



## **Introducing Movement and Embodied Meditation into the Classroom and Applied Studio**

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We know that our students are more stressed now than in the years when we were in college. Dr. B. Janet Hibbs and Dr. Anthony Rostain, authors of the 2019 book *The Stressed Years of Their Lives*, have shared that our students experience “more stress and anxiety now” because “they have grown up post 9.11, there is more anxiety in the family, the school shootings, the non-stop 24/7 news cycle, and the internet itself, which has created a different childhood than that which many of us experienced.”<sup>1</sup> And of course, all of this was before we were engulfed in a global pandemic. So much for all of us to navigate. How can we, as caring, committed teachers, help our students leave their stress outside the door of the studio, the classroom, or the Zoom platform, and enter our learning spaces with confidence and openness to engage with the material that is being offered to them?

Happily, there are gentle and accessible tools readily available to help our students to sleep better, concentrate more fully, engage more readily, and relax more easily. In our interactive workshop this afternoon I will introduce embodied meditation through *Qigong*, one of the main branches of Traditional Chinese Medicine (TCM), reflecting on how just a few minutes of daily Qigong practice can positively impact our students’ energy and focus. In addition, we will briefly consider how still meditation, with attentiveness on the regulation of breath, can benefit our students’ self-awareness and emotional control. Meditation offers our students a moment of quiet and a period of “non-doing,” to quote MBSR (Meditation-based stress reduction) founder Jon Kabat-Zinn.<sup>2</sup> Mindfulness practices such as the one we will experience today not only increase well-being; they also foster inclusivity, with faculty and students breathing and moving in sync with one another.

Before we engage with embodied meditation, let’s consider the science as it relates to the positive benefits of mindfulness and meditation. From a 2008 study entitled *Not all emotions are created equal*: “There is ample empirical evidence for an asymmetry in the way that adults use positive versus negative information to make sense of their world; specifically, across an array of psychological situations and tasks, adults display a negativity bias, or the propensity to attend to, learn from, and use negative information far more than positive information.”<sup>3</sup> This capacity to weigh negative input so heavily has likely evolved for a good reason – that is, to keep us safe.<sup>4</sup> “From the dawn of human history, our very survival depended on our skill at dodging danger. The brain developed systems that would make it unavoidable for us not to notice danger and thus, hopefully, respond to it.”<sup>5</sup> Simply put, we more quickly respond to negative stimulus than positive. No wonder our students have trouble seeing the positive side of things and carry that into their learning engagements with us. We, of course, humans like our students, also display a negativity bias and also struggle with the weight of that.

Yet, we can change the brain! In the podcast “How to Change Your Brain,” which aired on September 6, 2020, psychologist and Mindfulness practitioner Dr. Rick Hanson stated:

The brain is really good at learning from single experiences of worry, hurt, anger or inadequacy... [it] takes the repetition of many experiences, like gratitude or self-worth, to shift from state to trait.<sup>6</sup> According to Dr. Hanson, people who routinely practice mindfulness have improved structure and function in regions of the brain that support improvements in four major personal capacities:

1. to regulate their attention
2. to be aware of their body, and to be more self-aware in general
3. to be better able to regulate their emotions, their impulses, and their reactions
4. to have a more light-hearted and integrated sense of self

And this result, from a study published in 2014 and shared in *The Mindful Twenty-Something* by Holly Rogers: Inhabiting the present moment can change your brain. A meta-analysis determined that there are eight regions of the brain that are altered by meditation practice.<sup>7</sup> These brain regions are important in regulating emotions, improving memory, and increasing attention and awareness. Remarkably, this proves that we can alter the structure of our brain, improving its function in important ways, simply by learning to focus our attention in a particular manner.<sup>8</sup> The authors of the study noted that the existing literature on brain structure and meditation suggests that relatively few hours of training appear to be necessary to prompt changes in the brain. From Dr. Rogers: In the same way that exercise can change both the appearance and the strength of our muscles, meditation can change both the structure and the effectiveness of our brains.<sup>9</sup>

Sara Lazar, a neuroscientist at Massachusetts General Hospital and Harvard Medical School, has led two studies on mindfulness meditation and the brain.<sup>10</sup> In the first study, Dr. Lazar and her team found that long-term meditators “have an increased amount of gray matter in the insula, and [in the] sensory regions: the auditory and sensory cortex.... We also found they had more gray matter in the frontal cortex, which is associated with working memory and executive decision making.”<sup>11</sup> Since our cortex shrinks as we get older, it can become more challenging to “figure things out and remember things.... But in this one region of the prefrontal cortex, 50-year-old meditators had the same amount of gray matter as 25-year-olds.”<sup>12</sup> The second study looked at people who had meditated before and a group that began an 8-week mindfulness based stress reduction (MBSR) program. For this second group, they found thickening in four regions of the brain: the posterior cingulate, which is involved in mind wandering and self-relevance; the left hippocampus, which assists in learning, cognition, memory, and emotional regulation; the temporo parietal junction, which is associated with perspective taking, empathy, and compassion; and an area of the brain stem called the Pons, where...regulatory neurotransmitters are produced.<sup>13</sup> The amygdala, the “fight or flight” part of the brain which is important for anxiety, fear and stress got smaller in the group that went through the mindfulness-based stress reduction program. The change in the amygdala was also correlated to a reduction in stress levels.<sup>14</sup>

