Hello, FLCs and future FLCers! This semester seven of us explored several activities and readings throughout the year. We put together this handout for all of you; we have activities that are short and long, in-class/out-of-class, inside the classroom, or outside with your class. We hope you find them useful. We certainly did!

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Page 8 includes readings that we did throughout the experience.

"InsideOut Physiology" recordings on SoundCloud and also done live in class:

The human body operates as one integrated unit, but the standard "march through the systems" in physiology courses makes it difficult for students to see the big picture. Another issue with physiology courses is that although all or nearly all the processes students learn about are occurring at that moment inside their own bodies, neither instructors nor students typically take the time to notice or note that fact. Finally, even within a system, students tend to see the "pieces" without appreciating or understanding the integrated function of the system. InsideOut Physiology explorations are intended as a small corrective to these issues. As guided, 5-10 minute meditation-like "journeys" through a physiological system, which students are encouraged to listen to with their eyes closed (either live in class or via recordings on SoundCloud), the podcasts provide the big picture of a physiological system while ideally evoking a sense of wonder about and appreciation for the functioning of our own bodies.

Example: https://soundcloud.com/leupen/breathing-insideout

[contributed by Sarah Leupen]

Setting the tone and check-in [adapted from Case studies for Contemplative Mind in Society]

Print a small piece of paper with four questions: What matters to you? What do you know now? Where are you now? How are you? The small piece of paper makes it less overwhelming for students, and it also shortens the time to complete the exercise., The first three questions are targeted toward the material of the class. If they think about what matters in the discussion for the lecture (reading/discussion/problem solving etc.), they will take ownership of the content. The second question is to encourage them to share what they could say about what they read/worked on, with the idea of valuing their experience. The third and fourth questions are more socio-emotional, where are they with their feelings connected to the class, and the last one is a check on students well being. The questions can be used separately or at the same time. It takes about 10 minutes: to distribute papers and students' answers, and collect them. Instructors can quickly browse and address the class right there or at the end of the class period or do it the following time they meet. This exercise was originally designed as four journaling questions - if used in that setting, the students can submit as an un-graded assignment measured by participation.

[contributed by Mariajosé Castellanos]

Contemplative teaching: a case study

We discussed ZASTAVKER et al. (2022) on using contemplative teaching in STEM education. ZASTAVKER et al. (2022) conducted a study on using contemplative teaching in STEM education1. The study aims to enable student engagement with STEM in a holistic and embodied way, particularly in its applications to collective and individual human experience, including considerations of ethics, social justice, and activism; create opportunities for students to make sense of human experiences as embodied beings in the physical universe; allow students to develop a capacity for deeper self-awareness and reflection while also developing as individuals. The study used contemplative teaching in two courses: physics foundation and social science.

Reference:

ZASTAVKER, Y. V.; VENKATESH, M. J. Contemplating Engineering and Science: Creating Compassionate and Empathetic Learning Spaces in Engineering Education. **2022 IEEE Frontiers in Education Conference (FIE), Frontiers in Education Conference (FIE), 2022 IEEE**, [s. 1.], p. 1–5, 2022. DOI 10.1109/FIE56618.2022.9962595. Disponível em: https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url,uid&db=edseee&AN=edsee.9962595&site=eds-live&scope=site. Acesso em: 20 fev. 2023.

https://ieeexplore.ieee.org/document/9962595

[contributed by Pengwang Zhai]

Mindful Reaction to Controversial Topics Using Emotional Tactics

Task 1: While reading the following essay monitor how your body is experiencing any emotional activation.

The Western Journal

Op-Ed

"Global Warming Myth Debunked: Humans Have Minimal Impact on Atmosphere's Carbon Dioxide and Climate" By Jay Lehr, Ph.D. & Tom Harris January 22, 2019 at 3:10pm

Global warming activists argue carbon-dioxide emissions are destroying the planet, but the climate impacts of carbon dioxide are minimal, at worst. Activists would also have you believe fossil-fuel emissions have driven carbon-dioxide concentrations to their highest levels in history. The Obama-era Environmental Protection Agency went so far as to classify carbon dioxide as a toxic pollutant, and it established a radical goal of closing all of America's coal-fired power plants.

