit 3 sequence.

3.4 Guiding Questions

- *What is the vagus nerve?*
- *What does "vagus" mean?*
- *What are some of the places the vagus nerve wanders through?*
- *What are emotions?*
- *Do scientists know where emotions come from?*
- *How does mindfulness practice help tone the vagus nerve?*

3.4 Connect

In our last lesson, we learned about neurogenesis and how the brain processes and hardwires new information. Today we are going to talk about a part of our nervous system that operates largely by transmitting messages from the body to the brain.

3.4 Teach

Even though the brain is the most central part of the nervous system, we also have nervous systems in our hearts and our guts, which function independently of the brain and send constant updates to our brains about their condition. The vagus nerve[1]—"vagus" means "wanderer" in Latin—delivers messages directly from the internal organs (e.g., heart, lungs, digestive tract) to the brain. In fact, 80 percent of its activity consists of this bottom-up transfer of information. The vagus nerve is also associated with the sensing and expression of emotions. It innervates the vocal cords and modulates how we change our voices to express emotion; our faces, where we convey emotion; and courses along our hearts, where we often feel emotions.[2]

Emotions are triggered by a single event or series of events, like seeing a beautiful sunset or hearing a moving piece of music. Our brains register our emotions, but scientists don't fully agree on how and why emotions are produced.[3] Recent research shows that the organs in our body, not just our faces, are affected by and involved with the production and experience of emotional states. Stress, for example, which might derive from feeling overwhelmed or frustrated, can cause physical symptoms, such as stomachaches, headaches, or restricted

1: Christopher Bergland, "How Does the Vagus Nerve Convey Gut Instincts to the Brain?", *Psychology Today*, 2014. https://www.psychologytoday.com/blog/the-athletes-way/201405/how-does-the-vagus-nerve-convey-gut-instincts-the-brain.
2: David DiSalvo, "Forget Survival of the Fittest: It Is Kindness That Counts," *Scientific American*, 2009. http://www.scientificamerican.com/article/forget-survival-of-the-fittest/
3: Antonio R. Damasio, "The Science of Emotion," Library of Congress. http://www.loc.gov/loc/brain/emotion/Damasio.html.

respiration. Conversely, feelings of love, gratitude, and compassion can actually support heart health.[1]

The theory that emotions arise from the brain is supported by experiments showing that stimulating certain brain regions can make people fearful, sad, or happy. Yet we also know that we have the power to influence how we feel, which suggests that the brain and the body work together to manifest our perceived experiences. This indicates that our inner awareness, along with our physiological functions and external inputs, all have a hand in creating an emotion or a feeling.[2]

3.4 Active Engagement

Our Guided Rest routine is one of the best things we can do for the health of the vagus nerve. When the vagus nerve is relaxed, strong emotions are quelled and stress is reduced. Every time you exhale, especially every time you exhale lengthily, the vagus nerve is toned, or refined.

3.4 Link

Today we explored the nervous system in depth through the lens of the vagus nerve. Health and wellness practice gave us an opportunity to tone our vagus nerves through long, concentrated exhalation. In our next lesson, we'll explore why the vagus nerve responds so favorably to mindful movement and breathing.

3.4 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

1: Patti Neighmond, "Gratitude Is Good For The Soul And Helps The Heart, Too," National Public Radio, 2015. http://www.npr.org/sections/health-shots/2015/11/23/456656055/gratitude-is-good-for-the-soul-and-it-helps-the-heart-too

2: Manuela Lenzen, "Feeling Our Emotions," *Scientific American*, 2005. http://www.scientificamerican.com/article/feeling-our-emotions/

3.5 Vocabulary

Accelerator
Autonomic
Brake pedal
Central nervous system
Peripheral nervous system
Physiological

Lesson 5

Breathing and the Nervous System

3.5 Objectives

Students will be able to do the following:

- **Content**
  - Identify how breath is interconnected with the nervous system.
- **Posture**
  - Identify one Unit 3 pose that is calming and one Unit 3 pose that is energizing.

3.5 Materials

- See images at end of lesson (to be projected or distributed)
  - Illustration of the nervous system
  - Illustration of a neuron
  - Illustration of an axon
  - Illustration of the brain
  - Illustration of the heart
  - Illustration of the gut

3.5 Guiding Questions

- *What part of the brain controls breathing?*
- *What is the name for automatic functions of the brain stem?*
- *How can we influence an autonomic function?*
- *How might our breath patterns reflect our emotional states?*
- *Can certain breathing techniques help us change our emotional states?*
- *What are two wellness practices that support brain health?*
- *What is the brake pedal of the nervous system called?*
- *What is the accelerator of the nervous system called?*

3.5 Connect

The vagus nerve, which we learned about in our last lesson, is a nerve that is associated with emotion. Emotions show themselves in our bodies in the form of sensations. How does anxiety feel in your body? How do happiness or excitement feel in your body?

Do you ever notice a change in your breath or heart rate depending on your mood? How does your breath feel when you are angry? What happens in your heart? When we are in a state of anger, and our breath is shaky and our hearts are racing, it tends to be easier to say something hurtful or reactive. Have you ever felt so overwhelmed by an emotion like anger that you snapped and said or did something you later—or immediately—regretted? In this lesson, we will learn how and why we can use the breath as a guide to avoiding emotional mistakes.

3.5 Teach

The act of breathing, which happens all through our lives *without us ever having to think about it, directly affects our nervous systems. Breathing, or respiration, is ruled by the brain stem. Though it is an "autonomic" function, it is also something that we can modulate by breathing consciously. Therefore, it is one of the most direct ways to access our nervous systems.*

As we learned in Unit 1, Lesson 6, we can use the breath to gauge what and how we are feeling. When we are angry, we might hold the breath. When we are sad or crying, the breath might become jagged. When we are relaxed or asleep, the breath will be calm, deep, and smooth.

As we began to explore in Unit 1 and Unit 2, not only can we observe how our state of being is reflected in our breath but we can also use the breath to interpret or influence the way we feel physically, mentally, and emotionally. The breath is connected to the nervous system in the same way that an accelerator and a brake pedal are connected to a car. Inhaling accelerates, and exhaling brakes. When we need to psych ourselves up for something, we take a deep breath. When we need to relax, taking long, slow exhales will make us feel more

calm. When we are upset, focusing on the exhalation is most useful.[1]

3.5 Active Engagement

In our health and wellness practice, every action is linked with either an inhalation or an exhalation. As we move into and out of postures, we inhale (usually during upward or expansive movements) and exhale (usually during downward or contracting movements) deliberately. The physical actions of the limbs and trunk are wedded to the breath, and the breath is wedded to the nervous system. Thus, health and wellness practice is working not only on a musculoskeletal level, but on a physiological and neurological level as well. As we practice today, keep in mind that each posture is layered and dynamic.

3.5 Link

Today we dug deeper into the kinship between the breath and the nervous system. In our next lesson, we will examine the two main parts of the autonomic nervous system.

3.5 Closing Routine

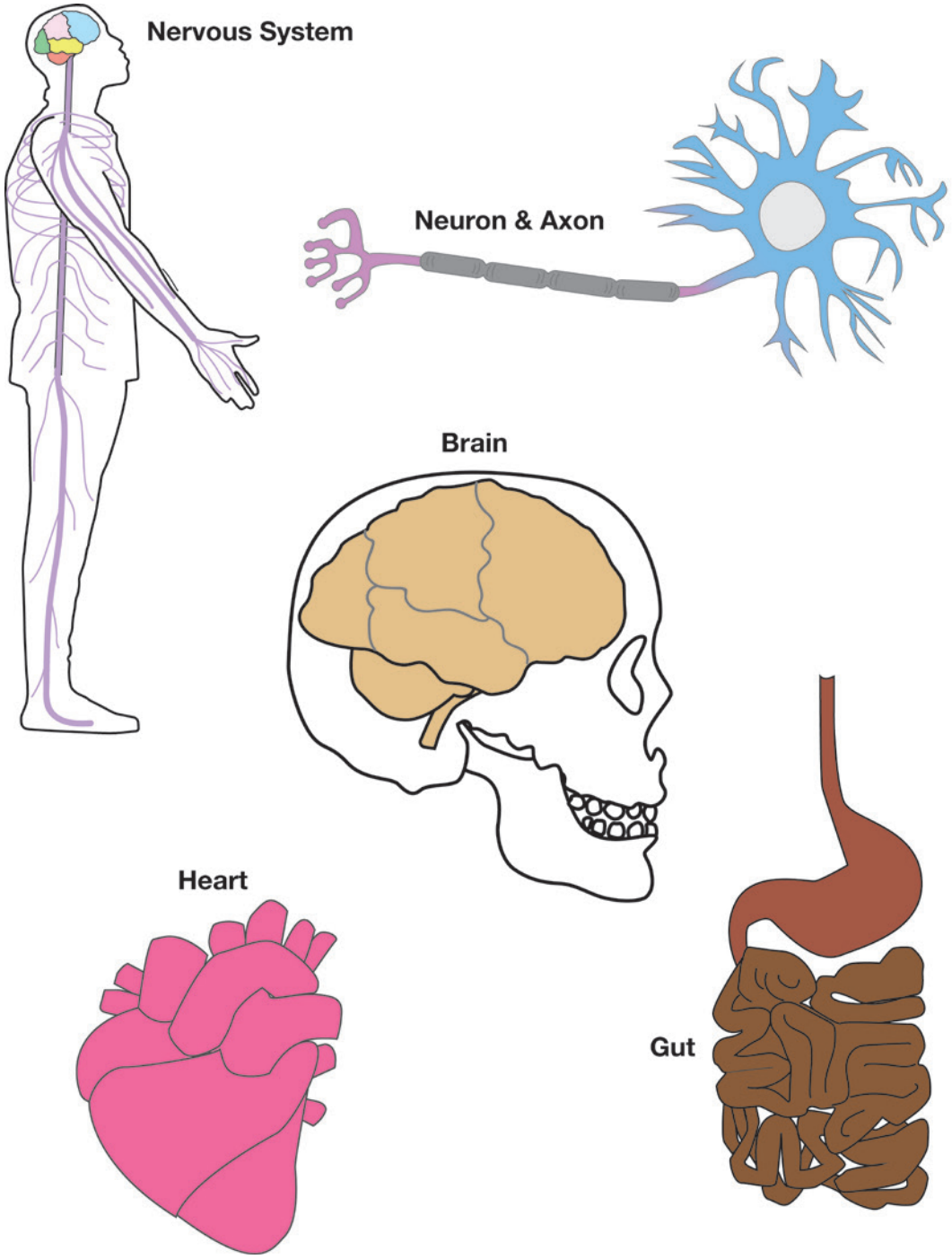
Reinforce the Closing Routine established in the first days/weeks of class.

3.5 Home Practice

For the rest of the day, try to pause and notice what is happening in your nervous system. While you are eating a meal, talking to a friend, answering a question in class, playing a sport, or walking down the hallway, stop and consider how the nervous system is activating and supporting you at that particular moment. Perhaps this will bring up a question for next time.

1: Rick Hanson, "Relaxed and Contented: Activating the Parasympathetic Wing of Your Nervous System," WiseBrain, 2007. http://www.wisebrain.org/ParasympatheticNS.pdf

Unit 3
Lesson 5 Handout



3.6 Vocabulary

Autonomic nervous system
Parasympathetic nervous system
Sympathetic nervous system

Lesson 6

Sympathetic and Parasympathetic Nervous Systems

3.6 Objectives

Students will be able to do the following:

- **Content**
  - Characterize and contrast the main functions of the sympathetic and the parasympathetic nervous systems.
- **Posture**
  - Independently demonstrate one pose that stimulates sympathetic activity and one that stimulates parasympathetic activity.

3.6 Materials

- Illustration of the sympathetic and parasympathetic nervous systems as they are located along the spinal column—see image at end of lesson

3.6 Guiding Questions

- *What is the sympathetic nervous system, and when should it be dominant?*
- *What is an example of a situation that might trigger a fight response?*
- *What is an example of a situation that might trigger a flight response?*
- *What is an example of a situation that might trigger a freeze response?*
- *Under what circumstances do we want our parasympathetic nervous systems to be dominant?*
- *How can mindfulness help us detect the dominance or overactivity of either branch of the ANS?*

3.6 Connect

Last time we met, we elaborated upon our ongoing conversation on the relationship between the breath and the inner workings of our bodies. This week we will go a little deeper into our study of the sympathetic and parasympathetic branches of the autonomic nervous system.[1]

3.6 Teach

There are two branches of the autonomic nervous system that are functioning all the time: the sympathetic nervous system (SNS) and the parasympathetic nervous system (PNS). "Autonomic" means "involuntary." The sympathetic nervous system rules everything in our body that expands, or moves toward activity. The parasympathetic nervous system rules constriction and rest. Dilation in the pupils, for example, occurs via the sympathetic nervous system, while constriction in the pupils occurs via the parasympathetic nervous system.

We live in a fast-paced, technology-driven world, so our sympathetic branch is activated more often than the parasympathetic one. Wellness practices counter unnecessary activation of the sympathetic nervous system through even breathing, long exhalations, deep rest, and the repetition of positive, peaceful thoughts.

The sympathetic nervous system provides the fuel required to engage with and take care of circumstances outside the body.[2] *In a sympathetic state, the body does not have the energy it needs to heal from sickness or injury, digest food or information, or restore itself.*

In order to recover from and prepare for our interactions with our external environments, the parasympathetic system must have the upper hand.[3] *In a parasympathetic state, our inhalations and exhalations become smooth and quiet and the nervous system becomes calm. Parasympathetic activation moves the body toward homeostasis, which we will explore in further depth in Unit 4.*

In our last lesson on breathing and the nervous system, we established that the inhalation is our accelerator, while the exhalation is our brake pedal. Considering everything we've

1: Eric H. Chudler, "Autonomic Nervous System," Neuroscience for Kids, University of Washington, 2014. https://faculty.washington.edu/chudler/auto.html.
2: "Sympathetic Nervous System," Encyclopedia Britannica, 2016. http://www.britannica.com/science/sympathetic-nervous-system
3: "Parasympathetic Nervous System," Encyclopedia Britannica, 2016. http://www.britannica.com/science/parasympathetic-nervous-system.

learned about sympathetic and parasympathetic duties, which branch of the autonomic nervous system do you think serves as our accelerator? Our brake pedal?

3.6 Active Engagement

Throughout our movement practice, keep track of which poses involve sympathetic engagement and which poses involve parasympathetic engagement. Also notice if and how your inhalation boosts your energy, while your exhalation winds you down.

3.6 Link

Even though the autonomic nervous system governs involuntary functions, we are able to influence the quality of its operation. By mindfully tuning in to what is happening within us and around us, we can learn to regulate our emotions and reactions, thus avoiding unnecessary or unwanted stress. How can mindfulness help us detect the dominance or overactivity of either branch of the ANS? In our next lesson, we will begin to discuss stress as a natural, physiological process.

3.6 Closing Routine

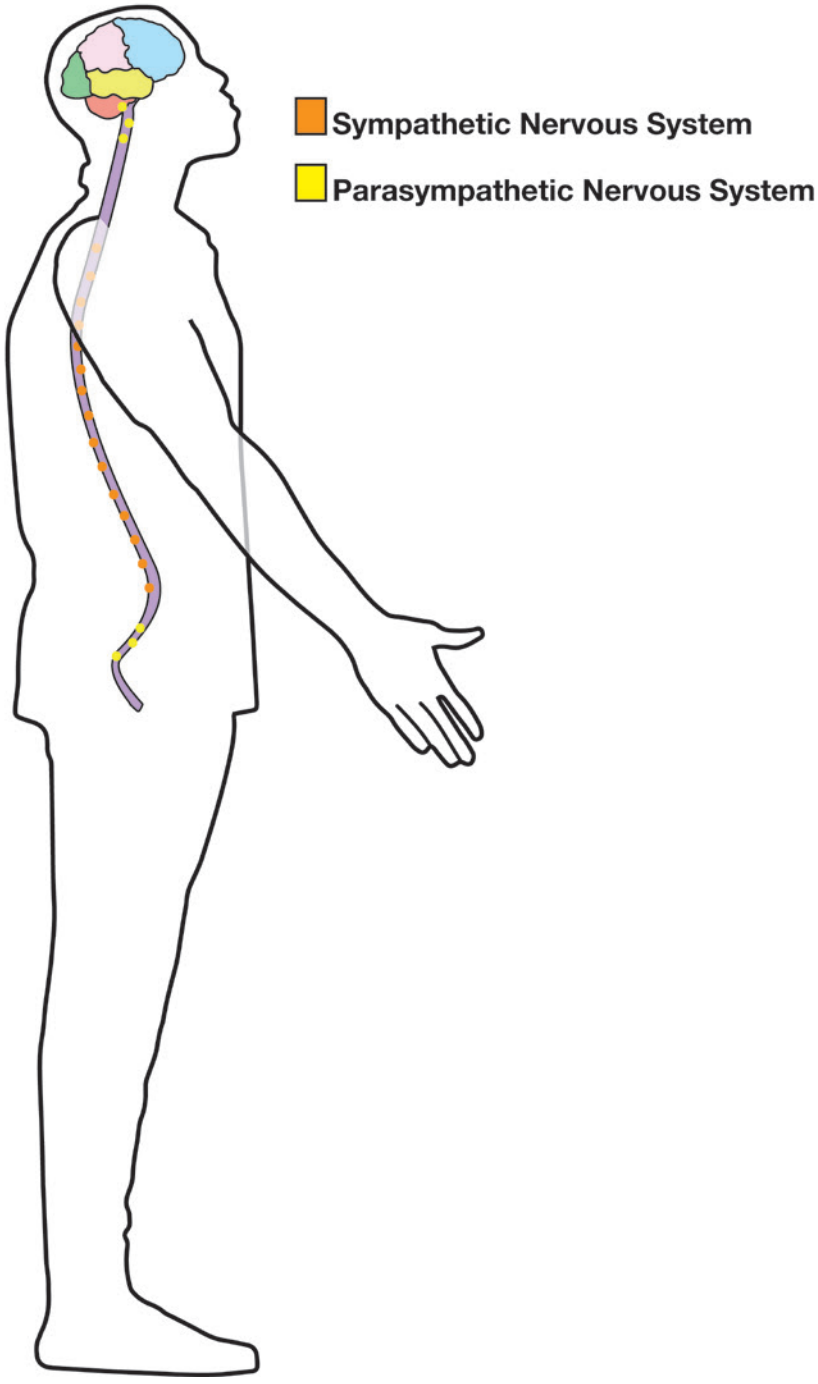
Reinforce the Closing Routine established in the first days/weeks of class.

3.6 Home Practice

Begin to hone your awareness of your own autonomic nervous system. Notice when you feel rushed, energetic, hyper, or worried—that's sympathetic. Notice when you feel relaxed, at ease, mellow, or unperturbed—that's parasympathetic. Which one is turned on more often?

In the event a friend or family member needs to calm down, teach him/her how to extend his or her exhalation by blowing through a straw (actual or imagined). Encourage him/her to blow through the straw a few times for as long as possible. This will help him/her extend their exhalation, which naturally supports parasympathetic function.

Unit 3
Lesson 6 Handout



3.7 Vocabulary

Adrenaline
Cortisol
Stress

Lesson 7
What is Stress?

3.7 Objective

Students will be able to do the following:

- **Content**
  - Identify potential sources of physical, emotional, and social stress.
- **Posture**
  - Independently demonstrate one strength posture.

3.7 Guiding Questions

- *What is one example of physical stress?*
- *What is one example of mental stress?*
- *What does physical stress feel like in the body? In the mind?*
- *What does mental stress feel like in the body? In the mind?*
- *Is it possible to engage with the symptoms of stress in order to bring the body and mind back into balance?*
- *What are some techniques for helping the body return to a state of homeostasis?*
- *How can stress be harmful? Helpful?*

3.7 Connect

We know that breathing is directly connected to the state of the nervous system. In this lesson we will start learning about the physiological purpose of stress. The nervous system uses stress in order to respond to the world around us. Some stress is good, some stress is bad—it all depends on how much of it there is, what form it takes, and where it is directed.