Finally, Drs. Roger Jahnke, Linda Larkey, Carol Rogers, Jennifer Etnier and Fang Lin, MS, completed “A Comprehensive Review of Health Benefits of Qigong and Tai Chi” in 2010.<sup>15</sup> In their study, they “identified numerous outcomes with varying levels of evidence for the efficacy

for Qigong and Tai Chi, including bone health, cardiopulmonary fitness and related biomarkers, physical function, falls prevention and balance, general quality of life and patient reported outcomes, immunity, and psychological factors such as anxiety, depression and self-efficacy.”<sup>16</sup> Twenty-seven articles reported on psychological factors such as anxiety, depression, stress, mood, fear of falling, and self-esteem.<sup>17</sup> In three studies, anxiety decreased significantly for participants practicing Qigong compared to an active exercise group.<sup>18</sup> Depression was shown to improve significantly in studies comparing Qigong to an inactive control.<sup>19</sup> Anxiety and depression showed fairly consistent responses to both Tai Chi and Qigong, especially when the control intervention did not include active interventions such as exercise.<sup>20</sup>

So, from the science, we know that we can change the brain and impact our emotional states by engaging in meditation and meditative movement – and just a few minutes of daily practice at that. So how can we bring these practices into the studio, classroom, or Zoom platform?

Let’s start by experiencing embodied meditation, or meditative movement, through the practice of Qigong (translated as “vital energy practice”). Qigong is one of the main pillars of Traditional Chinese Medicine (TCM) with sequences designed to remove energy blockages from the meridians, maintaining balance and health in the body. Documented history of Qigong goes back to the period of the Yellow Emperor (2696-2598 BCE) and the *Huangdi Neijing* (the *Yellow Emperor’s Classic of Internal Medicine*). There are thousands of forms of Qigong; today’s practices come from two of my Qigong instructors: Master Dr. Aihan Kuhn of the Tai Chi and Qigong Healing Institute and Master Chunyi Lin of Spring Forest Qigong. We will engage our parasympathetic nervous system through our Qigong practice, because we align our physical movement with our breath – this is a critical part of Qigong. Our breathing is akin to meditation breathing, relaxed and steady, and our movements are slow and gentle, allowing individuals of all levels of fitness and physical ability to participate in such a way as to receive benefits from the practice.

Qigong helps to encourage the student to become more aware of body and breath, and I choose which Qigong movements to utilize depending upon what body tension or emotional / mental stress that I observe in my student (or my student discloses) upon entering the studio. My goal is always to build positive energy through our work with Qigong. We will usually spend between three and five minutes at the start of the lesson in Qigong movement: we move and breathe together, teacher and student. Students appreciate this work, allowing us to create a space in-between the stress encountered outside of the studio and the focus of the lesson inside the studio – a limbo, of sorts, that leaves behind the student’s emotional or mental stress and prepares for the physical work to come. I invite you to join me in a short Qigong sequence, elements of which I routinely use at the start of a lesson.<sup>21</sup>

Sequence:

Short energy sequence

Bounce

Swinging arms

Head turning (align with breath)



Horizontal arm stretching  
Reach Sky, Touch Earth  
Self-massage by patting shoulders and arms

In class, I cannot address individual student issues, so instead I use a general routine to open the body, ignite energy (often required for a morning class), and provide an opportunity for us to expand our lungs and stretch our muscles. Again, I only allow a minute or two for this energy work at the start of class. Students in the early days of class are, perhaps naturally, skeptical, yet within a few weeks they are ready for us to engage in these few moments of physical movement. I cannot stress enough the value of the connection established between everyone in the room when we breathe and move together. Over the course of the semester I ask students to choose the movements that we do – this also increases engagement and interest. Let's now do a short sequence that can be used at the beginning of a class, to wake up the students' energy.

Sequence:

Bounce

Rotational Arm Stretching

Lunge and stretch arm

Left brain, Right brain exercise (cross lateral body movements encourage the left and right hemispheres of our brains to connect and coordinate.<sup>22</sup> Also, this movement helps to raise positive energy and diffuse negative energy, which I why I include it here in a Qigong sequence. This is a wonderful and useful energy practice to get students focused and ready to engage with class material.)

These movements can just as easily be done via Zoom as in person. For so many of our students, gentle movement while engaging with the breath is a wonderful way to enable them to experience the benefits of embodied meditation and focus.

Still meditation is also a way to engage with our students, lessening stress or anxiety and focusing attention at the start of a lesson or class. Again, we are only talking about a few minutes of connection, of settling in and preparing for the work ahead.

I am a certified instructor of the Koru Mindfulness Program, developed by two US psychiatrists, Drs. Holly Rogers and Margaret Maytan at Duke University. The Koru curriculum centers around practical skills that students can use to manage their stress, focus their minds, and gain perspective on issues and challenges they may be facing.<sup>23</sup> Rogers and Maytan developed a class aimed specifically for students and young adults, with an emphasis on accessibility, practicality, and immediate results. In 2013 The Center for Koru Mindfulness<sup>®</sup> was established to train others to teach Koru Mindfulness<sup>®</sup> at college campuses.<sup>24</sup> I regularly teach Koru Basic and Koru 2.0 classes for students at the University of Richmond and beyond.

When offering meditation in the vocal studio, I ask the student to please take a seat and settle in comfortably with both feet on the floor. I also sit, across or next to the student. I invite the student to begin to focus on her in-breath and out-breath, feeling the expansion and contraction

of the lower body. If the student is particularly stressed or anxious, it make take a few moments to move the breath from the upper body (chest) to lower in the body (belly). In this short sit sequence, it can be useful to ask the student to count to four with the in-breath and five or six with the out-breath: by extending the outbreath, we actually help to reset the Vagus nerve, and engage the parasympathetic part of our nervous system, described in polyvagal theory as the “Window of Tolerance” or the Ventral Vagal complex.<sup>25</sup> The simple counting exercise is useful because it affords students the opportunity to keep their minds gently engaged, preventing them from being swept away by the rushing thoughts and judgements of the thinking brain.

The process just described is basically the same for a class, whether in person or online. Surprisingly, engaging in mindful breathing with a student or a class over the Zoom platform can actually be quite successful. Students experience the intimacy of their individual space while still connecting to the class, eager for this type of authenticity.

Occasionally, I will suggest that, while we are focused on our breathing, we set an intention for the work ahead. For example, during a short breathing exercise, I once asked my class to set an intention of being open to offering and receiving help, as we were about to spend the majority of our class time working on peer group editing. This short moment of focusing on our intention set the stage for a collaborative and worthwhile session.

A brief note here about comfort – not every student will be comfortable sitting in a space with you, or others, focused on breathing. Here are two Qigong movements that I use when such is the case: Golden Wheel and Rock forward, Rock back. Let’s try them together.

If we are experiencing a particularly challenging week (say, midterms), I also offer a “self-hug” which my students report is very useful to them, even outside of our work together. I invite you to stand or sit, as you like, and let’s together do the “self hug.”

I have collected student testimonies about the positive impact of Qigong and still meditation and share a few of them with you this afternoon:

In performance:

*Prior to the chamber ensemble performance, I used Qigong while waiting backstage. The performance did not go as smoothly as I might have hoped, and brushing off mishaps during a performance has been something I typically struggle with. However, during this particular performance I was more focused in the moment during the mistakes, and was able to recover more quickly. I definitely think that practicing Qigong is helping with achieving that state of mindfulness.*

*My audition began 15 minutes after a meeting with current students and faculty at the conservatory. I spent those minutes in a relaxation room that they had set up for the auditionees with my lavender essential oil and the breathing techniques you shared with me. The self-hug was very comforting and the five breaths helped to calm me. I also used the breathing technique*

*that you showed me a few weeks ago while stretching my arms out and above my head [Y pose]. This helped to both lower my stress and expend energy.*

*Backstage, before my recital, I used Qigong to bring myself into a place of focus and awareness, gaining control over my nerves.*

*I did some Qigong body movements before arriving at the location of the performance. Once the program started, my nerves immediately kicked in. I had to repeatedly tell myself the meditation you'd shown me earlier [the meditation referenced here was the Koru program's Gatha meditation, adapted from one by Thich Nhat Hanh]. If it were not for that meditation, my mind would've been all over the place. It didn't perfectly calm my nerves, as they were still evident in my performance; however, had it not been for the meditation I would not have been as mentally prepared to perform.*

Outside of the studio:

*I used Qigong prior to a job interview I was very stressed about, and it helped me to calm down and focus. I could literally feel my heart rate decreasing and my breathing relaxing.*

*I was in my car, sitting outside of the building where I was about to take the Graduate Record Examination (GRE) tests. I was nervous, and I focused on my Qigong breathing. I was able to relax, bring myself into the present moment, and entered the testing site with confidence and clarity.*

*I was about to take a final in my major and the rest of the class was incredibly nervous about the test. I focused on my Qigong breathing and was able to keep myself separate from the stress of the other students.*

My introduction of Qigong into the studio was based on my intention to aid students in reducing stress and tension. While my highest hopes for Qigong were realized, I was delighted to learn that students declared it easier to sustain longer phrases after participating in regular Qigong practice. The slow and sustained inhale and exhale of Qigong practice, as in other meditative practices, develops a student's muscle memory which can then be used in singing. In a sense, one superimposes the ease and comfort of the Qigong / meditation breath onto the singing breath; muscle memory is thus developed through a relaxed and relaxing process, supporting connected singing across longer phrases.