3.7 Teach

We tend to think of stress as a negative force, but it is actually one of nature's most essential processes. Stress initiates and responds to movement in the body. When we get up to walk across the room, our bodies release two hormones: cortisol and adrenaline. These hormones carry the messages that let our bodies know it's time to perform an activity. Our bodies then respond to these messages by increasing our heart rates and shifting the rhythm of our breath ever so slightly, among other things.[1]

Cortisol and adrenaline are also released when our environments demand that we are alert and focused. For example, if you have a big test coming up, you might state that you feel stressed out. Various factors in your environment have the potential to flip the stress switch, some more than others. Something that causes stress for you might not cause stress for your best friend, and some things cause so much stress that your levels of adrenaline and cortisol are too high for you to feel healthy and well.

Being able to mindfully identify stress is one of the key factors to effective self-regulation. In Unit 4, we will discuss strategies for identifying and regulating

1: "Understanding the stress response," Harvard Health Publications, 2016.
http://www.health.harvard.edu/staying-healthy/understanding-the-stress-response

stress, as well as how to mediate the relationship between stress and emotions.

3.7 Active Engagement

Building muscle, increasing endurance, and improving your cardiovascular health all require a certain degree of stress. Remember this as you move through today's sequence. By applying a reasonable amount of stress to your body, you are actually increasing its capacity for activity and growth.

3.7 Link

Mindfully identifying your physical and emotional reactions to stress is a learned skill. If you work on developing this skill every day, you will gradually become more attuned to your needs. This mindful awareness begins by simply taking a breath and acknowledging to yourself or others, "I need a moment," "I need to sit," or "I need to lie down" before stress throws you too far off course. Once you can identify that there is too much going on for you, you can take a step back and take a break to stretch, breath, and rest.

In our next lesson, "Wired for Stress," we will spend more time talking about the uses of adrenaline and cortisol and what happens when there is too much adrenaline and cortisol in our systems.

3.7 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

3.8 Vocabulary

Adrenaline
Cortisol
Stress

Lesson 8
Wired for Stress

3.8 Objective

Students will be able to do the following:

- **Content**
  - Understand how the brain and body respond to stress.
- **Posture**
  - Demonstrate a cross-lateral movement.

3.8 Guiding Questions

- *When do you feel exhilarated by stress?*
- *When do you feel depleted by stress?*
- *What is adrenaline?*
- *What is cortisol?*
- *When is it important for our survival to be cautious and alert?*
- *How does our wiring make us react the same way to a bear as we do to a speeding car?*
- *How can stress hormones become toxic?*

3.8 Connect

In Lesson 1 of this unit, we began a conversation about the human brain and its development over millions of years. In Lesson 7, we defined and discussed stress. Now we will look at how the ways in which we are wired for stress are inextricably linked to how and why our brains have come to function as they do.

3.8 Teach

Stress can come and go quickly, depending on the moment-to-moment conditions of our lives. But what happens when stress sticks around for longer than we want it to?

Certain types of uncertainty fuel the stress response in a fun way. This is one reason why so many people like action movies and video games. The right dose of uncertainty or challenge can be exhilarating. It is possible, however, for the nervous system to become accustomed to a constant flow of cortisol and adrenaline. This is what's become known as feeling stressed out.

There are particular places in the brain where excess stress hormones can get stuck. These are the prefrontal cortex (PFC), related to our ability to reason, plan, and respond, the amygdala, and the hippocampus. The amygdala and the hippocampus reside within our limbic system and are related to fear and memory. When stress hormones run rampant, the PFC becomes temporarily impaired, and the limbic system can become overactive.

In Lesson 1 of this unit, we learned that our survival instinct is the result of thousands and thousands of years of human learning, growing, and thriving across a range of environments. Our ancient ancestors lived in forests or jungles, and their brains were programmed to be alert to predators like bears and lions. Now that most of the world's population lives in cities, we must navigate other daily worries. A reasonable amount of worry and caution contributes to your ability to stay alive. However, if you worry all day long about absent, unseen, or unrealistic threats, your body still receives the message to produce and circulate stress hormones—whether or not there is a legitimate cause for stress. This can result in an unhealthy, harmful accumulation of stress in the body.[1]

1: Salam Ranabir, and K. Reetu, "Stress and hormones," *Indian Journal of Endocrinology and Metabolism*, 2011. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3079864/

Perhaps you had to jump out of the way of a speeding car, and for days afterward you flinched at the sound of a motor or felt nervous crossing the street.

The impressions left by stress are a feature of our survival instinct. We want to perceive and respond appropriately to danger. But we also want to be aware of when our bodies and minds are anticipating danger that has never been or is no longer present. When we imagine a threat, the body takes a cue from the mind. In these instances, it helps to understand the relationship between thought-based stress and how the body manifests that stress.

3.8 Active Engagement

Exercise and mindfulness practices help flush excess cortisol out from our systems. If you feel an inkling of stress before we get our bodies moving, notice if there is any reduction in stress during or after rest.[1]

3.8 Link

Today we learned that stress hormones can become toxic when distributed in high doses. In our next lesson, we will learn how to divert or modify stress.

3.8 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

3.8 Home Practice

Try to notice when your stress response kicks in during the day. How does it feel when a teacher calls on you and you are not prepared? How does it feel when you actually know the answer to a teacher's question but, in your excitement, you draw a blank? Remember that your secret weapon against stress is mindful breathing. When you start to sense familiar stress signals, focus on long, slow exhales, as if you are breathing out through a straw.

1: "Exercising to relax," Harvard Men's Health Watch, Harvard Health Publications, 2011. http://www.health.harvard.edu/staying-healthy/exercising-to-relax.

3.9 Vocabulary

Challenge
Resilience
Trigger

Lesson 9

Turning Stress into a Positive Force

3.9 Objectives

Students will be able to do the following:

- **Content**
  - Understand and articulate the meaning of healthy stress.
- **Posture**
  - Apply a reasonable amount of stress to the body and breath in order to increase strength, flexibility, and lung capacity.

3.9 Guiding Questions

- *How can we distinguish between healthy and unhealthy stress?*
- *What are some ways that we can turn pressure into healthy stress?*
- *Can you name some wellness practices that help build resilience?*
- *How does healthy stress activate and strengthen the mindfulness muscle?*
- *How does healthy stress build stronger muscles and bones?*
- *How does mindful breathing exert enough stress to fortify the lungs?*

3.9 Connect

In our last lesson, we learned that stress hormones can become toxic when produced and circulated in high doses. In our current lesson, we will learn how to divert or modify stress. Once we understand how to manage stress through self-regulating, self-care techniques, we can actively participate in bringing the mind and body toward balance.

3.9 Teach

Health and wellness practices offer an effective method for stress management. Our Tripod—posture, breath, and gaze—helps stabilize our attention, even when we feel scattered. In general, exercise encourages circulation of the blood and brings oxygen to every cell of the body, including our brain cells, making it one of the best ways to flush out excess stress hormones. Our breathing techniques reduce the feelings of anxiety and upset that often accompany a sense of being stressed out, and mindfulness practice helps us listen in to what we feel and need.

Do you think any or all of these practices—movement, breathing, and mindfulness—actually require stress to be effective? It's true—we must apply stress to our bodies in order to become strong and more flexible, just as we must breathe intentionally in order to increase our lung capacity. And after all, we can't flex our mindfulness muscles without a little mental weight.

Through changing our perception of stress, we can take a different approach to the things that usually make us feel stressed out, like homework, tests, and social pressures. We might still feel challenged by these aspects of daily life, but we can rise to the challenges and open ourselves to the possibility of learning and growing. Some stressful or challenging circumstances can actually give us the opportunity to set the bar higher, recalibrate our minds and bodies, and develop resilience to conditions that used to knock us off course.[1]

1: Firdaus Dhabhar, "Good stress, bad stress," Stanford Medicine Newsletter, Stanford Medicine, 2012. http://stanfordmedicine.org/communitynews/2012fall/stress.html

3.9 Active Engagement

During today's practice, bring your attention to how you experience healthy stress in your body, breath, and mind. What does stress feel like in the muscles? On the joints? How does Ocean Breath work your nose and lungs in a way that helps you breathe clearly and deeply? How does distraction cause a bit of mental stress, and how does this stress activate your mindfulness muscle?

3.9 Link

Over the course of this unit, we have unpacked parts of the brain, branches of the nervous system, the physiological process of stress, and some of the mental, emotional, and physical effects of stress. We have also learned how to participate in seemingly automatic events and mechanisms within our bodies. Our wellness practices can help us become more attentive and responsible participants in our own health.

3.9 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

3.9 Home Practice

Choose one or two of the health and wellness tools we've learned so far, such as extension of the exhalation, STOP, or Taking in the Good. In order to have your mindfulness muscle primed and ready for a challenge, you must regularly practice under non-stressful circumstances. Try using STOP while you're walking down the street, or extending your exhalation during a casual talk with a friend or teacher.

3.10 Vocabulary

Involuntary
Voluntary

Lesson 10

Voluntary and Involuntary Functions

3.10 Objective

Students will be able to do the following:

- **Content**
  - — Define voluntary actions.
  - — Define involuntary actions.
- **Posture**
  - — Independently practice Unit 3 sequence.

3.10 Guiding Questions

- *What is a voluntary action?*
- *What is an involuntary action?*
- *What is one involuntary practice that we have learned to make voluntary through our wellness exercises?*
- *How are voluntary and involuntary actions related to mindful decision-making?*

3.10 Connect

Over the course of this unit, we have unpacked parts of the brain, branches of the nervous system, the physiological process of stress, and some of the mental, emotional, and physical effects of stress. We have also learned how to participate in seemingly automatic events and mechanisms within our bodies. Our wellness practices can help us become more attentive and responsible participants in our own health.

3.10 Teach

There are two basic types of actions that we perform as human beings: voluntary and involuntary.[1] Generally speaking, a voluntary action requires thought and deliberation, while an involuntary action occurs without conscious planning or decision-making. The involuntary actions of the body often go completely unnoticed or unaccounted for. The brain takes care of innumerable processes that keep us alive without our having to consciously decide or direct them. Thanks to the brain stem, the heart beats and the lungs draw in oxygen and expel carbon dioxide; the cerebellum helps us maintain balance while standing; and the spinal cord controls the reflex that moves the hands away from a hot stove.

Since we do not have to concentrate on whether or not the heart, lungs, liver, kidneys, or spleen are working, we have the brain capacity, time, and energy to learn new information, go on a bike ride, watch a movie, or have a conversation with a friend.

We can, however, actively support the involuntary functions of the brain, nervous system, respiratory system, and organs via voluntary means. What is one involuntary practice that we have learned to make voluntary through our wellness exercises?

1: Sharmila Basu, and April Gardner, "Teacher's Guide: Information about the Brain," The Brain: Our Sense of Self, National Institute of Heath & National Institute of Neurological Diseases and Stroke, https://science.education.nih.gov/supplements/nih4/self/guide/info-brain.html.

3.10 Active Engagement

Our health and wellness practices strengthen the parts of the nervous system that control both voluntary and involuntary actions. Enhancing the depth and quality of the breath (which is otherwise controlled autonomically by the brain stem) strikes a balance in the nervous system while simultaneously creating space between thought and action. When we voluntarily move our bodies in a way that supports the health of the muscles, tissues, and organs, we strengthen the organ and tissue systems that are normally autonomically maintained. Perhaps most importantly, we can voluntarily take rest when our bodies and minds feel overworked and undernourished. This influences the autonomic alternating between sympathetic and parasympathetic, as well as the rate at which adrenaline and cortisol are produced and released into the bloodstream.

3.10 Link

It's important to remember that just because something happens involuntarily doesn't mean we don't need to pay attention to it. Now that we know a little bit about voluntary and involuntary action, we can become more sensitive to how things are working underneath our skin.

Next we move on to Unit 4: Power of a Balanced Life. We have already touched upon many of the topics therein, such as homeostasis, balance, stress, and self-regulation. Unit 4 will give us more opportunities to consider the intersections and interactions between body, brain, mind, and environment.

3.10 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

The health and wellness instructor should formulate a unit review based on student comprehension of Essential Questions and Enduring Understandings and fulfillment of Objectives.

Unit 3
Review

Movement Lab and Assessment Activities:

Review and assess students' knowledge.

Possible activities:

- Independent Practice
- Partner Poses
- Student Sequencing
- Inventor's Club: Name It, Draw It, Teach It (Invent a new pose, then teach the steps that lead into and out of the pose.)
- Freeze Dance
- Games
- Storytelling

Unit 3
Glossary

A

Accelerator: something that brings about an increase in speed

Adrenaline: a hormone secreted by the adrenal glands, especially in conditions of stress, increasing rates of blood circulation, breathing, and carbohydrate metabolism, and preparing muscles for exertion

Autonomic: involuntary or unconscious

Autonomic nervous system: the part of the nervous system responsible for control of the bodily functions not consciously directed, such as breathing, the heartbeat, and digestive processes

Axon: the long, threadlike part of a nerve cell, along which impulses are conducted from the cell body to other cells

B

Brain stem: the central trunk of the mammalian brain, consisting of the medulla oblongata, pons, and midbrain, and continuing downward to form the spinal cord

Brake pedal: the pedal used by a driver to operate brakes in order to slow down or stop a vehicle

C

Central nervous system: the nervous system within the brain and spinal cord

Cerebellum: the part of the brain at the back of the skull in vertebrates that coordinates and regulates muscular activity

Cerebrum: the principal and most anterior part of the brain in vertebrates, consisting of two hemispheres, which is responsible for the integration of complex sensory and neural functions and the initiation and coordination of voluntary activity in the body

Challenge: a task or situation that tests someone's abilities

Chronic: persisting for a long time or constantly recurring

Cognizant: having knowledge of or being aware of something

Connection: a relationship in which a person, thing, or idea is linked or associated with something else

Contentment: a state of happiness and satisfaction

Cortisol: a steroid hormone produced by the adrenal cortex

H

Hippocampus: the elongated ridges on the floor of each lateral ventricle of the brain, thought to be the center of emotion, memory, and the autonomic nervous system

I

Involuntary: done without will or conscious control

L

Limbic system: a complex system of nerves and networks in the brain, involving several areas near the edge of the cortex concerned with instinct and mood, that controls the basic emotions (fear, pleasure, anger) and drives (survival)

N

Neurogenesis: the growth and development of nervous tissue

Neurological: of or relating to the central and peripheral nervous systems

Neuron: a specialized cell transmitting nerve impulses

P

Parasympathetic nervous system: the branch of the autonomic nervous system that serves to lower the heart rate, increase intestinal and glandular activity, and relax muscles

Peripheral nervous system: the nervous system outside the brain and spinal cord

Physiological: the functions and activities of a living organism and its parts

Prefrontal: in or relating to the foremost part of the frontal lobe of the brain

R

Resilience: the ability to bounce back from a challenge or setback

S

Safety: the condition of being protected from or unlikely to cause danger, risk, or injury

Stress: pressure or tension exerted on a material object; a state of mental or emotional strain resulting from adverse or very demanding circumstances

Sympathetic nervous system: the branch of the autonomic nervous system that serves to accelerate heart rate, constrict blood vessels, and raise blood pressure

T

Toxic: poisonous, noxious, dangerous

Trigger: to cause an event to happen or exist

V

Vagus: each of the tenth pair of cranial nerves, supplying the heart, lungs, upper digestive tract, and other organs of the chest and abdomen

Voluntary: done, given, or acting of one's own free will

Unit 4

Power of a Balanced Life

Unit Description and Outline

In Unit 4: *Power of a Balanced Life*, concepts from Units 1, 2, and 3 are expounded upon within the context of homeostasis, stress, emotional regulation, and habit formation. The unit aims to generate conversation around and direct experience with the correlation between wellness and balance.

We begin the unit with a recap of homeostasis. This lesson emphasizes the body's inherent drive to seek balance within itself in response to its environment. Scientifically speaking, homeostasis refers to our body temperature, blood PH, gas exchange, and blood glucose. We use this physiological phenomenon as a metaphor for other factors in our lives that can't be so easily measured, such as our thoughts, emotions, feelings, and behaviors.

These aspects of our interior lives, which spill over into our lives as social beings, indicate the quality of our psychological and physiological homeostasis.

Unit 4: *Power of a Balanced Life* posits balance as an aim, not a stopping point. The existence of the process of homeostasis implies that change is an important and inevitable part of life for all organisms. As health and wellness practitioners, one of our main objectives is to develop the physical and mental resiliency necessary to successfully navigate both ordinary and extraordinary changes in conditions and circumstance.

Becoming sensitized to what balance feels like is a part of learning how to find balance, and in Lesson 2, we hash out the idea of "control." Stress is quite often caused by situations that are out of our control. Therefore it tends to be more useful, and less stressful, to focus on that which we can control. As Dr. Hans Selye, (who coined the word "stress"), famously said, "It's not stress that kills us, but our reaction to it." Once students have the tools to identify personal stressors, they will then be able to appropriately respond and regulate their stress responses. We hope that the application of the strategies presented herein, and in Units 1, 2, 3, and 5, are effective in addressing personal stress management, problem-solving, and conflict resolution.

This unit will firm up prior lessons on the brain and nervous system with a return to the limbic system and the prefrontal cortex. The limbic system is the brain's seat of emotions. The limbic system also processes associative memory, survival instincts, emotional processing, pleasure, reward, and addiction. The limbic system is closely related to the endocrine system, which releases hormones and neurotransmitters that often dictate our moods and responses. When this system is overloaded, the chemicals that would normally be flushed from our systems remain and become toxic. This is essentially one of the components of *distress*—a state in which the body cannot cope with the demands placed upon it. There are certain areas of the prefrontal cortex, which is responsible for strategic planning and decision-making, that have receptors for cortisol, a hormone the body releases to deal with inflammation and environmental demands. When there is too much cortisol in the bloodstream, it attaches to these in the brain and impairs executive function. Exercise, deep breathing, and rest are some of the best ways to encourage the efficient and thorough removal of potentially toxic stress hormones from the circulatory system.

In Lesson 4, students are introduced to a very important word: dysregulation. Dysregulation is the inability to control or regulate emotion, and it occurs when there is an overload of stress. Repetitive and traumatic stress make the individual especially vulnerable to dysregulation: The limbic system is primed to react swiftly to our environment, even when our whole brain hasn't had the opportunity to organize and interpret what is happening. This means that sights, sounds, smells, tastes, and tactile sensations can amp up the limbic system and implore the organism to react. In other words, the old adage of "think before you act" is not always realistic or achievable for a system compromised by unsustainable levels of stress. Many people of all ages are not structurally equipped to employ executive function before speaking or acting, due to a variety of factors, most of which are not within the individual's control. This is why emotional regulation is put forth as a "learned skill," not an inborn trait, in the lesson immediately following.

The skill of listening closely to and reflecting upon our emotional state is an important part of regulation: Just as we must learn to identify and regulate symptoms of stress, we also must learn how to identify and

regulate emotions. This means that when we feel sad, we recognize that we are sad. When we think we are angry, we take a moment to look and see: "Am I truly angry? Could this be anger concealing hurt?" When we know we are putting on a happy face even when we feel awful, we wonder, "Why do I feel the need to act one way when I feel another?" Often emotional regulation requires learning to ask ourselves questions, and then learning the honest answers to those questions.

If we take our thoughts and emotions at face value, we might accept them as immovable truths. Emotions, however, are often built upon something deeper. Getting to know our emotions—and how they express themselves in the body, breath, thought patterns, habits, and behaviors—is a critical underpinning of mindfulness practice. It allows us to contextualize and recontextualize our experience of ourselves, others, and the world.

Unit 4 closes out with a two-part exploration of neuroplasticity and habits. Our habits shape our brains from the time we are born. Billions of brain neurons begin to wire together with each experience and movement that we make, from the time we roll over to the day we say our first word. This wiring continues throughout our lives. As we repeat habits, the wiring becomes reinforced. This is true for both positive and negative habits. By identifying our habits, reinforcing the ones that we wish to keep, and weakening the ones we wish to shed, we become the architects of our own brains. Being able to choose and stick to even one health-supporting habit can support emotional regulation, repattern dysregulation, and wring out excess stress.