Can we help our students to move away from focusing on their stress and anxiety and, instead, move toward an enhanced opportunity for learning in our studios or our classrooms? Yes, we can. Can we do this in just a few minutes at the start of our lesson or class? Yes, we can. Does this necessitate a departure from what we have done in the past? For most of us, yes, and it may not feel easy or accessible at the beginning. Yet, might we be willing to try something new to help our students to regulate their attention, to be aware of their bodies and be more self-aware, to be better able to regulate their emotions, their impulses, and their reactions, and to have a

more light-hearted and integrated sense of self? If you answer yes to that question, the simple steps outlined here today can be your starting point.

My contact information is on the screen behind me, and I urge any who would like more information about introducing Qigong or Koru to your students to please reach out to me directly.<sup>26</sup> Thank you for joining me in Qigong practice this afternoon!

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<sup>1</sup> Fresh Air, Terry Gross host, aired 28 May 2019, NPR.

<sup>2</sup> Kabat-Zinn, Jon. *Wherever You Go There You Are*. New York: Hatchette Books, 1994.

<sup>3</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3652533/>, 2008 study, accessed 10.3.20. Not all emotions are created equal: The negativity bias in social-emotional development. Amrisha Vaish, Tobias Grossmann, and Amanda Woodward.

<sup>4</sup> *Psychology Today*, June 20, 2003, accessed 6.10.2019 and again 10.3.20:  
<https://www.psychologytoday.com/us/articles/200306/our-brains-negative-bias>

<sup>5</sup> Ibid.

<sup>6</sup> <https://www.rickhanson.net/being-well-podcast-how-to-change-your-brain/>

<sup>7</sup> Rogers, Holly. *The Mindful Twenty-Something*, (Oakland, CA: New Harbinger Publications, Inc., 2016), 53. Fox, K. S. Nijeboer, M. Dixon, J. Floman, M. Ellamil, S. Rumak, P. Sedlmeier, and K. Christoff. 2014. "Is Meditation Associated with Altered Brain Structure? A Systematic Review and Meta-analysis of Morphometric Neuroimaging in Meditation Practitioners." *Neuroscience and Behavioral Reviews* 43: 48-73.  
<https://pubmed.ncbi.nlm.nih.gov/24705269/>

<sup>8</sup> Rogers, Holly. *The Mindful Twenty-Something*, (Oakland, CA: New Harbinger Publications, Inc., 2016), 53.

<sup>9</sup> Ibid.

<sup>10</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1361002/> (first study) and  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3004979/> (second study).

<sup>11</sup> Q&A with Dr. Lazar: [https://www.washingtonpost.com/news/inspired-life/wp/2015/05/26/harvard-neuroscientist-meditation-not-only-reduces-stress-it-literally-changes-your-brain/?utm\\_term=.3898ba15aae4](https://www.washingtonpost.com/news/inspired-life/wp/2015/05/26/harvard-neuroscientist-meditation-not-only-reduces-stress-it-literally-changes-your-brain/?utm_term=.3898ba15aae4)

<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

<sup>14</sup> Ibid.

<sup>15</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3085832/pdf/nihms281835.pdf>

<sup>16</sup> Ibid., p. 16.

<sup>17</sup> Ibid., p. 12.

<sup>18</sup> Ibid., References 28, 46, and 110.

<sup>19</sup> Ibid., p. 12.

<sup>20</sup> Ibid., p. 19.

<sup>21</sup> If you are interested in learning more about any of the Qigong movements mentioned in this paper, other Qigong movements (specific or general), or have any questions about Qigong, please reach out to the author directly at [jcable@richmond.edu](mailto:jcable@richmond.edu).

<sup>22</sup> <https://www.inc.com/melanie-curtin/want-to-sync-2-hemispheres-of-your-brain-neuroscience-says-to-do-this-daily-it-only-takes-4-minutes.html>.

<sup>23</sup> <https://korumindfulness.org/about/the-koru-story/>.

<sup>24</sup> <https://korumindfulness.org/about/the-koru-story/>. More information about the Koru study can be found here:  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4016159/>.

<sup>25</sup> <https://themovementparadigm.com/how-to-map-your-own-nervous-system-the-polyvagal-theory/>  
<https://www.thescienceofpsychotherapy.com/deb-dana/>

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<https://directory.richmond.edu/bios/jcable/>.