The final lesson sets the instructor and students up for Unit 5, in which we take stock of the range of health and wellness strategies and techniques students have acquired over the past four units.

Essential Questions

What is the connection between stress and emotional regulation or dysregulation?

What is the connection between mindfulness and emotional regulation?

What is the connection between mindfulness and habit modification or formation?

How does emotional regulation enable us to develop and maintain healthy habits?

Enduring Understandings

Self-regulation is a learned habit that can foster balance in the body and mind.

Habits can have positive or negative effects on health, behavior, and relationships.

Mindfulness can help us form habits that will best support our health and wellness.

Learning Objectives

Students will be able to do the following...

4.1 Homeostasis

Content

- Define homeostasis.
- Identify external factors that affect how they feel internally.

Posture

- Apply balanced effort in postures.

4.2 Homeostasis and Stress

Content

- Understand the difference between an appropriate level of stress and an inappropriate level of stress.
- Distinguish between areas of life that they can control and areas of life that they cannot control.

Posture

- Notice and identify appropriate stress as experienced in challenge postures.

4.3 Processing Stress

Content

- Identify the anatomical location of the limbic system and the prefrontal cortex.
- List the basic functions of the limbic system and the prefrontal cortex.

Posture

- Utilize movement practice as an opportunity for stress reduction and management.

4.4 Identifying and Regulating Stress

Content

- Define "stress regulation."
- Describe and discuss the benefits of stress regulation in terms relevant to their lives.

Posture

- Cite two postures that enable them to identify stress signals in the body and/or mind.
- Cite two mindfulness exercises that might help them regulate stress.

4.5 Emotional Regulation

Content

- Define emotional regulation and provide examples of how emotional regulation helps us appropriately respond to our environment.
- Correlate mindfulness practices with enhanced ability to regulate emotions.

Posture

- Describe an emotionally regulated response to a challenging pose.

4.6 Balance and Boundaries

Content

- Compare and contrast the experiences of physical, mental, and emotional balance and imbalance.

Posture

- Demonstrate mindful attention to boundaries throughout Active Engagement.
- Independently demonstrate one balancing pose from Unit 3.

4.7 Habits and Neuroplasticity

Content

- Define neuroplasticity.
- Review the definition of habit.
- Describe how neuroplasticity and habit-formation are related.

Posture

- Mindfully navigate variations in transitions and form.

4.8 Making and Breaking Habits

Content

- Describe how habits can have positive or negative effects on our behavior and our relationships.
- Identify one habit that contributes to a feeling of balance.
- Identify one habit that contributes to a feeling of imbalance.

Posture

- List three positive habits they have developed in health and wellness class.
- Combine old and new Unit 4 postures into an intelligent sequence.

Unit 4
Active Engagement

Each unit will follow the same format of sequencing, in the following order:

Mindfulness Practice
(at beginning and/or after Closing Sequence)
Warm-up
Opening Sequence A
Opening Sequence B
Standing
Seated
Strength
Backbends
Finishing
Closing Sequence
Rest

In each unit you will find poses that are expected to be covered in order to achieve movement objectives. In Unit 4, these postures are as follows:

Wide Angle 2 and 4
Eagle
Seated Spinal Twist
Seated Wide Angle
Supernova
Donut Roll
Eight Angle
Superbow
Partner Boat
Supine Split

Add in postures from previous units to fill out your sequence. You can gradually add in new postures from the above list or start with simpler versions of all postures to create a sequence. Students will work toward becoming proficient in these new postures by the end of the unit. Toward the end of Unit 4, your sequence might look something like the one below:

Warm-up (optional)
Opening Sequence A
Rotated Chair into Big Toe
Warrior 1 into Warrior 2
Wide Angle 2 and 4
Forest
Eagle
One-legged Side Balance
Butterfly
Seated Spinal Twist
Rolling Rock into Boat x 3
Seated Wide Angle
Supernova
Donut Roll
Eight Angle
Superhero
Bow
Super Bow
Child
Shoulder stand or Legs up the Wall
Supine Split
Closing Sequence
Mindfulness Practice: Kindness Project
Rest

Extensions of Learned Postures

Spend the first two months establishing a clear class structure (routines and procedures) and building a foundational base of postures. Slowly begin to add variety into the movement phase of class.

Adding in extensions (variations on familiar poses) is a way to keep the sequences lively, creative, and exciting while still maintaining structure and routine and emphasizing repetition. Repetition is a critical component of mindful movement practice, and it supports coordination, strength, flexibility, and body awareness.

Extension postures can also be useful in increasing or maintaining enthusiasm and engagement from second- or third-year health and wellness students or in offering an all-level experience for classes that include beginners and more intermediate or advanced practitioners.

Instructors are encouraged to adhere to unit sequences as closely as possible but also to meet the students where they are. For instance, if students seem tired or lethargic, incorporate more standing postures and positions where the head is lifted, not lowered.

Below are examples of extensions of postures.

Opening Sequence A and B

- Count steps together
- One student leads
- One time independent
- Sleeping or Supine Opening A
- Opening Sequence B
  - — Warrior 1 into Warrior 2 into Reverse Warrior 2

Tree

- Side Tree
- Tree into Warrior 3
- Last Tree Standing (Tree Challenge)
- Partner Tree in groups of 2, 3, and 4
- Partner Tree

Downdog

- Downdog Split
  - — Twisted Dog
  - — One-Legged Downdog, knee-to-nose plank, x 3 each side
  - — Donkey Kicks (inhale jump, exhale down)
  - — Baby Donkey Kicks (start in a little ball, little hops up)
  - — Horse Kick (one leg at a time)
  - — Three-legged Dog with Curl-in OR Curling Dog (knee-to-nose and/or knee-to-elbow)
  - — Downdog to Handstand
  - — Mountain Climbers or Prancing Dog or Dog on a Bicycle
  - — Frog (Downdog to Squat to Downdog, repeat)
  - — Downdog to Plank Twist
  - — Alternate Arm/Leg Lift
  - — Cat back from Downdog into Plank

Side Angle

- Half bind with arm around thigh
- Both arms up (difficult)
- Reverse Warrior to Side Angle
- Warrior 1, Warrior 2, Reverse Warrior, Side Angle (hold Side Angle)
- Hand inside or outside foot
- "The Thinker"

Warrior 1

- Hands together
- Hands apart
- Opposite hands on opposite elbows
- Upper body twist with arms in T
- Cactus arms
- Warrior 1 to High Lunge to Warrior 3
- Chair to High Lunge to Warrior 1
- Hands clasped behind back, forward bend, head inside front foot

Lunge

- Low or High Lunge, changing legs by jumping back and forth x 4
- Changing sides, feet to outside of hand

Boat

- Sinking or Half Boat
- Twisted Boat

Child

- Knees apart
- Bent elbows, hands on shoulders
- Extend arms, walk hands to right/left, side bend child's pose

Triangle

- Reverse Triangle/Triangle, x 3
- Bound Triangle
- Jumping Jacks in between
- Mountain to Star to Triangle and back

Plank

- One-legged Plank
- Hand-to-shoulder plank
- Inclined Plane
- Plank Push-up (Inhale plank, exhale bend elbows)
- Knees to opposite arms, Mountain Climber
- Supine Plank

Side Plank

- Side Plank 1 and 2
- Side Tree Plank
- Side Tree Plank, one leg lifted
- Seated Tree into Side Plank
- Side Plank (rainbow/tree)

Jump Back/Jump Through

- Rolling into Floating Lotus
- Blocks to lift up

Pointing Dog

- Pointing Dog, knee to nose x 3
- Pointing Dog, right elbow to left knee, both sides, x 3
- Half Pointing Dog/Half Bow

Warrior 3 Extensions

- High Lunge with Cow-Face Arms into Warrior 3
- Intense Stretch
- Hands interlaced behind back
- Hands pressed together behind back

Bridge and Wheel

- One-legged Bridge/Wheel

4.1 Vocabulary

Homeostasis

Lesson 1
Homeostasis

4.1 Objectives

Students will be able to do the following:

- **Content**
  - — Define homeostasis.
  - — Identify external factors that affect how they feel internally.
- **Posture**
  - — Apply balanced effort in postures.

4.1 Guiding Questions

- *What are some external factors that might influence your internal homeostasis (sense of balance)?*
- *How does it feel to be in balance? To be imbalanced?*

4.1 Connect

In Unit 1, we used the Tripod as a means for finding stability in our health and wellness practice. Posture, breath, and gaze are the three places toward which we can direct our attention, whether we are working on a posture or working through a challenging life experience. In this lesson, we will discuss the difference between feeling balanced and imbalanced in our daily lives, and we will explore these feelings through movement and breath.

We will also deepen and expand our understanding of many concepts presented in Unit 3: Power of the Brain-Body Connection*. In that unit, we examined the brain, the nervous system, and the physiological domino effect of stress.*

4.1 Teach

In Unit 4, we will learn more about the relationship between balance and stress, how we can manage stress in order to support our own health and wellness, and how to modify and create habits in response to the actual circumstances of our lives. In this lesson and lessons following, we will learn about and apply the principle of homeostasis, though not in strictly biological or technical terms.

Homeostasis is "the tendency of the body to seek and maintain a condition of balance or equilibrium within its internal environments, even when faced with external changes." This implies that homeostasis is not a static state, but rather something we are constantly moving toward or away from. Our bodily systems will naturally attempt to maintain homeostasis by involuntarily regulating our heart rate and our internal temperature.

The body is often faced with external changes. What are some external factors that might influence your internal homeostasis (sense of balance)? Weather, time of day, the food we put in our bodies, the time and energy we spend on different activities, relationships, technology, schoolwork, sports: these are some examples of external factors that are likely to have an impact on how we are functioning, both physically and emotionally.

One of the goals of our health and wellness practice is to learn how to move toward a sense of balance even when the internal and external environments are not necessarily in harmony.

4.1 Active Engagement

Let's focus on bringing balanced effort to posture practice. In each shape, notice whether you are expending more energy than necessary. Perhaps a posture that was once difficult for you has become easier, and you can relax into it. Also notice if you are extending yourself too much in a particular direction. See if you can find dynamic action in each pose (e.g., grounding down to lift up in Tree or pressing the back foot down and reaching through the extended arm in Side Angle).

4.1 Link

We've discussed how balance isn't just about being able to hold a posture without falling over. Balance is a process. As your lives get busier and fuller, it is worth engaging with that process and noticing what throws you off, causing you to move farther away from homeostasis. In our next lesson, we will discuss how stress is an essential part of homeostasis. We will also discuss what tends to increase our stress levels and knock us off balance.

4.1 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

4.1 Home Practice

Until we meet again, check in with yourself throughout each day and try to get a read on the question, "Am I moving toward or away from balance?"

4.2 Vocabulary

Control
Scale

Lesson 2
Homeostasis and Stress

4.2 Overarching Learning Objective

Students will be able to do the following:

- **Content**
  - — Understand the difference between an appropriate level of stress and an inappropriate level of stress.
  - — Distinguish between areas of life that they can control and areas of life that they cannot control.
- **Posture**
  - — Notice and identify appropriate stress as experienced in challenge postures.

4.2 Materials (See Active Engagement)

- Large piece of paper, chalkboard, whiteboard, or Smart Board
- Marker (erasable or permanent), chalk, or Smart Board pen

4.2 Guiding Questions

- *What are some things you have control over?*
- *What is out of your control?*

4.2 Connect

Our previous lesson focused on defining homeostasis. Homeostasis is "the tendency of the body to seek and maintain a condition of balance or equilibrium within its internal environments, even when faced with external changes."[1] Remember, balance is not a static state, but rather something we are constantly moving toward or away from. In this lesson, we will reconsider the relationship between stress and balance via the question of control.

4.2 Teach

When external factors disturb your internal conditions, the body and brain will try to bring you back into balance. One of the preconditions for moving toward balance is, to some degree, the experience of stress. Stress can be defined as "the non-specific response of the body to any demand for change."[2]

As we know from our Unit 3 studies, stress is a natural process that can contribute either to a sense of balance or a sense of imbalance.[3] An appropriate amount helps us thrive, while an inappropriate amount can cause us to feel disorganized, exhausted, and unwell.

In order to support internal balance, it is important to identify what we have control over versus what we do not have control over. What are some things you have control over? What is out of your control? If we are able to identify what aspects of our health and wellness we have control over, we will be better prepared to manage external sources of stress, which are usually out of our control.

4.2 Active Engagement

Draw the two pans of a balance scale (like the scales of justice) on large piece of paper, chalkboard, whiteboard,

1: Dictionary.com, http://www.dictionary.com/browse/homeostasis
2: "What is stress?" The American Institute of Stress, http://www.stress.org/what-is-stress/.
3: Kiecolt-Glaser, Krantz, and Thom, "How stress affects your health," American Psychological Association, 2013. http://www.apa.org/helpcenter/stress.aspx.

or Smart Board. Over one pan, write "What I Control." Over the second pan, write "What I Cannot Control." Add students' examples of what is within and outside of their control to the respective pans.

Movement and Breath

Our health and wellness practices aim to both reduce present stress and get us ready for handling future stress. As we practice, notice when you begin to feel stress in the body. Can you feel muscles stretching and strengthening? Can you feel your lung capacity increase as you breathe deeply through a strenuous posture? How do you respond to that stress?

4.2 Link

We've learned that excess disturbance of internal balance is what we've come to know as being stressed out. By balancing and harmonizing certain areas of our lives, we can start to become less disturbed by external factors. In our next lesson, we will return to the brain to discover how its different parts produce and process stress reactions and learn how to engage with these parts in order to create more mental and emotional balance.

4.2 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

4.2 Home Practice

Until we meet again, continue to check in with your personal stress triggers. We initiated this line of inquiry in Unit 3, Lesson 8. Let's see if the same things continue to create a feeling of being stressed out or if there are new stress culprits. Also note whether you have any habitual ways of dealing with feeling stressed out. We will have an ongoing conversation about this interplay between external stress triggers and internal responses.

Lesson 3
Processing Stress

4.3 Overarching Learning Objective

Students will be able to do the following:

- **Content**
  - — Identify the anatomical locations of the limbic system and the prefrontal cortex.
  - — List the basic functions of the limbic system and the prefrontal cortex.
- **Posture**
  - — Utilize movement practice as an opportunity for stress reduction and management.

4.3 Guiding Questions

- *When do you tend to feel emotionally agitated?*
- *When do you tend to feel mentally stressed?*
- *Is there a clear distinction between emotional and mental stress?*

4.3 Connect

In the previous lesson, we learned that the body is constantly adapting to fluctuations in environmental circumstances. When the body or the brain begin to feel the effects of stress, the organism is prompted to regain homeostasis. Excessive disturbance of internal homeostasis creates a feeling of being stressed out. By balancing and harmonizing certain areas of our lives, we can start to become less disturbed by external factors.

In this lesson, we will revisit two areas of the brain that process information and help us regulate stress: the prefrontal cortex (the "intellectual" brain) and the limbic system (the "emotional" brain). We will also expand upon our discussion of how movement and breath help us process physical, emotional, and mental stress.

4.3 Teach

The word "limbic" derives from the word "limbus," which translates as "the border or margin of a structure." The limbic system is a grouping of structures positioned between the "back brain" (brain stem and cerebellum) and the "front brain" (prefrontal cortex). These structures participate in a number of functions, such as associative memory, survival instincts, emotional processing, pleasure, reward, and addiction.

As we discovered in Unit 3, the limbic system is closely linked to the autonomic nervous system (sympathetic and parasympathetic), as well as to the endocrine system, which is responsible for circulating, releasing, and regulating hormones. This means that the activity in the limbic system influences whether we are in a state of relaxation (parasympathetic) or a state of action (sympathetic). One of the best things we can do to release excess stress hormones and maintain balance between sympathetic and parasympathetic functions is to move our bodies regularly and vigorously.

The prefrontal cortex (PFC) regulates decision-making, planning, and reasoning. It helps us consciously interpret and organize information that we receive from other parts of the brain, such as the limbic system. It is also where mindfulness, a relaxed and engaged state of attention, occurs. Mindfulness is one of the most effective practices for maintaining a healthy,

resilient PFC and for ensuring its connection to the limbic system.

4.3 Active Engagement

One of the best things we can do for stress regulation and reduction is exercise. Exercise helps our bodies release tension and our minds process experiences. Moving and breathing boost circulation, which is crucial for the thorough dissolution of excess stress hormones. As we work with today's sequence, keep in mind that you are not only actively reducing stress that is currently accumulated in your body but also laying the groundwork for future stress management and reduction.

4.3 Link

The pathways connecting the limbic system and the prefrontal cortex must be clear and strong in order for us to effectively process sensory input and emotions. In our next lesson, we will investigate how a balanced relationship between the limbic system and the PFC can support the ability to regulate strong emotions.

4.3 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

4.3 Home Practice

Just like our bodies need rest from physical activity, our brains require recuperation time too. Until we meet again, see if you can find time in your day, even if it is only a few minutes, to rest your brain. This does not mean zoning out on the computer or another device, talking on the phone, eating, or reading. Simply sit, breathe, and do nothing. Allow your emotional brain to take a break from feeling and your intellectual brain to take a break from thinking. Taking the occasional brain break is vital to stress regulation.

4.4 Vocabulary

Dysregulated
Identify
Regulate

Lesson 4

Identifying and Regulating Stress

4.4 Objectives

Students will be able to do the following:

- **Content**
  - Define "stress regulation."
  - Describe and discuss the benefits of stress regulation in terms relevant to their lives.
- **Posture**
  - Cite two postures that enable them to identify stress signals in the body and/or mind.
  - Cite two mindfulness exercises that might help them regulate stress.

4.4 Guiding Questions

- *What is stress regulation?*
- *What is the relationship between homeostasis and stress regulation?*
- *When are your words or actions motivated by strong or sudden emotion? By reason and rationality?*

4.4 Connect

Throughout Unit 3 and into Unit 4, we have been listening to the ongoing conversation between the limbic system (the "emotional" brain) and the prefrontal cortex (the "intellectual" brain). These parts of our brain are crucial players in the game of everyday life, especially when it comes to navigating and regulating stress.

4.4 Teach

The site of an organism's stress response is not restricted to just one part of the brain or body. If the limbic system is triggered, we might begin to feel emotionally stressed (overwhelmed by feelings, unable to identify how or what we feel, or unable to make coherent decisions about how to express those feelings). The limbic system is primed to react swiftly to its environment, even when the whole brain hasn't had the opportunity to organize and interpret what is happening. This means that sights, sounds, smells, tastes, and tactile sensations can amp up the limbic system and implore the organism to react. Sometimes, stress signals are telling us something important. Under certain circumstances, acting quickly and unthinkingly is important for our survival: jumping out of the way of a speeding car or a flying object, or thinking "Fire!" at the first whiff of smoke.[1]

Intellectual stress can be caused by an overactive prefrontal cortex. If you are worried about an event looming in the future, a test, an athletic competition, or a conversation with a friend you've been fighting with, you might ruminate to the point of distress.[2]

Cyclical thinking is when the same repetitive patterns of thought occur to you over and over.

1: Childre, Cryer, and McCraty, "Pull the Plug on Stress," *Harvard Business Review*, 2003. https://hbr.org/2003/07/pull-the-plug-on-stress
2: Law, Bridget Murray. "Probing the depression-rumination cycle," American Psychological Association, 2005. http://www.apa.org/monitor/nov05/cycle.aspx.

In order to manage stress, first you must be able to identify its symptoms. External stimuli (such as sights, smells, words, tastes, or sensations), strong emotions, and thoughts can all catalyze a cascade of stress responses in the brain and body. Occasionally—or frequently, depending on how a particular brain works—the brain and the body can overreact to stimuli, emotion, or thought. If this happens often enough, the organism's stress response becomes dysregulated. Developing a relaxed and engaged state of attention (mindfulness) helps us regulate stress by mediating activity in both the limbic system and the prefrontal cortex.[1]

When we are able to make conscious, deliberate decisions in response to experiences, thoughts, and emotions, we ultimately feel less anxious and more at ease. Our health and wellness practices, especially our mindfulness exercises, help us tune in to what is happening in our environments, in our bodies, and in our minds. As we become more adept at listening in, the currents between the limbic system and the prefrontal cortex are strengthened. This allows the brain and the body to distinguish between legitimate stressors and illegitimate stressors, thereby regulating stress.

4.4 Active Engagement

In health and wellness class, we learn how to notice what is happening in the body, slow down the breath, and observe the mind. These are learned skills that contribute to sound decision-making in both mundane and stressful situations. See if you can bring your awareness to the play between limbic and prefrontal cortex or the play between emotional response (the fear of falling, for example, while in a balance posture) and reasoning (the decision to redistribute your weight in order to avoid falling).

1: Congleton, Holzel, and Lazar, "Mindfulness Can Literally Change Your Brain," *Harvard Business Review*, 2015. https://hbr.org/2015/01/mindfulness-can-literally-change-your-brain.

4.4 Link

Our health and wellness practices provide training not only for the body, but for all parts of the brain. Part of this training is coming to understand the exchange between our internal experiences and our external environments and then approaching these intersecting planes with an attitude of mindfulness. As social creatures, we are constantly affected by what is happening around us. In turn, what is happening around us is affected by our own speech and actions. In our next lesson, we will discuss a multifaceted physical-mental-emotional process that can be affected by stress, known as "emotional regulation."

4.4 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

4.4 Home Practice

Just as you did during our movement practice, see if you can bring your awareness to the play between limbic and prefrontal cortex or the play between emotional response and reasoning in day-to-day life. When are your words or actions motivated by strong or sudden emotion? When are your words or actions motivated by reason and rationality? Are there particular people or circumstances that set the limbic system or the prefrontal cortex in motion?

4.5 Vocabulary

Emotional regulation

Lesson 5
Emotional Regulation

4.5 Objectives

Students will be able to do the following:

- **Content**
  - — Define emotional regulation and provide examples of how emotional regulation helps us appropriately respond to our environments.
  - — Correlate mindfulness practices with an enhanced ability to regulate emotions.
- **Posture**
  - — Describe an emotionally regulated response to a challenging pose.

4.5 Materials

- Simple illustration of radio tower (optional)—see image at end of lesson

4.5 Guiding Questions

- *When do you feel emotionally regulated?*
- *When do you feel emotionally dysregulated?*
- *Why is emotional regulation important for our health and wellness?*
- *Why is emotional regulation a key component of any healthy relationship?*
- *Which of our mindfulness practices might assist us in the process of emotional regulation?*

4.5 Connect

As social creatures, we are constantly affected by what is happening around us. In turn, what is happening around us is affected by our own speech and actions. In this lesson, we will discuss a multifaceted physical-mental-emotional process that can be affected by stress, known as "emotional regulation."

4.5 Teach

Being able to mindfully identify and appropriately express emotions is called emotional regulation. Balanced emotional regulation entails an intricately choreographed dance between feelings, thoughts, physiological signals—such as heart rate and breath pattern—and nonverbal communication—such as body language and facial expression.[1] Both the limbic system and the prefrontal cortex participate in this multipart process, but the degree to which each is involved depends on each of our senses of emotional balance or lack thereof.

Have you ever felt sad or thought you were angry but looked happy? This image of a conflicted or fragmented emotional state is most likely one we can all relate to. Emotional regulation is one of the most important skills for leading a balanced life, but it is also one of the most difficult to learn. This is because the stability of our emotional lives has the potential to become dysregulated due to a variety of factors, most of which are not necessarily within our control.[2]

1: Saudino and Wang, "Emotional Regulation and Stress," *Journal of Adult Development*, 2011. http://link.springer.com/article/10.1007%2Fs10804-010-9114-7#page-2.
2: Bessel Van der Kolk, "Developmental trauma disorder: Towards a rational diagnosis for children with complex trauma histories," *Psychiatric Annals*, 2005. http://www.traumacenter.org/products/pdf_files/preprint_dev_trauma_disorder.pdf.

Imagine a radio tower. A radio tower is engineered to withstand environmental disturbances. Its peak appears narrow and delicate. Its foundation appears strong and fortified, with the very base of each leg rooted deep in the ground. While the top of the tower might sway or rattle with each strong gust of wind, the sturdiness of the foundation prevents the whole structure from toppling over. Building emotional regulation provides a similar effect. There are changes and challenges that may cause our bodies and minds to shift and fluctuate, but deep down we know we can weather any obstacle.

Just as we must learn to identify and regulate symptoms of stress, we also must learn how to identify and regulate emotions. This means that when we feel sad, we recognize that we are sad. When we think we are angry, we take a moment to look and see: "Am I truly angry? Or could this be anger concealing hurt?" When we know we are putting on a happy face even when we feel awful, we wonder, "Why do I feel the need to act one way when I feel another?" Often emotional regulation requires learning to ask ourselves questions and then learning the honest answers to those questions.

Studies have shown that healthy relationships are important to longevity, or the potential for living a long life.[1] Emotional regulation is a key underpinning of any healthy relationship, since it also entails being able to perceive, understand, and accept the feelings and thoughts of others. Empathy and compassion are largely functions of the prefrontal cortex. When the limbic system overrides the prefrontal cortex, it can be difficult to empathize with another person's experience.

1: Veronique Greenwood, "The Longevity Project: Decades of Data Reveal Paths to Long life," *The Atlantic*, 2011. http://www.theatlantic.com/health/archive/2011/03/the-longevity-project-decades-of-data-reveal-paths-to-long-life/72290/.

4.5 Active Engagement

How can we use (and improve) emotional regulation in our wellness practice? Have you ever felt frustrated in a challenging posture? What would an emotionally regulated response look like in this scenario?

Physical regulation is a good place to begin the process of emotional regulation. Through our practices of mindful breath and movement or our application of STOP, we learn, again and again, what it feels like to move through our experiences in a thoughtful, nonreactive way.

4.5 Link

Our capacity for emotional regulation is not fixed. There are circumstances and forces that work against our ability to emotionally regulate, and there are practices available to us that will boost our ability to emotionally regulate. One such practice is the practice of discerning and setting boundaries, which we will explore in our next lesson.

4.5 Closing Routine

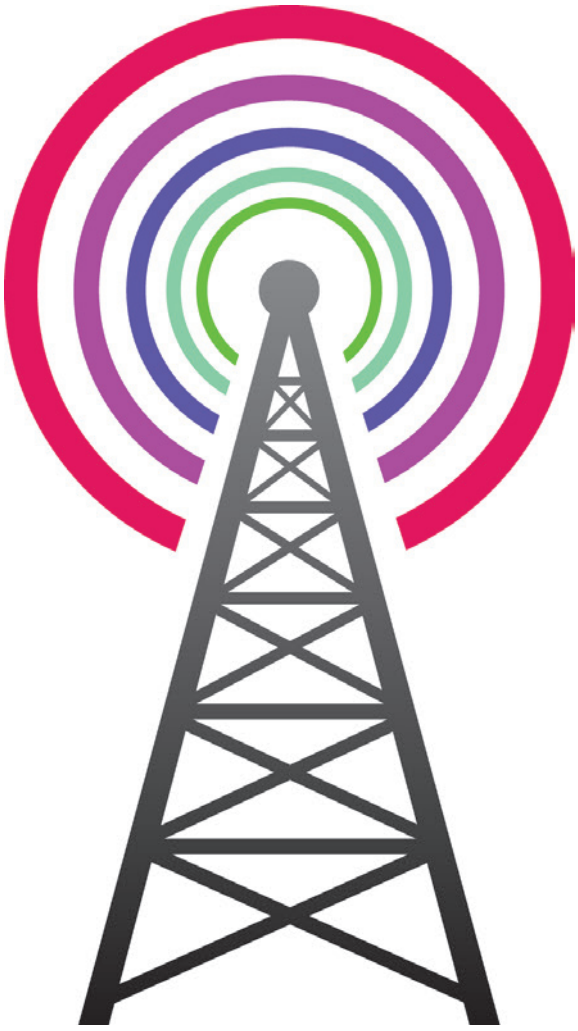
Reinforce the Closing Routine established in the first days/weeks of class.

4.5 Home Practice

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?

Unit 4

Lesson 5 Handout



4.6 Vocabulary

Resource
Skill

Lesson 6
Balance and Boundaries

4.6 Objectives

Students will be able to do the following:

- **Content**
  - Compare and contrast the experiences of physical, mental, and emotional balance and imbalance.
- **Posture**
  - Demonstrate mindful attention to boundaries throughout Active Engagement.
  - Independently demonstrate one balancing pose from Unit 3.

4.6 Materials

- 5 x 7 paper (for distribution), or large piece of paper, chalkboard, whiteboard, or Smart Board
- Pens (for distribution) or marker (erasable or permanent), chalk, or Smart Board pen

4.6 Guiding Questions

- *What is a boundary?*
- *Why are boundaries useful in maintaining personal balance?*
- *What is the relationship between mindfulness and setting boundaries?*

4.6 Connect

In our last lesson, we pondered the confluence of body, brain, stress, and emotions within the framework of regulation and dysregulation. In the following lesson, we will make further inquiries into the nature of personal balance, emotional regulation, and the benefits of boundaries.

4.6 Teach

As individuals, we possess physical, intellectual, and emotional resources. Just as the earth contains only so much water, we are given only so much time and energy to distribute across the many realms of our lives. We can only be in one place at one time. We can only accomplish a certain number of tasks or fulfill a certain number of duties in our waking hours. We can only spend so much time taking more care of external responsibilities until our capacity for self-care becomes taxed.

Leading a balanced life means knowing when to expend energy on commitments and activities, when to say yes, and when to say no. One way we can create balance is by setting reasonable boundaries. A boundary is defined as "a line that marks the limits of an area." In this case, the "area" we are considering is our physical, mental, and emotional energy and attention. We are working with our own cache of resources, so we must choose the direction of our energy and attention wisely.

The best way to create healthy boundaries is to have an internal barometer for when to say yes and when to say no. Whether we realize it or not, we are constantly saying yes or no. For example, saying, "No, I will not go out for lunch because I really need to spend lunchtime in study hall," can have either a negative or positive domino effect on your time and energy reserves. The same is true for the following scenario: "Yes, I will take a break from my homework in order to eat a good meal." In either case, you are weighing the outcome of choosing one thing over another (studying over socializing during

lunch; eating a nourishing dinner over studying until bedtime) and hopefully making the decision that will restore your resources rather than deplete them. Understanding when, where, how, why, and around what to set boundaries is a learned habit and skill.

4.6 Active Engagement

Optional Activity: Students, alone or together, draw two pie graphs. Each section of the first pie graph represents a major area of everyday life: "School," "Friends," "Home," "Work," "Extracurricular," "Sports and Hobbies," etc. The size of each section should correspond approximately to the amount of time, energy, and attention they actually give to each area.

Each section of the second pie graph will represent the same areas, but the size of each section should reflect how much time, energy, and attention *they would rather give* to each area. Note any differences in the pie graphs. Discuss each area of life in terms of output versus input. *What are we putting in? What are we getting back?*

Movement and Breath

In our wellness practice, we get to experience how the body automatically sets boundaries. When we stretch in a posture and can't go any farther, this is an indication that the body and nervous system are setting a boundary. If we exceed our boundaries, the body will let us know in the form of pain, discomfort, or labored breathing. As we become more mindful of our limitations, we come to respect and honor them. With consistent observation, we might even notice our limitations change over time.

4.6 Link

Having a healthy read on our resource levels helps us make long-term beneficial choices. As in many health and wellness practices, setting clear, reasonable boundaries becomes easier the more we do it. In this sense, boundary-setting is a habit in favor of balance. In our next lesson, "Habits and Neuroplasticity," we will get into the nitty-gritty of habit modification and formation.

4.6 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

4.6 Home Practice

Begin to delineate your personal boundaries. This might take time, but we have acquired many tools to help us in our journeys toward more balanced lives. Common symptoms of stress and resource depletion may include fatigue, anxiety, or irritability. If and when you notice these symptoms, see if you can take a step back and utilize one of our many mindfulness practices.

4.7 Vocabulary

Neuroplasticity

Lesson 7

Habits and Neuroplasticity

4.7 Objectives

Students will be able to do the following:

- **Content**
  - — Define neuroplasticity.
  - — Review the definition of habit.
  - — Describe how neuroplasticity and habit modification and formation are related.
- **Posture**
  - — Mindfully navigate variations in transitions and form.

4.7 Guiding Questions

- *What is neuroplasticity?*
- *What is a habit?*
- *How does neuroplasticity contribute to the formation of new habits? Give an example.*

4.7 Connect

In Unit 3, we delved into various functions and physiological processes in the brain and nervous system, all of which shape our experience of ourselves and the world around us. Throughout our current unit, we have contemplated the associations between the body-brain connection in relation to stress, emotions, and balance.

4.7 Teach

In this lesson, we will discuss habits and how they are interwoven with a neurological process called neuroplasticity.[1]

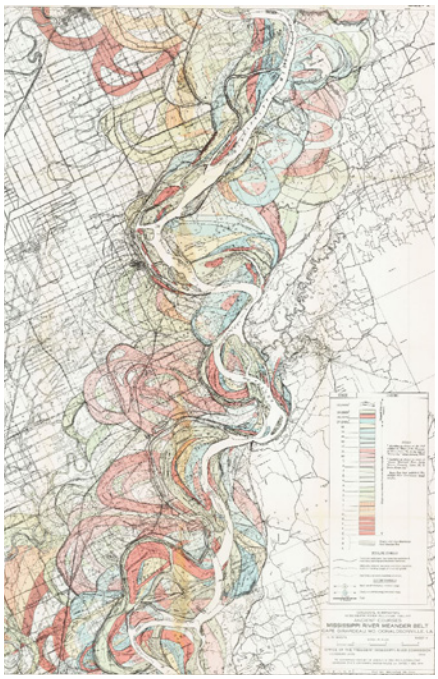
Let's review what a habit is. Habit are actions we repeat so often that they become automatic. Sometimes we pick up habits based on who we spend time with and the circumstances we are in. For instance, your family might have a habit of eating dinner at 7:00 every night, or you and your friends might have a habit of playing soccer after school on Fridays.

Scientists have found that new habits, ideas, and thoughts can be continually learned and changed throughout our entire lives. Sensory input prompts neurons to communicate, and if particular neurons communicate with one another often enough, a strong neural connection is made. Scientist Donald Hebb coined a phrase to describe this process: "Neurons that fire together, wire together." On the other hand, if those neurons someday cease to fire together, the wiring might weaken.

Neuroplasticity is a neurological process that allows us to learn, grow, and change. It is also a factor in making or breaking habits. Habits are learned patterns of behavior. Some patterns of behavior are helpful, some are neutral, and some are unhelpful.

1: Dan Siegel, *Brainstorm*. "The brain is an amazing organ, capable of reorganizing itself by forming new neural connections throughout our lifetime. This phenomenon is called neuroplasticity. Our actions, thoughts and speech affect these neural connections. Through mindful repetition, we can be a brain architect."

When you make an effort to reroute your habitual thoughts and actions, your brain absorbs and adapts to this effort. The image at right illustrates the "meander belt" of a section of the Mississippi River.[1] It shows how the course of the river has changed over many, many years. This is a beautiful way of visualizing how neural currents are routed and rerouted depending on what kind of input your brain is exposed to. Imagine your neural connections as the flowing water and your brain as the land through which those currents are moving.



4.7 Active Engagement

Our health and wellness practices allow us to examine our habits. In Unit 2, we began to apply mindfulness of mind to our wellness exercises by noticing what and how we are thinking throughout the sequence. We have been working on approaching challenging postures with an attitude of curiosity rather than an attitude of defeat. This is one way of influencing the ever-changing landscape of our neurological maps.

In today's practice, we will be putting a slightly different spin on familiar postures in order to support dynamic flexibility in our brains and bodies. We can gently challenge our habits in simple ways every day, especially when it comes to how we move through space.

1: Harold Fisk, MIssissippi Meander Belt, 1944. http://www.radicalcartography.net/index.html?fisk'.

4.7 Link

When we commit ourselves to habits that support health and wellness, physiological changes can take place in the body, the brain, and the nervous system. This is why it is important to incorporate activities that support positive physical, mental, and emotional flexibility into daily life. In our next lesson, we will investigate how our habits help or hurt our ability to maintain balance. We will also begin a conversation, which will unfold into Unit 5, about how to effectively formulate and achieve new habits across and within different areas of our lives.

4.7 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

4.7 Home Practice

Throughout the next several days, take time to notice your personal habits. It might be difficult at first, since most of our habits are largely unconscious, but it will become easier to perceive habits the more you actively look for them. In our next class, we will share and discuss our respective habits and how they impact our health and wellness.

4.8 Vocabulary

Collective
Distraction
Formation
Malleable
Neutral
Unconscious

Lesson 8

Making and Breaking Habits

4.8 Objectives

Students will be able to do the following:

- **Content**
  - — Describe how habits can have positive or negative effects on our behaviors and relationships.
  - — Identify one habit that contributes to a feeling of balance.
  - — Identify one habit that contributes to a feeling of imbalance.
- **Posture**
  - — List three positive habits they have developed in health and wellness class.
  - — Combine old and new Unit 4 postures into an intelligent sequence.

4.8 Materials

- Index cards (one for each category, so multiple cards for each student)
- Pens or pencils
- Large notepad, whiteboard, chalkboard, or Smart Board
- Marker (permanent or erasable), chalk, or Smart Board pen

4.8 Guiding Questions

- *What are some of your current habits?*
- *What are some habits you would like to change?*
- *What are some habits you would like to acquire?*
- *What are some habits that have positive effects on your sense of balance?*
- *What are some habits that have negative effects on your sense of balance?*
- *What are some habits that support emotional regulation?*
- *What are some habits that support, and are supported by, mindfulness?*
- *Are there neutral habits?*

4.8 Connect

Our last lesson covered neuroplasticity and how it applies to habit formation. Do you remember what neuroplasticity means? Does anyone recall how neuroplasticity is tied to habits? Whenever we repeat an action or experience, we form a new neural connection in the brain. With enough repetition, this connection becomes fortified.

Our habits are not necessarily permanent. Our brains, ideas, beliefs, and habits are malleable and dependent on conditions. When we make an effort to reroute our habitual thoughts and actions, the brain absorbs and adapts to this effort. This is the nature of neuroplasticity.

4.8 Teach

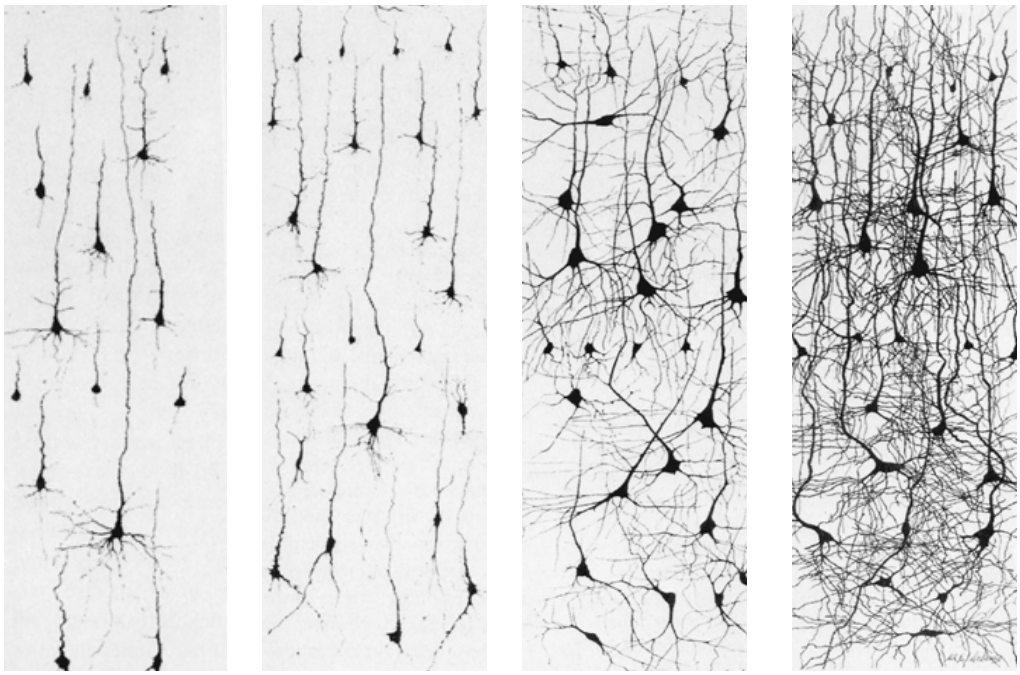
Today we will look back at the habits we have already formed before we look ahead to habits we would like to make or break. Once we are able to mindfully detect our habits, we can then decide whether they contribute to or take away from our pursuit of balance. We can become architects of our own brains by deliberately building positive habits and dismantling negative habits.

Over the course of many lessons, we have learned how to practice mindfulness of mind or notice what and how we are thinking. Now we will give our attention to the project of habit modification and habit formation. What are our current habits? What are some habits we'd like to change? What are some habits we'd like to acquire? Which of these habits, if any, support our health, wellness, and sense of balance?

For the most part, human beings function according to habit. Habits make up our daily routines, like eating meals at regular times, brushing our teeth, or walking down the same streets when we commute to and from school. We learn habits everywhere, at home, school, from our friends, or within the

particular religious or ethnic background we belong to. Because we do not consciously decide to pick up every habit we have, many of our habits are not apparent to us.

As we carry out new or habitual patterns of movement, behavior, and thought, neuroplasticity occurs within us. Below, you'll see several photographs of neural circuitry in the brain.[1] The leftmost image portrays the neural circuitry of a newborn. The second panel shows the neural circuitry of a three-month-old. The third panel illustrates the neural circuitry of a fifteen-month-old. The fourth panel displays the neural circuitry of a two-year-old. Which panel shows the greatest density in neural connectivity?



Newborn | 3 months | 15 months | 2 years

1: Handel, Steven. "Mindfulness Is Self-Directed Neuroplasticity," The Emotion Machine, 2011. http://www.theemotionmachine.com/mindfulness-and-neuroplasticity.

As a person ages, the brain's wiring becomes increasingly more complex and interconnected. Neuroplasticity is what allows us to learn from our experiences and transfer that understanding to other experiences. Our first years of life entail huge transformations in the brain, but our neural networks don't stop growing and proliferating when we become adults. In fact, these networks shape-shift until the day you die.

As we learned in Unit 3, the child brain and the teenage brain are the most "neuroplastic." This means they are primed for learning and wide open to environmental stimuli and input. Childhood and adolescence are the best times of life to learn skills, pick up information, and form beneficial habits.

4.8 Active Engagement

Let's share and discuss our respective habits and how they impact our health and wellness. We can think of our habits as being productive and positive when they bring us into balance and unproductive and negative when they produce an imbalance or a feeling of instability or confusion.

Optional Activity: Create a taxonomy of habits. Establish categories of habits (e.g., Physical, Mental, Emotional, Practical, Academic, Social/Collective, Ethical, Family, Personal, Positive, Negative, Neutral). Ask students to write down or verbally share habits they would like to make or break. Select a habit from students' verbal or written responses. Write selected habits on a surface that is visible to the entire class (large notepad, chalkboard, whiteboard, or Smart Board). As a class, decide whether each habit in each category is likely to bring about a feeling of balance or imbalance.

Movement and Breath

Health and wellness practices help us perceive previously invisible or unconscious habits of our minds and bodies. As we practice today, let's see if we can strengthen our

habit of moving from distraction to attention through the application of our handy Tripod. Changing our mental habits in relation to our wellness practice can be as simple as noticing where our thoughts go while we are in a challenging pose and quietly bringing our attention back to the breath.

4.8 Link

Today we observed the habits we already have and discussed whether they have a positive, neutral, or negative effect. When we bring mindfulness to established habits, we can begin the task of deciding which ones we would like to create. Some of the habits we create now will be beneficial throughout our lives, like eating healthy foods or getting enough sleep each night. In Unit 5, we will continue a more in-depth discussion about how to effectively formulate and achieve new habits across and within different areas of our lives.

4.8 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

4.8 Home Practice

Over the next week, continue to investigate and observe your daily habits and routines (including habitual thoughts, habitual speech, and habitual behaviors). Do you notice any habits that did not occur to you today? Is there another category of habits you'd like to add to our list?

The health and wellness instructor should formulate a unit review based on student comprehension of Essential Questions and Enduring Understandings and fulfillment of Objectives.

Unit 4
Review

Movement Lab and Assessment Activities:
Review and assess students' knowledge.

Possible activities:

- Independent Practice
- Partner Poses
- Student Sequencing
- Inventor's Club: Name It, Draw It, Teach It (Invent a new pose, then teach the steps that lead into and out of the pose)
- Freeze Dance
- Games
- Storytelling

Unit 4
Glossary

C

Collective: shared by a group

Control: the power to influence or direct behavior or the course of events

D

Distraction: a thing that prevents someone from giving his/her full attention to something else

Dysregulation: abnormality or impairment in the regulation of a metabolic, physiological, or psychological process

E

Emotional regulation: a complex process that involves initiating, inhibiting, or modulating one's state or behavior in a given situation

F

Formation: the action of making or process of being made

H

Homeostasis: the tendency of the body to seek and maintain a condition of balance or equilibrium within its internal environments, even when faced with external changes[1]

I

Identify: establish or indicate who or what someone or something is

M

Malleable: easily influenced; pliable

N

Neuroplasticity: the brain's ability to organize itself by forming new neural connections throughout life

Neutral: impartial; neither positive nor negative

R

Regulate: control or maintain the rate or speed of a process so that it operates properly

S

Scale: an instrument for weighing

U

Unconscious: not conscious; done or existing without your realizing it

1: Dictionary.com, http://www.dictionary.com/browse/homeostasis

Unit 5

Tool Kit for a Balanced Life

Unit Description and Outline

In Unit 5, we begin to move from concrete practices and identification of stressors, moods, physiology, and strategy to understanding what underpins the way we see ourselves as human beings. We begin to look at wellness as an ongoing process and not a collection of discrete practices.

In earlier lessons, we spoke of wellness as a habit and taught different techniques for effective habit identification and formation. In Unit 5, we advance from considering *why* something might be good for us to learning *how* to discern, for oneself, how habits emerge in various areas of everyday life and how these areas of everyday life are inextricably connected with one another.

Beginning in Lesson 1, we define four simple steps that aim to help students define and work toward goals they wish to achieve. These four steps are *motivation*, *preparation*, *repetition*, and *perseverance*. Personalization, independence, and empowerment are the overarching themes of this unit, and lesson by lesson we move through the different ways that students can take ownership of their own health and wellness. Finally, the closing lesson offers students an opportunity to actively implement and express their learning through designing their own lesson plans using the framework of backward design.

Lesson 2, "Movement, Play, and Socialization," is an externalized take on "Move, Breathe, Rest, Repeat" between the importance of social connections to our personal and shared health and wellness. If we become too inward-focused, we risk isolating ourselves from the world around us. Conversely, if we are too social and lack boundaries or respect for introspection, we risk not gaining a deeper sense of inner purpose or fulfillment. Movement, play, laughter, and being social all breed creativity, confidence, happiness, and an increased capacity for learning. Why? Because the mind learns best when it is open and relaxed, and a mind that struggles to learn is often one beset by stress, anxiety, and tension.

In our hyperactive, hyper-productive culture, some of the most underappreciated, universally beneficial habits are those associated with sleep and rest. Proper physical growth, tissue repair, consolidation of memory, and many other physiological and neurological processes all depend on adequate amounts of sleep and rest. While sleep is one of the most mundane yet vital parts of life, many students are not aware of why it is so important and are likely to not get enough of it. In Lesson 3, we cover the physiological, psychological, and emotional benefits of getting enough sleep, as well as how to recharge our bodies through midday active relaxation. As part of the active engagement portion of this lesson, students are given the opportunity to brainstorm strategies for improving their sleep and active relaxation routines.

Boredom and daydreaming are two sides of the same coin, separated merely by perception. Teenagers often complain of being bored, or label unpleasant or tedious tasks or activities as boring. On the other hand, adolescence is largely characterized by daydreaming. In Lesson 4, we draw a correlation between the creative and reflective values of both boredom and daydreaming. Where do these two highly common tendencies of the mind fall on the spectrum of experience? Are they useful? Wasteful? Do they help or hinder learning? We argue that boredom and daydreaming can serve as fertile ground for some of our best, most unexpected creative thinking. Albert Einstein, Benjamin Franklin, and Steve Jobs all espoused the usefulness of letting the mind be free to wander and roam in order to escape the tyranny of logical, linear thought. A flexible, curious mind can take learning in unanticipated directions, leading us to wonderfully surprising outcomes.

Nutrition is the focus of Lesson 5, with the emphasis falling primarily on *how* to eat mindfully and less on *what* to eat. How does the body feel after consuming caffeine? Sugar? Oily or fried food? How does color-coding our plates help ensure comprehensive intake of nutrients? How does thoroughly chewing our food aid in digestion? What do appreciation and attention have to do with mealtimes? The formula is relatively straightforward: Make

a colorful plate, take a seat, take a moment to appreciate your food, chew carefully, and notice how different foods make you feel.

Lesson 6 combines and expands the categories of "inner life" and "outer life." The inner life is defined as that which encompasses our thoughts, emotions, dreams, ambitions, hopes, and desires, though it is largely influenced by external factors: the food we eat, the people we spend time with, and how much we sleep, to name just a few. The outer life is defined by the conditions we live in: our homes, families, neighborhoods, school communities, activities, and schedules. By identifying each of these facets, we recognize that the line between the inner and outer lives is blurred. As we consciously create healthy inner lives, our outer lives will reap the benefits, and vice versa.

The Kindness Project, the subject of Lesson 7, extends our embrace of self-care to include others. This practice reminds us that everyone around us wants the same things we do: to be happy, healthy, safe, and loved. When we have this understanding at the forefront of our minds, our interactions become imbued with a sense of interconnection and interdependence. Through the very simple act of sending good wishes toward ourselves, our friends and family, people who we do not know very well, and those with whom we struggle, we develop friendliness and compassion, and the rough edges in our minds begin to soften. As we have reiterated throughout this curriculum, health and wellness includes all aspects of the individual; kindness and compassion have been shown to have a remarkable impact on both physical and mental health.[1] We must also remember that kindness needs to be extended to the places where it is needed most. It can be easy to offer kindness to a friend or to a stranger, but sometimes much more difficult to extend it to ourselves, or to those whom we do not like or perceive as adversarial. Sending kindness in the privacy of our own minds is a safe, realistic way to begin extending compassionate thoughts to ourselves and others.

The trajectory of the health and wellness curriculum is one of gaining knowledge and experience about one's own body, nervous system, emotions, and mind, and then figuring out ways to apply that experience to real-life situations. In Lesson 8, we define that process as "gaining wisdom." Wisdom is not simply knowing things; it is accumulated through learning lessons and making mistakes, then investing the fruit of those experiences in our individual and collective growth.

Wisdom also relates to our individual daily needs. There is wisdom in knowing when we need to invest more effort or take it easy, when it's necessary to rest and restore, and when it's appropriate to be active, stimulated, and social. We can use mindfulness tools to help us pay attention to how we feel, what we think, and what we are doing. When we employ these tools in everyday life, we gain wisdom about how our inner life is reflected and refracted through the lens of our outer life. Through posture practice, we gain wisdom from the body's feedback, the breath's rhythm, and the mind's meanderings. Wisdom is physical, mental, emotional, social, and environmental.

1: Emma Seppala, "The Compassionate Mind: Science shows why it's healthy and how it spreads," Association for Psychological Science. http://www.psychologicalscience.org/index.php/publications/observer/2013/may-june-13/the-compassionate-mind.html

We arrive at the end of Unit 5 and the curriculum as a whole with Lesson 9: Backward Design. In this lesson, we explain to the students exactly how the authors of the curriculum approached deciding what to write and what to teach, and this was by determining the needs of the students (and teachers) in a public school environment. When we are traveling somewhere or entering into a complex, long-term project, it is important to know what our destination will be. Whether it's the grocery store, another country, a job site, or a lesson plan, it is important to be able to point toward that destination and say, "That's where I'm going." Life will introduce any number of obstacles, detours, and curveballs, but having a direction will help stabilize us in the face of change and adversity. Once we know where we are going, we can figure out the best way to get there. The overarching need that we identified in public school environments is that of stress management and reduction. Students and teachers negotiate numerous stressors every day, making the ability to mindfully identify, work with, and reduce stress an increasingly valuable and pragmatic skill. Empowering individuals and communities to establish sustainable habits and strategies for greater health, wellness, and happiness is the objective of this health and wellness curriculum.

Essential Questions

What is the relationship between our inner and outer lives?

How can we translate health and wellness principles and techniques to all areas of our lives?

What is the connection between mindfulness and inner life? Between mindfulness and outer life?

How can we continually transform information and experience into applied wisdom?

Enduring Understandings

A sustained commitment to health and wellness in all areas of life creates a sense of balance and a greater capacity for wisdom.

Learning Objectives

Students will be able to do the following...

5.1 The Architecture of Healthy Habits

Content

- List the key ingredients for forming new habits.

Posture

- Understand wellness practice as an ongoing process of habit observation, formation, and modification.

5.2 Movement, Play, and Socialization

Content

- Describe and discuss how to prioritize movement, play, and socialization.

Posture

- Experience Active Engagement as an opportunity to move, play, and socialize.

5.3 Sleep and Active Relaxation

Content

- Articulate the physical, intellectual, and emotional benefits of active relaxation.
- Articulate the physical, intellectual, and emotional benefits of proper sleep.
- Understand and describe the differences between sleep and active relaxation.

Posture

- Experience and understand the rest phase of Active Engagement as a transferrable practice of active relaxation.

5.4 Learn and Create

Content

- Identify and share personal habits that support learning and creativity.
- Identify and share personal habits that hinder learning and creativity.
- Identify and share one learning or creativity-related goal and the process required to achieve it.

Posture

- Notice instances of boredom or daydreaming during the physical practice.

5.5 Nutrition

Content

- Demonstrate an understanding of the basic principles of mindful eating.
- Draw up individual worksheets that map out goals for forming healthy eating habits.

Posture

- Demonstrate proficiency in postures learned thus far.
- Demonstrate preparedness for student teaching.

5.6 Inner and Outer Lives

Content

- Identify what habits and practices have a positive effect on our inner and outer lives.
- Describe how our inner state of balance and harmony can have a positive effect on others and our environment.

Posture

- Create a health and wellness practice that will illustrate the connection between outer and inner lives.

5.7 The Kindness Project

Content

- Describe and express ways to exhibit kindness toward themselves and others.
- Discuss and implement strategies for improving classroom and school climate.

Posture

- Identify three ways to bring friendliness, compassion, and equanimity into their health and wellness practice.

5.8 Wisdom

Content

- Define wisdom.
- Discuss how wisdom can be applied through positive choices and attitudes.

Posture

- Design a sequence of poses that encourages a state of paying attention.

5.9 Backward Design

Content

- Choose a personal outcome and design a pathway toward achieving it.
- Design and teach a well-rounded lesson on a specific wellness-related topic of interest (e.g., movement, play, socialization, active relaxation, sleep, learning, creativity, or nutrition).

Posture

- Demonstrate a strong understanding of how to structure a posture sequence.
- Demonstrate a strong understanding of breath count.
- Demonstrate a strong understanding of how to enter, hold, and exit the postures included in self-authored sequence.

Unit 5
Active Engagement

In the culminating unit of the curriculum, students will actively apply knowledge and experience gained over the course of the previous four units through lesson planning, sequence design, and student teaching.

Each sequence should resemble the following format of sequencing:

Intelligently structured movement sequence
Mindfulness Practice
(at beginning and/or after closing sequence)
Warm-up (2–3)
Opening Sequence A, B, or C
(the C stands for "create your own"!)
Standing (2–3)
Seated (2–3)
Strength (2–3)
Backbends (1–3)
Finishing (1–3)
Closing
Rest

In Unit 5, students will engage in the Movement Lab, where they will design sequences based on the below themes:

Energy
Rest
Focus
Balance
Endurance

Each unit includes postures that should be covered in order to achieve movement objectives. In Unit 5, these postures are as follows:

Whirligig
Lion
Hero
Side Bow
Partner Seated Sunrise/Sunset
Supine Butterfly
Partner Warrior 3
Turtle
Side Tree Plank
Upward Seated Wide Angle

Add in postures from previous units to fill out your sequence. You can gradually add in new postures from the above list or start with simpler versions of all postures to create a sequence. Students will work toward becoming proficient in these new postures by the end of the unit. Here are some sample sequences based on the themes for Unit 5:

Sample Energy Sequence

Mountain
Big Toe
Triangle
Rotated Triangle
Chair into Warrior 1
One-Legged Balance
Whirligig
Rotated Seated Tree
Lion into Hero
Boat into Floating Lotus × 3
Side Crow
Quad Stretch
Half Split into Split
Bow
Side Bow
Child
Closing Sequence
Mindfulness Practice: STOP
Guided Rest

Sample Restorative Sequence

Child
Cat/Cow
Twisted Low Lunge
Downdog
Big Toe
Triangle into Half Side Angle
Wide Angle 1 and 3
Windmill
Garland
Seated Spinal Twist into Pigeon
Partner Seated Sunrise/Sunset
Butterfly
Supported Bridge (can use block, textbook, or rolled-up mat if available)
Supine Figure Four
Supine Twist
Supine Butterfly: Mindful Listening
Rest

Sample Focus Sequence

Opening Sequence A and B
High Lunge Arms Up, bend and straighten front leg
Twisted Low Lunge
Partner Warrior 3
Partner Dancer
Side Plank
Seated Wide Angle
Supernova
Twisted Snail
Bug
Turtle
Pointing Dog
Superbow
One-legged Bridge or One-legged Wheel
Supine Figure Four
Right Angle Handstand into Handstand
Closing Sequence
Mindfulness Practice: One Minute Count
Rest

Sample Balance Sequence

Opening Sequence A, B, or C
Twisted Chair into Rotated High Lunge
High Lunge into Warrior 3 with Cow-Face Arms
Intense Stretch into Rotated Triangle
Tree into Dancer
Forearm Plank
Side Tree Plank
Seated Forward Bend
Seated Wide Angle
Garland into Crow
Side Camel with Cat/Cow movement in spine
Camel
Child
Forearm Stand
Shoulder stand Sequence
Closing Sequence
Mindfulness Practice: The Kindness Project
Rest

Sample Endurance Sequence

Throughout this sequence, a specific challenge or balance posture should be repeated for three rounds. Students should be instructed to hold longer each time, competing only with themselves. **Tree Challenge** is the example given; students and instructors can change out Tree for another posture if preferred.

Opening Sequence C:
Frog x 10 from Downdog
Warrior 1 into Warrior 2
High Lunge into Warrior 3
Tree Challenge (first round)
One-Legged Balance (with arms up)
Chair into Hands Under Feet
Twisted Garland
Tree Challenge (second round)
Sport Stretch
Snail (bring hands to floor and lift up between sides)

Half Boat into Boat x 3
Superhero or Bow
Bridge or Wheel x 5
Seated Forward Bend
Tree Challenge (third round)
Shoulder stand Sequence
Closing Sequence
Rest

Extensions of Learned Postures

Spend the first two months establishing a clear class structure (routines and procedures) and building a foundational base of postures. Slowly begin to add variety into the movement phase of class.

Adding in extensions (variations on familiar poses) is a way to keep the sequences lively, creative, and exciting while still maintaining structure and routine and emphasizing repetition. Repetition is a critical component of mindful movement practice, and it supports coordination, strength, flexibility, and body awareness.

Extension postures can also be useful in increasing or maintaining enthusiasm and engagement from second- or third-year health and wellness students or in offering an all-level experience for classes that include beginners and more intermediate or advanced practitioners.

Instructors are encouraged to adhere to unit sequences as closely as possible but also to meet the students where they are. For instance, if students seem tired or lethargic, incorporate more standing postures and positions where the head is lifted, not lowered.

Below are examples of extensions of postures:

Opening Sequence A and B

- Count steps together
- One student leads
- One time independent
- Sleeping or Supine Opening A
- Opening Sequence B
  - — Warrior 1 into Warrior 2 into Reverse Warrior 2

Tree

- Side Tree
- Tree into Warrior 3
- Last Tree Standing (Tree Challenge)
- Partner Tree in groups of 2, 3, and 4
- Partner Tree

Downdog

- Downdog Split
  - — Twisted Dog
  - — One-Legged Downdog, knee-to-nose plank, x 3 each side
  - — Donkey Kicks (inhale jump, exhale down)
  - — Baby Donkey Kicks (start in a little ball, little hops up)
  - — Horse Kick (one leg at a time)
  - — Three-legged Dog with Curl-in OR Curling Dog (knee-to-nose and/or knee-to-elbow)
  - — Downdog to Handstand
  - — Mountain Climbers or Prancing Dog or Dog on a Bicycle
  - — Frog (Downdog to Squat to Downdog, repeat)
  - — Downdog to Plank Twist
  - — Alternate Arm/Leg Lift
  - — Cat back from Downdog into Plank

Side Angle

- Half bind with arm around thigh
- Both arms up (difficult)
- Reverse Warrior to Side Angle
- Warrior 1, Warrior 2, Reverse Warrior, Side Angle (hold Side Angle)
- Hand inside or outside foot
- "The Thinker"

Warrior 1

- Hands together
- Hands apart
- Opposite hands on opposite elbows
- Upper body twist with arms in T
- Cactus arms
- Warrior 1 to High Lunge to Warrior 3
- Chair to High Lunge to Warrior 1
- Hands clasped behind back, forward bend, head inside front foot

Lunge

- Low or High Lunge, changing legs by jumping back and forth x 4
- Changing sides, feet to outside of hand

Boat

- Sinking or Half Boat
- Twisted Boat

Child

- Knees apart
- Bent elbows, hands on shoulders
- Extend arms, walk hands to right/left, side bend child's pose

Triangle

- Reverse Triangle/Triangle, x 3
- Bound Triangle
- Jumping Jacks in-between
- Mountain to Star to Triangle and back

Plank

- One-legged Plank
- Hand-to-shoulder plank
- Inclined Plane
- Plank Push-up (Inhale plank, exhale bend elbows)
- Knees to opposite arms, Mountain Climber
- Supine Plank

Side Plank

- Side Plank 1 and 2
- Side Tree Plank
- Side Tree Plank, one leg lifted
- Seated Tree into Side Plank
- Side Plank (rainbow/tree)

Jump back/Jump Through

- Rolling into Floating Lotus
- Blocks to lift up

Pointing Dog

- Pointing Dog, knee-to-nose x 3
- Pointing Dog, right elbow to left knee, both sides, x 3
- Half Pointing Dog/Half Bow

Warrior 3 Extensions

- High Lunge with Cow-Face Arms into Warrior 3
- Intense Stretch
- Hands interlaced behind back
- Hands pressed together behind back

Bridge and Wheel

- One-legged Bridge/Wheel

5.1 Vocabulary

Motivation
Perseverance
Preparation
Repetition

Lesson 1

The Architecture of Healthy Habits

5.1 Overarching Learning Objective

Students will be able to do the following:

- **Content**
  - List the key ingredients for forming new habits.
- **Posture**
  - Understand wellness practice as an ongoing process of habit observation, formation, and modification.

5.1 Guiding Questions

- *Why are old habits hard to break?*
- *Can we create new habits?*
- *How are new habits formed?*
- *How can we apply our understanding of wellness practices to create new, positive habits?*
- *What are the four key ingredients to successful habit formation?*

5.1 Connect

In our last unit, we discussed how we can actively change our brains throughout our whole lives. We took a look at some habits we have formed in our lives that support our health and wellness and some that do not.

Unit 5 is an ambitious unit. We will begin to plot out the development of personal habits for health and wellness and analyze how seemingly isolated habits have a radiating impact on our lives. We will also move toward more independent and cooperative learning and practice. By the end of this unit, you will be prepared to design—and then teach—a lesson based on a health and wellness topic you find most compelling. But first, let's look at the key ingredients for forming new habits.

5.1 Teach

Today we will talk about how habits are formed and what we can do to participate in the process of creating new habits. Movement, play, socialization, active relaxation, sleep, learning, creating, and nutrition are aspects of life that interact with and influence one another. When you don't get enough sleep, your schoolwork will likely suffer. When you are hungry, you might have a difficult time concentrating on the sport or game you are playing.

Similar to skyscrapers, statues, and houses, we require the proper internal and external supports when building new habits. The scaffolding underlying successful habit formation is made up of motivation, preparation, repetition, and perseverance.

***Motivation:** To kick-start a new habit, it is important to understand your motivation. Motivation is what gets you going, what excites and challenges you. When you are clear about your motivation, it is like directing an arrow toward a target: you know where you want to go, and you are set on getting there.*

Preparation: *Once you are clear on your motivation, you can figure out the means by which to reach your goal. Preparation for the process is crucial. When you prepare, you think about the beginning, middle, and end. You also think about potential obstacles and how you will overcome them.*

For instance, if you have a test tomorrow, you might prepare by studying the evening before, having a good dinner, getting to bed at a reasonable hour, waking up early enough to do a little wellness practice, eating a hearty breakfast, and preparing calmly for the day. All of these actions would support your readiness for your test. On the other hand, if you get home from school, play video games for two hours, eat dinner in front of the television, and stay up late doing homework, you might wake up the next day tired and irritable.

Repetition: *To actually form a long-term habit, you need to consistently repeat the actions that support this habit. Neuroplasticity occurs through repetition. When we have a new experience, our neurons communicate with one another. This communication creates or strengthens neural connections. Similar to skiing down a snowy hill, if we repeatedly take the same route, the path becomes more and more defined with each run.*

Perseverance: *When the going gets tough, you can draw upon your physical, intellectual, and emotional reserves. This is what we call "perseverance"—the refusal to give up despite setbacks. Consider a big goal or aspiration you have for yourself. What obstacles might you face? What can you do about these obstacles? Who can you turn to for inspiration and support? Even though perseverance has to come from within, it never hurts to surround yourself with people who will cheer you on.*

5.1 Active Engagement

*Our overarching health and wellness goal is an **awareness of body, breath, mind, and emotions**. Through our posture practice, we are creating new habits or patterns that make us physically and mentally stronger, steadier, and more flexible. As we move, can you observe physical habits that you may or may not have noticed before? Are there any posture-related habits you'd like to modify or establish?*

5.1 Link

Today we talked about how habits are formed and what we can do to participate in the process of creating new habits or breaking old habits. In our next lesson we will begin assembling our tool kits for a balanced life, starting with a conversation about movement, play, and socialization.

5.1 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

5.1 Home Practice

Take a moment to consider a habit that you would like to establish in your daily life, then use our habit formation rubric to consider a few questions: What is your motivation? What will you do to prepare? What will you have to repeat? How will you persevere against the odds?

5.2 Vocabulary

Confidence
Longevity
Socialize

Lesson 2

Movement, Play, and Socialization

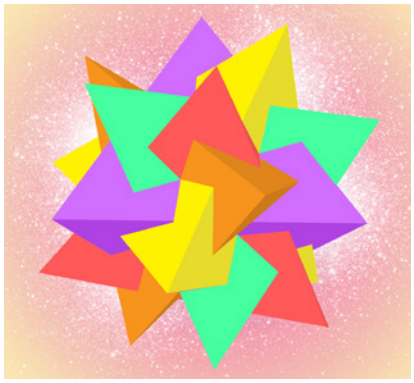
5.2 Objectives

Students will be able to do the following:

- **Content**
  - Describe and discuss how to prioritize movement, play, and socialization.
- **Posture**
  - Experience Active Engagement as an opportunity to move, play, and socialize.

5.2 Guiding Questions

- *Does movement increase or decrease stress?*
- *Does play increase or decrease stress?*
- *Does socialization increase or decrease stress?*
- *How does movement support other parts of your life? Play? Socialization?*
- *Do you notice a connection between play and your ability to think creatively?*
- *Do you notice a connection between how much you move and how confident you feel?*



5.2 Connect

Our last lesson kicked off Unit 5 with a discussion on the architecture of healthy habits. Our lives, and thus our habits, are composed of many interlocking parts. Have you ever tried to map out your life using a planner or calendar? This is a helpful exercise for organizing your time, but life is far more complex and dimensional than words on paper. It might be more accurately reflected by the image of a five tetrahedra!

In this lesson, we will look at three important parts of our lives that we should prioritize for our physical, mental, and emotional health and wellness: movement, play, and socialization.

5.2 Teach

***Move:** Movement addresses the needs of the whole person. Aerobic movement that increases your heart rate for over thirty minutes is beneficial for cardiovascular health, and less aerobic activities that strengthen muscles and require mindful attention actually support how your brain functions. Physical activity enhances neuroplasticity—your memory is sharpened, neurological connections are forged, and existing connections are fortified. As Dr. John Ratey says, "That which makes us think, also makes us move."*

Movement that employs coordination, balance, and proprioceptive awareness can also boost confidence. Having a clear sense of where we are in space means we are better able to move safely, gracefully, and comfortably.

***Play:** Today we will think of "play" as the spontaneous exploration of life. Engaging in*

pleasurable and nonjudgmental play brings us joy, and joy is good for our health. Laughter actually alleviates stress. Based on your own experience, do you agree with this statement?[1]

When we feel playful and joyful, we tend to be more open to new ideas and experiences. Spontaneity and openness are often aspects of creative and collaborative processes.[2] *Thus, play allows the brain to become active in fresh ways, thereby enhancing existing connections and sparking new ones.*[3] *But above all, play means having fun, and having fun is one of the best parts of life.*

Socialize: *Human beings are social beings. In fact, the branch of our nervous system called the vagus nerve, which we explored in Unit 3, is now recognized as our "social nervous system," or the original social network. Nowadays we think of Facebook and Snapchat as social networks, but social media platforms are just technological imitations of something that we already have built into us—the desire and the capacity to connect, express, empathize, emote, and respond.*

When we enjoy healthy social lives, we constantly exercise our social-emotional skills. We maintain connections that feed our senses of caring and being cared for. Some studies have even shown that there is a link between friendship and longevity.[4]

1: Richard Restak, "Laughter and the Brain," *The American Scholar*, 2013. https://theamericanscholar.org/laughter-and-the-brain/#.V2ffYiMrJcw
2: Eric H. Chudler, "Laughter and the Brain," Neuroscience for Kids, 2015. https://faculty.washington.edu/chudler/laugh.html
3: Diamond, Adele, "On Why Disciplining the Mind May Be Critical for Children's Academic Success." https://www.youtube.com/watch?v=6wdFKPTEL2M
4: Tara Parker-Pope, "What Are Friends For? A Longer Life," *The New York Times*, 2009. http://www.nytimes.com/2009/04/21/health/21well.html?_r=0

5.2 Active Engagement

Throughout our movement practice, see if you can bring an attitude of playfulness to each sequence and posture. As you focus on your own experience of each shape, see if you can also appreciate how it feels to practice in the company of others.

5.2 Link

Do you recall our Unit 1 lesson on moving, breathing, and resting? Early on we talked about the importance of balancing movement and rest. Some said that, if given a choice, they would prefer to rest indefinitely, while others said they would choose constant movement over rest. Now we know that one cannot usurp the other without negatively influencing our mental, emotional, and physical health. In our next lesson, we will address the benefits of active relaxation and sleep (they aren't the same thing!).

5.2 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

5.2 Home Practice

Until we meet again, keep a brief record of how much time each day you are able to devote to movement, play, and socialization, respectively. Notice how you feel at the end of a day that is full of movement, play, and socialization, as opposed to how you feel at the end of a day that did not have enough time or space for one or all of these components.

5.3 Vocabulary

Consolidation
Insulin
Intention
Metabolism
Preparation

Lesson 3

Sleep and Active Relaxation

5.3 Objectives

Students will be able to do the following:

- **Content**
  - — Articulate the physical, intellectual, and emotional benefits of active relaxation.
  - — Articulate the physical, intellectual, and emotional benefits of proper sleep.
  - — Understand and describe the differences between sleep and active relaxation.
- **Posture**
  - — Experience and understand the rest phase of Active Engagement as a transferable practice of active relaxation.

5.3 Guiding Questions

- *What are the connections between movement and active relaxation?*
- *What are the connections between sleep and physical health? Between sleep and mental health?*
- *Why is it important to take a break from technology during active relaxation?*

5.3 Connect

In our last lesson, we considered the ways in which our own lives are made up of closely related, intersecting, interdependent parts. Movement, play, and socialization are essential aspects of daily life, but these more active pursuits must be balanced by passive, restorative practices, like active relaxation and sleep.

5.3 Teach

In this lesson, we will explore habits around active relaxation and sleep. While relaxation and sleep may seem like simple, easy things we are all born knowing how to do, we must actually learn how to do these things properly and well. Cutting-edge research on relaxation and sleep indicates that the body and the brain must rest in order to function productively.

***Sleep:** When we are well rested, the major and minor obstacles of everyday life tend to seem less problematic. When we are sleep-deprived, our capacity to negotiate even the smallest tasks can diminish, and our abilities to speak, act, and behave mindfully become compromised.[1]*

The health of both the brain and the body depend on the quality of our sleep. Most teenagers need about 8 or 9 hours of sleep each night for optimal brain growth, which entails memory consolidation (of the day's learning), insulin function and food metabolism (to keep fit), and immune function (to fight off disease).[2] Highly important mental functions—focusing attention, thinking, remembering, problem solving, emotional regulation, and connecting with others—can all be impaired due to lack of sleep.[1] The long-term effects of poor sleep habits (kept up through adolescence and into adulthood) include weight gain, an increased risk of various ailments and diseases, cognitive decline, and an increased

1: "Sleep Deprived: We're Recharging Our Phones, But Not Ourselves," National Public Radio, 2016. http://www.npr.org/sections/health-shots/2016/04/09/473406980/sleep-deprived-were-recharging-our-phones-but-not-ourselves
2: Maria Konnikova, "The Work We Do While We Sleep," *The New Yorker*, 2015. http://www.newyorker.com/science/maria-konnikova/why-we-sleep

risk of dementia.[2]

There are key do's and don't's around sleep. For example, choosing and sticking to a regular bedtime helps stabilize the systems of the body that control the chemicals necessary for sleep. Also, research shows that screens—computers, televisions, and phones—trick the body into believing it needs to remain alert and active. It is imperative that we put aside our screens a good 2–3 hours before bed.

***Active Relaxation:** While focusing your attention in an uninterrupted manner serves to sharpen the intellect, you'll be relieved to know that it is also healthy for the mind to "do nothing."*

Downtime, or active relaxation, does not mean zoning out in front of a computer, television, phone, or other source of entertainment. It doesn't mean anxiously puttering around looking for something to do in order to avoid boredom. Active relaxation means having no plans, no goals, no distractions. It might look like sitting still or lying down and simply breathing.[4]

Our Guided Rest phase of practice is a good example of how to actively relax.

During sleep we are unconscious; during active relaxation, we are mindfully aware of what is happening in the body and mind while refraining from trying to fix, change, or interrupt. Studies show that active relaxation allows the body and the brain to shift into parasympathetic gear. When the body drops into a parasympathetic state, we are able to digest, assimilate, and filter out matter (such as food, chemical by-products of breathing, thoughts, experiences, and sensory stimuli).

1: "Rest, Relaxation and Exercise," Mental Health America.
http://www.mentalhealthamerica.net/conditions/rest-relaxation-and-exercise
2: Maria Konnikova, "The Walking Dead," *The New Yorker*, 2015.
http://www.newyorker.com/science/maria-konnikova/the-walking-dead
3: Maria Konnikova, "Why Can't We Fall Asleep?" *The New Yorker*, 2015.
http://www.newyorker.com/science/maria-konnikova/why-cant-we-fall-asleep
4: "The Importance of Rest and Relaxation," University of Washington.
https://www.washington.edu/admin/hr/benefits/publications/carelink/tipsheets/rest-relax.pdf

There are many things in our environments that jockey for our attention, time, and energy: family, friends, responsibilities at home and school, hobbies, interests, and social media. Social media alone can cause a lot of stress. It can make you feel as though you need to be or want to be in many places at once. This creates a feeling of fragmentation or disorganization in the body and mind. This disorganization can make it increasingly difficult to understand how we feel (physically and emotionally), what we think, and what we need.

5.3 Active Engagement

Large group and independent activity: Generate a discussion with students regarding healthy sleep and active relaxation habits. On a large pad of paper, whiteboard, chalkboard, or Smart Board, draw a table with four columns. Label the first column "Motivation," the second column "Preparation," the third column "Repetition," and the fourth column "Perseverance." "Perseverance" should include room for potential obstacles and strategies for overcoming them. Choose one goal in order to walk the whole class through the process, then ask students to draw up individual tables with their personal habit formation processes mapped out.

During the rest phase of Active Engagement, give your attention to each part of your body as you allow it to rest. Allow your brain to rest. Use this time as an opportunity to appreciate all the systems of your body and the essential functions they perform. Know that when you come out of rest, you will be better equipped to navigate the rest of your day.

5.3 Link

Your movement, play, socialization, relaxation, and sleep will all be contingent upon, in one way or another, your occupation as a student. School provides a space for all of these components (except sleep!), especially within the context of health and wellness class. But the primary purpose of school is education—learning, understanding, analyzing, applying, and synthesizing information and experience. In our next lesson, we will look at how learning and creativity are vital parts of a robust health and wellness tool kit.

5.3 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

5.3 Home Practice

Continue working on your goal of forming health-and-wellness-supporting habits. Keeping a sleep journal or a movement and active relaxation journal can be an effective way to track your progress. This way you can begin to make more coherent correlations between basic, yet crucial, habits and what is going on in the rest of your life. Plot out your path using our list of key ingredients: motivation, preparation, repetition, and perseverance.

5.4 Vocabulary

Executive function
Flexibility
Inhibitory control

Lesson 4
Learn and Create

5.4 Objectives

Students will be able to do the following:

- **Content**
  - — Identify and share personal habits that support learning and creativity.
  - — Identify and share personal habits that hinder learning and creativity.
  - — Identify and share one learning- or creativity-related goal and the process required to achieve it.
- **Posture**
  - — Notice instances of boredom or daydreaming during physical practice.

5.4 Guiding Questions

- *What are some mental habits that fuel your brain and help you with your schoolwork?*
- *What are some mental habits that hinder your learning?*
- *What happens in your brain when you are creative?*
- *Why is creativity an important part of overall health and wellness?*

5.4 Connect

So far, Unit 5 has revolved around healthy habit formation, as well as how to bring different areas of our life into balance. In our last lesson, we looked at how the time we spend doing nothing is just as important as the time we spend actively engaged with the world around us. In this lesson, we will make inquiries into how learning and creativity play huge roles in our personal and collective growth.

5.4 Teach

Learn: *As a student, your job is to learn. All of your classes, assignments, exams, projects, presentations, and field trips are geared toward helping you understand, analyze, apply, and synthesize information. How and what you learn is dependent on the health of the brain, which you can tend to via the habits you establish and sustain. How you operate at school can have a lot to do with the routines and behaviors you uphold both within and outside of the school day. For example, in our last lesson, we emphasized the correlation between sleep and brain health. If you make a habit of sleeping too little, it will likely have an impact on your ability to focus on the task of learning.*

Each and every one of us has a set of cognitive skills called "executive functions." The core executive functions are cognitive flexibility (creativity), inhibitory control (self-regulation, discipline), and working memory (reasoning, planning). These functions help us with nearly everything, from making decisions about what to have for lunch, choosing not to lash out at a friend when we are in a bad mood, remembering details about homework to seeing a project through from start to finish. The prefrontal cortex, which we became acquainted with in Unit 3, is the site of executive function and is the last part of the brain to develop fully.

When you feel tired, anxious, depressed, or otherwise compromised on a physical, emotional, or intellectual level, your executive functions suffer. Our brains function best when we are relaxed, secure, supported, and happy. Think of health and wellness practices that might help you feel more relaxed, secure, supported, and/or happy.

Create: *The natural outcome of learning is creativity. Our brilliant brains have the capacity to convert ideas and concepts into new, innovative forms according to our unique perspectives and experiences.[1] We might think of learning as a linear process, but creativity is the thing that takes learning in unanticipated directions.[2] When we take care of our bodies, minds, and emotions, we are cultivating fertile ground for free thinking and imagining. If we are mired down in physical lethargy, mental fog, or emotional chaos, we have less time and energy for creativity. When do you feel the most inspired and creative?*

Now let's consider the relationship between boredom and creativity. Did you know that boredom is often the state of mind that gives rise to novel ideas?[3] Otherwise known as daydreaming, boredom can provide a vast, empty field for thought or act as an indication that you need to be pushing yourself farther in order to feel adequately challenged. But boredom, as we all know, is something we believe we should avoid at all costs. We go to great lengths to avoid being bored.

Next time you feel bored, try to mindfully observe the thoughts and feelings that pop up. Do any thoughts or feelings you haven't noticed before, or

1: Krista Tippett, "Rex Jung: Creativity and the Everyday Brain," OnBeing, 2013. http://www.onbeing.org/program/rex-jung-creativity-and-the-everyday-brain/1879

2: Sir Ken Robinson, "Why is Creativity Important in Education?" Adobe. http://tv.adobe.com/watch/creativity-in-education/why-is-creativity-important-in-education/

3: Vivian Giang, "The Science Behind How Boredom Benefits Creative Thought," *Fast Company*, 2015. http://www.fastcompany.com/3042046/the-science-behind-how-boredom-benefits-creative-thought

given enough attention to, become apparent? Do you see ideas or imaginings that weren't obvious to you before?

Learning and creativity are most satisfying when we strike a balance between being stimulated and having the head space to process what we are taking in. Creativity will become imperative as we move into our last phase of Unit 5, when we will work together and individually to design and implement original lesson plans.

5.4 Active Engagement

All of our health and wellness practices are aimed at fostering balance in the body and mind. Certain techniques are particularly useful for quieting and clearing the mind so that we are well positioned to take in information and transform that information into knowledge.

In our physical practice, I will continue to encourage you to notice when, how, and what you are learning from your experience of the sequences and postures. I will also direct you to pay attention to any feelings of boredom or instances of daydreaming.

5.4 Link

We have spent the last several lessons evaluating the ways in which movement, play, socialization, active relaxation, sleep, learning, and creativity factor into day-to-day life. Next up is the topic of nutrition—we'll analyze how what we put in our bodies becomes the fuel that drives all of our daily endeavors.

5.4 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

5.4 Home Practice

Continue to add on to your list of healthy habits. Now that you've started generating goals related to movement, play, socialization, active relaxation, and sleep, think about how you can adjust existing habits or envision new habits that will help you along in your everyday learning process and your creative practices. Remember to use our simple steps: identify motivation, prepare, plan for repetition, and anticipate obstacles that will require perseverance.

5.5 Vocabulary

Nutrition

Lesson 5
Nutrition

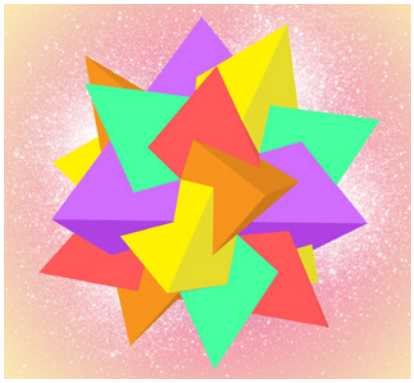
5.5 Objectives

Students will be able to do the following:

- **Content**
  - — Demonstrate an understanding of the basic principles of mindful eating.
  - — Draw up individual worksheets that map out goals for forming healthy eating habits.
- **Posture**
  - — Demonstrate proficiency in postures learned thus far.
  - — Demonstrate preparedness for student teaching.

5.5 Guiding Questions

- *What is the relationship between nutrition and physical health?*
- *What is the relationship between nutrition and all other areas of our lives discussed thus far?*



5.5 Connect

This image of the five tetrahedra is a handy visual representation of how all aspects of our lives are not only interconnected but also inextricable from one another. Both our brains and our bodies respond to the sensory stimuli we give them, and both are tasked with properly absorbing, digesting, assimilating, and releasing whatever they take in. This input comes in the form of sights, sounds, smells, sensations, tastes, ideas, experiences, and actual matter, like food.

5.5 Teach

The average person eats several times a day, and every snack or meal influences how the brain and the body work. For example, what we choose to eat or not eat for breakfast will have an influence on how we feel and think in our morning classes. Nutrition is defined as "the process of providing or obtaining the food necessary for health and growth." One of the foundational elements of a balanced lifestyle is developing healthy habits in relationship to food. There are many factors we can think about when it comes to eating. Let's begin by examining the basic principles of mindful eating.

What: *Generally speaking, the body does well with a variety of foods that provide balanced amounts of protein, carbohydrates, fats, vitamins, and minerals. The main categories of food groups to consider are whole grains, fresh vegetables, fresh fruits, proteins, and fat.*

Our diets are informed by many factors, including our backgrounds and traditions, so our choices will vary. When assembling a plate of food, we can observe the spectrum (or lack thereof) of color in front of us. A range of colorful food can be indicative of a range of nutrients. For example, if you eat a burger and fries, your plate will largely be brown and beige (ketchup does not count!). Try adding in salad, vegetables, and fruit for more nutrients and taste.

We can also observe the way foods make us feel. What is your state of mind and energy after eating fried or oily foods? How does your body feel after you've had a lot of caffeine (soda or coffee)? If we find that some foods make us sleepy or agitated, we can decide not to eat them, or to eat them at an appropriate time. We would not want to feel sleepy or agitated, for instance, during school, when it is necessary to be alert, calm, and collected.

As we established in our last several lessons, there are so many parts of our lives that require adequate attention and energy. What we eat fuels all of these parts of our lives—even sleep. If we eat sugar shortly before bedtime, chances are we will not be able to sleep or we will not sleep well, which has a snowball effect on the day ahead, and potentially on the days following. A mindful approach to food can have a dramatic, positive influence on how we are able to navigate the world.

***How:** Eating slowly is a good place to start. In earlier lessons we discussed how many breaths we take in a minute (approximately 15) and how many thoughts we have in one day (50,000–70,000). Have you ever thought about how many times you chew one bite of food? When we chew our food thoroughly and slowly, we absorb more nutrients and energy from the food. Research has also found the the longer we chew our food, the easier it is for our digestive systems to break it down and the more sated we feel.[1]*

Whenever possible, sit down to eat, whether it is at a table, on a bench, or on the floor. This will help slow you down and shift your nervous system from sympathetic to parasympathetic. When we stand and eat, it suggests eating on the run, and you will most likely chew less, rush more, and digest poorly.

1: Katie Cavuto, "5 Reasons You Should Chew Your Food," *US News*, 2015. http://health.usnews.com/health-news/blogs/eat-run/2015/03/10/5-reasons-you-should-chew-your-food.

Once you are sitting down, it is advisable to be without distractions, such as books, electronics, television, cell phone, computer, or radio. Concentrating solely on your food allows the brain to register that your body is eating and allows your body to devote its resources to the long, complex process of digestion.

You should also take a moment to think about where your food has come from and all the people, animals, plants, and natural cycles that went into producing the sustenance that you are about to convert into all your thoughts, ideas, physiological functions, and activities.

***When:** Think about mealtimes, or a general schedule for eating, that would make sense for you. Three meals a day seems to be a good formula, leaving time in between meals for digestion, though this has been shown to vary slightly. Consistent mealtimes tend to be balancing for the brain and body, as is allowing plenty of time for digestion between eating and exercise or eating and sleep. Try eating your last meal of the day about three hours before you go to bed. If you eat a large meal right before bed, you might have a restless sleep, because your body will be working hard to digest the food. If energy is still being used for digestion, then the rebuilding of the bodily tissues will not happen as thoroughly during sleep.*

5.5 Active Engagement

Large group and individual activity: Brainstorm healthy eating habits as a class, isolating unhealthy eating habits first and then finding their correlating opposites. After illustrating examples, have students draw up individual habit formation charts, including the categories "Motivation," "Preparation," "Repetition," and "Perseverance." Have students leave enough space for notes on benefits (associated with motivation) and potential obstacles (associated with perseverance).

5.5 Link

We are working toward the final phase of learning and creativity, when you will be selecting the topic of either movement, play, socialization, active relaxation, sleep, learning, creativity, or nutrition in order to formulate and execute a full-fledged health and wellness class.

In our next lesson, we will revisit the idea of inner and outer lives, which we began unpacking in earlier units in terms of balance, boundaries, and self-care. Now we want to give further consideration to the fact that we are indeed developing individual stability, strength, and resilience so that we can go out into the world and enjoy vibrant, satisfying experiences, and relationships in community.

5.5 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

5.5 Home Practice

We have multiple opportunities every single day to reroute our habits around eating and nutrition. Keep your habit formation worksheet handy and check in with it at least once a day to remind yourself of where you're going and how you want to get there. Also make a sincere attempt to apply the basic principles of mindful eating. Make a colorful plate; take a seat; take a moment to appreciate your food; and chew carefully.

Lesson 6
Inner and Outer Lives

5.6 Objectives

Students will be able to do the following:

- **Content**
  - — Identify what habits and practices have a positive effect on their inner and outer lives.
  - — Describe how their inner state of balance and harmony can have a positive effect on others and their environment.
- **Posture**
  - — Create a health and wellness practice that will illustrate the connection between the outer and inner lives.

5.6 Guiding Questions

- *What do you think of when you hear the words "inner life"?*
- *What do you think of when you hear the words "outer life"?*
- *What are some ways that you currently connect your inner and outer lives?*
- *How can you live so that your inner and outer lives balance each other?*
- *What effect might a balanced inner life have on the people in your life?*
- *How can you share the tools you've learned with others who might benefit from them?*

5.6 Connect

In previous lessons we have investigated how we as individuals can regulate our behavior in a way that best supports our health and wellness. Most recently, we considered various parts of our lives and how those parts are interrelated and interlocking, like the pieces of a five tetrahedra. We discussed movement, play, socialization, active relaxation, sleep, learning, creating, and nutrition.

Now we are are going to broaden this perspective by looking at how our own health and wellness can have a meaningful impact on our world and the people in it. We will transfer all the knowledge we have gained throughout this year toward integrating our inner and outer lives.

5.6 Teach

In this lesson, we will continue to discuss the importance of using what we've learned from our inner lives to benefit our outer lives, and vice versa.

How would you define inner life? Our inner lives are complex, colorful tapestries of thoughts, feelings, emotions, dreams, hopes, and desires. They are also characterized and influenced by the food we eat, how much we sleep, and who we spend time with. The quality of our inner lives is usually enhanced when we spend time with people who support, love, and inspire us.

How would you define outer life? Our outer lives are typically defined by the conditions we live in: our homes, families, neighborhoods, school communities, activities, and schedules. Name one thing your inner and outer life have in common.

How do you feel when you have spent most of your day or week expending energy outward? Most of the time, we are with other people—friends, family, teachers, coaches, people on the bus or subway or street—and we tend to direct our energy toward

managing all of those interactions. Your nervous system is indeed responding to what is happening in your environment through an intricate set of physiological and neurological operations. Thinking and talking in a group, or even one-on-one, can require a lot of outward effort and attention. If we spend too much time with others and do not take time to be quiet and reflective, we might feel imbalanced, depleted, or hyperactive. This is why some creative endeavors (for example, writing, drawing, painting, playing an instrument), active relaxation, and well-regulated sleep are paramount to our well-rounded health and wellness.

How do you feel when you have spent too much time alone? As social beings, we require safe, healthy, caring exchanges with other people. Time to ourselves is critical for personal health and wellness, but we can also end up isolating ourselves or neglecting our need to be with others. This is why playing, socializing, learning, and creating are just as important as active relaxation and sleep.

How can you take what you've learned about ourselves and apply that to your life with others? We've acquired valuable understanding of what it means to speak and act mindfully and how it feels to take care of ourselves through sound decision-making and intelligent habit formation. Are there people in your life with whom you could share all of this knowledge?

5.6 Active Engagement

Individual activity: *How are the inner and outer lives connected? What can we do to strengthen our inner lives in order to support our outer lives, and vice versa?* Have students draw a Venn diagram. One circle represents Inner Life, and the other represents Outer Life. Students add what belongs in each life to the appropriate circle. The circles central space belongs to all the things that bridge the gap between the inner and outer lives.

5.6 Link

How we focus our attention influences how our nervous systems work or don't work. When we position our attention in a particular direction, neural activity occurs. If we continue to direct our attention toward certain concerns, priorities, activities, thoughts, and actions, those connections will be repeatedly strengthened. Our attention is our power—our power to care for and integrate our inner and outer lives.

In our next lesson, we will become fluent in a practice called the Kindness Project. The Kindness Project offers one way of merging our inner lives with our outer lives in a mindful, compassionate way.

5.6 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

5.6 Home Practice

Knowing that we need balance and actually bringing balance into our lives are two separate things. To make it work, we have to act. All of our practices support day-to-day balance through dynamic mindfulness practices. As you navigate your inner and outer lives, notice how much attention is being given to one or the other. Can you carve out more time for quiet reflection? Would you benefit from more time with others? These are questions only you can answer.

5.7 Vocabulary

Communication
Compassion
Connection
Equanimity
Friendliness
Kindness

Lesson 7
The Kindness Project

5.7 Objectives

Students will be able to do the following:

- **Content**
  - — Describe and express ways to exhibit kindness toward themselves and others.
  - — Discuss and implement strategies for improving classroom and school climate.
- **Posture**
  - — Identify three ways to bring friendliness, compassion, and equanimity into their health and wellness practice.

5.7 Guiding Questions

- *How can kindness be demonstrated in the classroom? At home? In the world?*
- *What would it be like if no one expressed compassion, equanimity, or friendliness?*
- *What are some of the potential positive effects of approaching any situation with an attitude of friendliness? Of compassion? Of equanimity?*

5.7 Connect

In our last lesson, we began to shift our focus from an individual perspective of health and wellness to a more expansive, inclusive look at the well-being of everyone around us. When we are feeling healthy, rested, and relaxed, how do we treat ourselves, others, and our environment?

5.7 Teach

In this lesson, we will learn a practice called the Kindness Project, which is a method of developing kindness toward ourselves and others. The Kindness Project is a mindfulness practice done in a seated or lying-down position. We silently repeat phrases in our minds that vocalize support for and dedication to ensuring the happiness and well-being of ourselves and others, without exception.

The first person we think of is ourselves, so that we may have the fortitude necessary to be an engaged, caring, compassionate member of our community. The second person we think of is someone we love and respect. The third person we think of is someone we feel neutrally toward. The fourth person we think of is someone we are currently having difficulty with. Lastly, we extend warmth and care to everyone near and far.

When we repeat kind phrases in our minds, they have the potential to alter how we feel and act. Intentional acts of kindness have been shown to reduce stress, boost immunity, decrease bullying, and increase empathy for others.[1] Studies have also found that people are happier and more emotionally grounded when they engage in acts of kindness on a regular basis.[2] The more friendliness and compassion we express, the less tension we experience in the body and the mind and the more we can be at ease in the company of others.

1: Angela Laguipo, "Act of Kindness Helps Reduce Effects of Stress," *Tech Times*, 2015. http://www.techtimes.com/articles/116401/20151217/act-of-kindness-helps-reduce-effects-of-stress.htm

2: Frederickson, Otake, Otsui, Shimai, and Tanaka-Matsumi, "Happy People Become Happier Through Kindness: Kindnesses Intervention," US National Library of Medicine, National Institutes of Health, 2006. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1820947/

The Kindness Project develops three qualities: friendliness, compassion, and equanimity. And friendliness, compassion, and equanimity are three attitudes that, through repetition and practice, facilitate communication, connection, and mindfulness.

In order to feel friendliness and compassion toward others, we must begin by developing an attitude of friendliness and compassion toward ourselves. What are some ways we can show friendliness or kindness toward ourselves? We might refrain from judging ourselves harshly when we make mistakes, or we might take active relaxation, a midday brain break, or a nap when our minds and bodies feel fatigued or stressed.

Compassion is an attitude of care, connection, and inclusion that helps us empathize with what other people are going through and try to understand their struggles. When we see someone being bullied, we can imagine what it feels like. When someone is struggling with anger, greed, jealousy, and stress, we can acknowledge what they are feeling, and reflect on times when we have experienced those same feelings.

This intention to understand and feel another person's joy or pain allows us to feel less distant and more connected. During the Kindness Project, we can think of someone who is having difficulty, either mentally, emotionally, or physically, and empathize with their pain, offering them silent words of support.

Compassion can also take the form of using words that support communication instead of shutting it down. When we are in an argument or disagreement with a friend, we can choose our words carefully to let them know how we feel, and we can listen carefully to how they feel.

It's not always easy to exhibit friendliness and compassion. It might take some extra effort to hold positive feelings toward some people, so we begin with who or what is familiar and easy to love, and then move outward.

When it is difficult to find friendliness or compassion toward someone, we can use another approach, which is useful in challenging situations with people whom we do not feel compatible with or whom do not share our point of view. This attitude is called "equanimity." An equanimous mind does not lean toward liking or disliking, but remains open and neutral, effectively replacing bias and prejudice.

When we offer kind or equanimous thoughts to someone we are having a difficult time, disagree with philosophically and socially, or who is causing harm, it has the effect of breaking down mental barriers and divisions between us and them. Similar to shaking hands with someone we have just met or hugging a friend we have not seen in a long time, we connect with the other person instead of feeling separate from them. When we practice the Kindness Project for those we are having difficulty with, we create a pause that allows us to notice ourselves making a judgment about that person. Merely noticing that we are in a place of judgment can help soften the hard lines we've drawn around ourselves or someone else.

5.7 Active Engagement

Throughout your practice today, see if you can develop an attitude of kindness toward yourself and others. We can listen to and respect our bodies by not pushing ourselves too hard in each pose. We can send good thoughts to the people practicing near us (rather than jealousy or competitiveness). We can notice if we have a feeling of like or dislike in a particular pose and try to bring equanimity of mind to our practice.

After Closing Sequence: Instructors are encouraged to find three words, to be used consistently, that seem most appropriate for students. Suggested words include "healthy," "well," "happy," "kind," "compassionate," "steady," "peaceful," "calm," and "safe."

Close your eyes. As you breathe in and out, slow and steady, imagine your own face. Silently say to yourself, "May I be [blank]. May I be [blank]. May I be [blank]." Repeat these words a few times. Then imagine the face of someone you love and admire. Silently say to this person, "May you be [blank]. May you be [blank]. May you be [blank]." Repeat these words a few times. Now imagine the face of someone you have difficulty with. Silently say to this person, "May you be [blank]. May you be [blank]. May you be [blank]." Repeat these words a few times. Finally, imagine all the people in the world far and near, and silently say to them, "May you all be [blank]. May you all be [blank]. May you all be [blank]."

5.7 Link

The Kindness Project extends our commitment to self-care to others. It helps us recognize that everyone around us wants the same things we do—to be happy, healthy, safe, and loved. When we have this understanding at the forefront of our minds, our interactions become imbued with a sense of interconnection and interdependence.

In our next lesson, we will learn about wisdom, which is defined as knowledge based on experience. We will be actively applying our individual and collective wisdom to lesson-planning.

5.7 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

5.7 Home Practice

Bring the Kindness Project with you into your everyday life. If possible, share it with friends and family. Also take the time to ask yourself, "Is there a person in my life I could treat with more friendliness? Is there a person in my life I might be able to show more compassion toward? Is there a challenging situation in my life that requires equanimity?"

5.8 Vocabulary

Humility
Perception
Wisdom

Lesson 8
Wisdom

5.8 Objectives

Students will be able to do the following:

- **Content**
  - Define "wisdom."
  - Discuss how wisdom can be applied through positive choices and attitudes.
- **Posture**
  - Design a sequence of poses that encourages a state of paying attention.

5.8 Guiding Questions

- *Why is wisdom an important quality to develop?*
- *How do we foster the development of wisdom?*
- *What is the difference between wisdom and knowledge?*

5.8 Connect

In our last lesson, we became acquainted with the Kindness Project, a mindfulness practice that helps us grow our capacity for friendliness, compassion, and equanimity. In this lesson, we will explore the concept of wisdom.

5.8 Teach

Wisdom is knowledge gained from experience. It is the ability to understand people, situations, and events with clear perception and to act accordingly. It does not necessarily mean being smart; one who is wise has learned something from life and understands when, how, and why to apply what has been learned.

Wisdom doesn't arrive easily, quickly, or fully formed. It develops over time, and usually over the course of various circumstances and phases of life. Typically we have to make mistakes to gain wisdom—in fact, most things in life that involve learning require mistakes! When we make a mistake, we can be observant about where, how, and why we made the mistake, and then make the necessary adjustments for the next time we do that same thing. This is an expression of wisdom, or knowledge gained from experience.

In order to truly engage with the process of becoming wise, we must pay attention, be humble, and ask questions. Without these components, we risk overlooking the many potentials of any and every situation we find ourselves in.

As we've explored over so many of our lessons, there is wisdom in knowing when we need to invest more effort or take it easy, when it's necessary to rest and restore, and when it's appropriate to be active, stimulated, and social. We've acquired mindfulness tools that help us pay attention to how we feel, what we think, and what we are doing. When we employ these tools in everyday life, we gain wisdom about how our inner lives are reflected and refracted

through the lens of our outer lives. Through posture practice, we gain wisdom from the body's feedback, the breath's rhythm, and the mind's meanderings. Wisdom is physical, mental, emotional, social, and environmental.

5.8 Active Engagement

Create a 5–7 minute practice that fosters a sense of wisdom. It can be a posture-based, seated, or supine breathing or mindfulness practice. Feel free to try things out and make mistakes. The same goes for any creative process. Bring what you've learned from the past into the present, but maintain an open mind as to where you can take that knowledge. Can you name a mindfulness practice that helps you feel as though you are in the moment? That helps you keep an open mind?

5.8 Link

Think of a person you know who strikes you as wise. Now consider these questions: How does this person speak and act? How does this person listen and observe? What is one quality this person possesses that you would most like to find in yourself?

5.8 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

5.8 Home Practice

Write a short essay on the wisdom gained in the course of our one-year health and wellness program. Use this as an opportunity to solidify ideas and plans for our final exam: student-authored lesson plans.

5.9 Vocabulary

Design
Direction
Outcome
Pathway

Lesson 9
Backward Design

5.9 Objectives

Students will be able to do the following:

- **Content**
  - Choose a personal outcome and design a pathway toward achieving it.
  - Design and teach a well-rounded lesson on a specific wellness-related topic of interest (e.g., movement, play, socialization, active relaxation, sleep, learning, creativity, or nutrition).
- **Posture**
  - Demonstrate a strong understanding of how to structure a posture sequence.
  - Demonstrate a strong understanding of breath count.
  - Demonstrate a strong understanding of how to enter, hold, and exit the posture included in the self-authored sequence.

5.9 Materials

- A blank lesson template for each student (see end of lesson)

5.9 Guiding Questions

- *What does it mean to have direction?*
- *What are some different ways of giving directions?*
- *Why is it important to have a sense of where you are going in your life?*

5.9 Connect

When you are traveling somewhere, it is usually useful to know what your destination will be. Whether it's the grocery store, another country, or a job site, it is important to be able to point toward that destination and say, "That's where I'm going." Life will introduce any number of obstacles, detours, and curve balls, but having a direction will help stabilize you in the face of adversity. And once you know where you are going, you can figure out the best way to get there.

5.9 Teach

This health and wellness curriculum has been structured according to a method of curriculum-building called "backward design." When the writers of the curriculum were planning out all of these lessons, the first thing they did was discuss two basic questions: 1. What are the health and wellness needs of students and teachers? and 2. What are the best tools we can offer in order to help students and teachers meet those needs?

At the end of this lesson, these fundamental questions will be shared. But first, come up with your own answers to these questions and then design a practice that will help you arrive at your chosen outcome. Consider which of the central lifestyle topics we've discussed might serve as the groundwork of your lesson: movement, play, socialization, activ e relaxation, sleep, learning, creativity, or nutrition. This project will serve as your final exhibition.

5.9 Active Engagement: Movement Lab

This final project should be done over the last few weeks of school in order to allow ample time for each student to present his or her fully formed lesson.

Design a full lesson plan that attends to these questions: What need am I addressing? Which tools will I use to meet this need? Your lesson should include the following:

1. One central theme

- Movement
- Play
- Socialization
- Active relaxation
- Sleep
- Learning
- Creativity
- Nutrition

2. Intelligently structured movement sequence

- Mindfulness Practice
- Warm-up (2–3)
- Opening Sequence A, B, or C (the C stands for "create your own"!)
- Standing (2–3)
- Seated (2–3)
- Strength (2–3)
- Backbends (1–3)
- Finishing (1–3)
- Closing
- Rest

3. Mindfulness practice

If your point of focus is sleep, you might lead us through a sequence that aims to support sound sleep. If you choose to concentrate on socialization, you might design a lesson that encourages interaction (such as partner poses or small group work). If you're most interested in play or creativity, you might leave some room for students to add on innovative gestures or actions to familiar postures.

5.9 Link

Can anyone guess what the curriculum writers identified as the primary issue that needed to be addressed?

It's something we all experience to varying degrees throughout our lives—stress. Students and teachers face a tremendous amount of stress every day. How that stress manifests in our lives is largely determined by whether or not we are able to identify, regulate, and reduce it. The more empowered we are to navigate stress, the happier and healthier we can be. This is the goal of the health and wellness curriculum.

Backward design is a tool for life and learning, both inside and outside of a traditional academic setting. As you go forward, it's important to have a sense of what you want to do, what you want to create, and how you want to live. Remember that life always delivers unexpected twists and turns, so even if you plan on going in one direction, you may end up somewhere else. The destination that you choose merely serves as a way for you to learn about process. The lessons you learn while traveling along your own road are equally as important as where you land when you arrive.

5.9 Closing Routine

Reinforce the Closing Routine established in the first days/weeks of class.

5.9 Home Practice

Ask a friend or family member who is not yet familiar with health and wellness practices if you can teach him/her your lesson. You have gained an abundance of skill and understanding—use it well!

Unit 5
Lesson Template

Lesson Name: _____

Objectives

Students will be able to do the following:

Content

_____

_____

Posture

_____

_____

Vocabulary

_____ _____ _____

_____ _____ _____

_____ _____ _____

Materials

_____ _____ _____

_____ _____ _____

_____ _____ _____

Guiding Questions

_____

_____

_____

_____

_____

_____

_____

Connect

_____

_____

_____

_____

_____

_____

_____

Teach

Active Engagement

Link

_____

_____

_____

Closing Routine

_____

_____

_____

_____

_____

_____

_____

Home Practice

_____

_____

_____

_____

_____

_____

_____

Unit 5
Glossary

C

Communication: the imparting or exchange of ideas or information

Compassion: deep awareness of another's feelings

Confidence: a feeling of self-assurance arising from one's appreciation of one's own abilities or qualities

Connection: a relationship in which a person, thing, or idea is linked or associated with someone or something else

Consolidation: to bring together separate parts into a single or unified whole

D

Design: a plan or drawing produced to show the look and function or workings of a building, garment, or other object before it is built or made

Direction: a course along which someone or something moves

E

Equanimity: mental calmness, composure, or evenness of temper, especially in a difficult situation

Executive function: a set of cognitive processes that are necessary for the cognitive control of behavior

F

Flexibility: the quality of bending easily without breaking

Friendliness: affability, warmth

H

Humility: a modest view of one's own importance

I

Inhibitory control: the capacity to voluntarily control or regulate behavioral responses

Insulin: a hormone produced in the pancreas by the islets of Langerhans that regulates the amount of glucose in the blood

Intention: an aim or plan

K

Kindness: the quality of being friendly, generous, and considerate

L

Longevity: long life

M

Metabolism: the chemical processes that occur within a living organism in order to maintain life

Motivation: the reason or reasons one has for acting or behaving in a particular way

N

Nutrition: the process of providing or obtaining the food necessary for health and growth

O

Outcome: the way a thing turns out; a consequence

P

Pathway: a way that constitutes or serves as a path

Perception: the ability to see, hear, or become aware of something through the senses

Perseverance: steadfastness in doing something despite difficulty or delay in achieving success

Preparation: the action or process of making ready or being made ready for use or consideration

R

Repetition: the action of repeating something that has already been done, said, or written

S

Socialize: to mix socially with others

W

Wisdom: knowledge gained from experience

Units 1–5
Posture Guide

This posture guide provides a basic overview of the postures included in Unit 1 through Unit 5.

All Fours

Prep

Big Toe

Standing/
Forward Fold

Arms Down

Standing/
Forward Fold

Boat

Strength

Arms Up

Standing

Bow

Backbend

Brain Balance Hop

Balance

Bridge

Backbend

Bug

Strength

Buoy

Balance/
Strength

Butterfly

Seated

Camel

Backbend

Cat

Warm-up

Chair

Standing

Kangaroo: Hop up and down in Chair, with hands forward at the chest like a kanagaroo.

Child

Rest

Cobra

Backbend

Cow

Warm-up

Cow-Face

Seated

Note bind detail behind back: "Cow-Face Arms"

Crow

Balance

Dancer

Balance

Dolphin Dive

Strength

Eagle

Balance/Twist

Donut Roll

Strength

Eight Angle

Arm Balance

Downdog

Standing/
Inversion/Rest

Figure Four

Standing

Forearm Plank

Strength

Forearm Stand

Inversion

Forest (Partner Tree)

Standing/ Balance

Frog/ Garland

Strength

Guided Rest

Rest

Half Boat

Strength

Half Moon

Balance

Half Side Angle

Standing

Half Split

Warm-up

Hands Under Feet

Standing

Handstand

Inversion

Head Up

Warm-up

Hero

Seated

High Lunge

Standing

High Lunge with Cow-Face Arms

Standing

Inclined Plane

Strength

Intense Stretch

Standing

Jump Back

Transition

L-Shape

Prep/Seated

Jump Through

Transition

Legs-up-the-Wall

Cool Down/ Inversion

Knees into Chest

Supine

Lion

Seated

Knees to Ears

Cool Down/ Inversion

Low Lunge

Standing

Mountain

Standing

One-Legged Balance

Balance

One-Legged Bridge

Backbend

One-Legged Downdog

Balance/ Inversion

One-Legged Plank

Strength

Partner Boat

Strength/ Partner

Partner Dancer

Balance/ Partner

Partner Figure Four

Balance

Partner Seated Sunrise/ Sunset

Seated/ Partner

Partner Warrior 3

Balance/ Partner

Pigeon

Rest

Reverse Warrior 2

Standing

Right Angle Handstand

Inversion

Rolling Rock

Warm-up

Rotated Seated Tree

Seated

Rotated Side Angle

Standing/Twist

Rotated Triangle

Standing/Twist

Seal 1

Backbend

Seal 2

Backbend

Seated Forward Bend

Seated/Forward Fold

Seated Mountain

Cool Down

Seated Spinal Twist

Twist

Seated Sunrise

Cool Down

Seated Sunset

Cool Down

Seated Tree

Seated/ Forward Fold

Seated Twist

Seated

Seated Wave

Seated

Seated Wide Angle

Seated

Shoulder stand

Inversion

Side Angle

Standing

Side Bow

Backbend

Side Camel

Standing

Side Crow

Strength

Side Forearm Plank

Strength

Side Plank

Strength

Side Tree Plank

Strength/ Balance

Sleeping Crocodile

Rest

Snail 1

Seated

Snail 2

Seated/ Forward Fold

Sphinx

Backbend

Split

Seated

Sport Stretch

Seated

Standing Forward Fold

Standing/ Forward Fold

Standing Split

Balance

Star

Standing

Superbow

Backbend

Superhero 1

Backbend

Superhero 2

Backbend

Supernova

Strength

Supine Butterfly

Supine/
Cool Down

Supine Figure 4

Supine/Rest

Supine Split

Supine/Rest

Supine Twist

Supine/Rest

Table

Strength

Tree

Standing/
Balance

Triangle

Standing

Turtle

Seated

Note three
variations

Twisted Chair

Standing/Twist

Twisted Garland

Twist

Twisted Low Lunge

Standing/Twist

Twisted Snail 1

Seated/Twist

Twisted Snail 2

Seated/Twist

Updog

Backbend

Upward Lunge

Standing

Upward Seated Wide Angle

Balance

Warrior 1

Standing

Warrior 2

Standing

Warrior 3

Balance

Warrior 3 with Cow-Face Arms

Balance

Wheel

Backbend

Whirligig

Balance

Wide Angle 1

Standing

Wide Angle 2

Standing

Wide Angle 3

Standing

Wide Angle 4

Standing

Windmill

Standing/Twist

Sequences

Closing Sequence

Frog

Half Opening Sequence A

Half Opening Sequence B

Opening Sequence A

Opening Sequence B

Plank Sequence

Warm-up Sequence

Mindfulness Guide

Easy In, Extend Out
Breathe in naturally. Breathe out slowly, making the exhalation longer than the inhalation.

Even In, Even Out
The inhalation and exhalation should be equal in length. Count up as you breathe in (1, 2, 3) and count down as you breathe out (3, 2, 1). The count may increase as the breath becomes deeper and fuller.

Guided Rest
(Can be practiced lying down or sitting up.) Feel your body lying down or sitting, resting. Feel your feet resting. Feel your legs resting. Feel your hips resting. Feel your belly and your back resting. Feel your chest and your shoulders resting. Feel your arms resting. Feel your hands resting. Feel the muscles of your neck and face resting. Feel your eyes, ears, nose, mouth, and skin all resting. Feel your whole head resting. Feel your brain resting. Optional: Begin with the head and work down toward the feet.

Kindness Project
Instructors are encouraged to find three words, to be used consistently, that seem most appropriate for students. Suggested words include "healthy," "well," "happy," "kind," "compassionate," "steady," "peaceful," "calm," and "safe."

Close your eyes. As you breathe in and out, slow and steady, imagine your own face. Silently say to yourself, "May I be [blank]. May I be [blank]. May I be [blank]." Repeat these words a few times. Then imagine the face of someone you love and admire. Silently say to this person, "May you be [blank]. May you be [blank]. May you be [blank]." Repeat these words a few times. Now imagine the face of someone you have difficulty with. Silently say to this person, "May you be [blank]. May you be [blank]. May you be at [blank]." Repeat these words a few times. Finally, imagine all the people in the world far and near, and silently say to them, "May you all be [blank]. May you all be [blank]. May you all be [blank]."

One Minute Count

Breathe in an out mindfully and count each cycle of breath. Inhale/exhale (1), inhale/exhale (2), inhale/exhale (3). See how many breaths you take in one minute.

STOP
Stop. **T**ake a few deep breaths. **O**bserve the sensations in your body. **P**roceed with awareness.

Mindful Listening
Breathing in and out mindfully, tune into the sounds outside the room. Once you feel as though you've observed all the sounds outside the room, move your awareness to the sounds inside the room. After calmly noticing sounds inside the room, hear the sounds within your own body (thoughts, heartbeat, breath, digestion).

Optional: Repeat steps in reverse, beginning with the body and progressively expanding awareness to sounds inside and outside the room.

Taking in the Good

Begin by taking 20-30 seconds to focus on a positive, reassuring, or joyful thought or memory. Observe any thoughts, feelings, or physical sensations that emerge during or after this exercise. Eventually work your way up to spending a whole minute or two on taking in the good.

The exercises used within the Pure Edge, Inc. Health and Wellness Program are based on tested practices. Yoga-based exercises have been shown to have many benefits for young people, including reduction of stress and anxiety;[1-3] increase in self-regulatory capacities,[4] including decreased anger;[5,6] increased ability to maintain focus;[7] reductions in negative affect,[1,3] depression,[5] and body dissatisfaction,[8] and reduction of negative behaviors.[5] Physically, yoga has been shown to enhance cardiovascular fitness,[9–11] balance,[12,13] and grip strength.[14] At least one study has shown that the position we hold our bodies in has a direct correlation to raising levels of confidence, risk-taking, and competence, lowering cortisol levels, and configuring the brain to sensibly cope with stressful situations.[15]

While participating in this program, children will exercise and connect with their own bodies while increasing their connection to and understanding of the world around them. The simple, regulated breathing exercises help students relax by focusing on their breath and the simplicity of the moment. Each session includes relaxation, which gives students a break from their full, and often stressful, school days and lives.

References

1. West J, Otte C, Geher K, Johnson J, Mohr DC. Effects of Hatha yoga and African dance on perceived stress, affect, and salivary cortisol. Annals of behavioral medicine: a publication of the Society of Behavioral Medicine. 2004;28(2):114-8. Epub 2004/09/30.
2. Platania-Solazzo A, Field TM, Blank J, Seligman F, Kuhn C, Schanberg S, et al. Relaxation therapy reduces anxiety in child and adolescent psychiatric patients. Acta paedopsychiatrica. 1992;55(2):115-20. Epub 1992/01/01.
3. Noggle JJ, Steiner NJ, Minami T, Khalsa SB. Benefits of yoga for psychosocial well-being in a US high school curriculum: a preliminary randomized controlled trial. Journal of developmental and behavioral pediatrics: JDBP. 2012;33(3):193-201. Epub 2012/02/22.
4. Mendelson T, Greenberg MT, Dariotis JK, Gould LF, Rhoades BL, Leaf PJ. Feasibility and preliminary outcomes of a school-based mindfulness intervention for urban youth. Journal of abnormal child psychology. 2010;38(7):985-94. Epub 2010/05/05.
5. Berger BG, Owen DR. Mood alteration with yoga and swimming: aerobic exercise may not be necessary. Perceptual and motor skills. 1992;75(3 Pt 2):1,331–1,343. Epub 1992/12/01.

6. Khalsa SB, Hickey-Schultz L, Cohen D, Steiner N, Cope S. Evaluation of the mental health benefits of yoga in a secondary school: a preliminary randomized controlled trial. The journal of behavioral health services and research. 2012;39(1):80-90. Epub 2011/06/08.
7. Peck HL, Kehle TJ, Bray MA, Theodore LA. Yoga as an intervention for children with attention problems. School psychology review. 2005;34:415-424.
8. Scime M, Cook-Cottone C. Primary prevention of eating disorders: a constructivist integration of mind and body strategies. The International journal of eating disorders. 2008;41(2):134-42. Epub 2007/10/25.
9. Bera TK, Rajapurkar MV. Body composition, cardiovascular endurance and anaerobic power of yogic practitioner. Indian journal of physiological pharmacology. 1993;37:225-8.
10. Moorthy AM. Survey of minimum muscular fitness of the school children of age group 6 to 11 years and comparison of the influence of selected yogic exercises and physical exercises on them. Yoga mimamsa. 1982;21:59-64.
11. Bagga OP, Gandhi A. A comparative study of the effect of Transcendental Meditation (T.M.) and Shavasana practice on cardiovascular system. Indian heart journal. 1983;35(1):39-45. Epub 1983/01/01.
12. Berger DL, Silver EJ, Stein RE. Effects of yoga on inner-city children's well-being: a pilot study. Alternative therapies in health and medicine. 2009;15(5):36-42. Epub 2009/09/24.
13. Dhume RR, Dhume RA. A comparative study of the driving effects of dextroamphetamine and yogic meditation on muscle control for the performance of balance on balance board. Indian journal of physiology and pharmacology. 1991;35(3):191-4. Epub 1991/07/01.
14. Dash M, Telles S. Improvement in hand grip strength in normal volunteers and rheumatoid arthritis patients following yoga training. Indian journal of physiology and pharmacology. 2001;45(355-360).
15. Carney DR, Cuddy AJ, Yap AJ. Power posing: brief nonverbal displays affect neuroendocrine levels and risk tolerance. Psychological science. 2010;21(10):1363-8 Epub 2010/09/22. ion of eating disorders: a constructivist integration of mind and body strategies. The International journal of eating disorders. 2008;41(2):134-42. Epub 2007/10/25.

Pure Edge

Success Through Focus

www.pureedgeinc.org