Claims of unprecedented carbon-dioxide levels ignore most of Earth's 4.6-billion-year history. Relative to Earth's entire record, carbon-dioxide levels are at historically low levels; they only appear high when compared to the dangerously low levels of carbon dioxide that occurred in Earth's very recent history. The geologic record reveals carbon dioxide has almost always been in Earths' atmosphere in much greater concentrations than it is today. For example, 600 million years ago, when history's greatest birth of new animal species occurred, atmospheric carbon-dioxide concentrations exceeded 6,500 parts per million (ppm) — an amount that's 17 times greater than it is today.

Atmospheric carbon dioxide is currently only 410 parts per million. That means only 0.04 percent of our atmosphere is carbon dioxide (compared to 0.03 percent one century ago). Only one molecule in 2,500 is carbon dioxide. Such levels certainly do not pose a health risk, as carbon-dioxide levels in our naval submarines, which stay submerged for months at a time, contain an average carbon-dioxide concentration of 5,000 ppm.

The geologic record is important because it reveals relationships between carbon-dioxide levels, climate, and life on Earth. Over billions of years, the geologic record shows there is no long-term correlation between atmospheric carbon-dioxide levels and Earth's climate. There are periods in Earth's history when carbon dioxide concentrations were many times higher than they are today, yet temperatures were identical to, or even colder than, modern times. The claim that fossil-fuel emissions control atmospheric carbon-dioxide concentrations is also invalid, as atmospheric concentrations have gone up and down in the geological record, even without human influence.

The absurdity of climate alarmism claims gets even stranger when you consider there are 7.5 billion people on our planet who, together, exhale 2.7 billion tons of carbon dioxide each year, which is almost 10 percent of total fossil-fuel emissions every year. However, we are but a single species. Combined, people and all domesticated animals contribute 10 billion tons.

Further, 9 percent of carbon-dioxide emissions from all living things arise not from animals, but from anaerobic bacteria and fungi. These organisms metabolize dead plant and animal matter in soil via decay processes that recycle carbon dioxide back into the atmosphere. The grand total produced by all living things is estimated to be 440 billion tons per year, or 13 times the amount of carbon dioxide currently being produced by fossil-fuel emissions. Fossil-fuel emissions are less than 10 percent of biological emissions. Are you laughing yet?

Every apocalyptic pronouncement you hear or read is nothing short of insanity. Their primary goal is not to save plants, humans, or animals, but rather to use climate "dangers" as a justification for centralizing power in the hands of a select few.

Note: Portions of this article have been excerpted with permission of the publisher and author of the 2018 book, *The Mythology of Global Warming* by Bruce Bunker, Ph.D. (Publisher: Moonshine Cove). For more information on this topic, the authors strongly recommend this book, which provides some of the very best information about the climate change debate. Jay Lehr, Ph.D. (jlehr@heartland.org) is science director of The Heartland Institute. Tom Harris is executive director of the International Climate Science Coalition.

The views expressed in this opinion article are those of their author and are not necessarily either shared or endorsed by the owners of this website. If you are interested in contributing an Op-Ed to The Western Journal, you can learn about our submission guidelines and process here.

Task 2:

With a partner complete the following: One person shares for 90 seconds, and the other person just listens. Repeat this step for the other person. If there is a third person, repeat again, if not, the two people can discuss for the final 90 seconds.

Reflect on how the essay made you feel, and how you recognized these feelings in the body.

Discussion: The SIFT technique for evaluating sources

(S)top

(I)nvestigate source

(F)ind better coverage

(T)race claims

[contributed by D Snyder]

Contemplative Group Reading Practice (From Barbezat and Bush, Contemplative Practices in Higher Education: Powerful Methods to Transform Teaching and Learning)

Instructions for reading:

Sit quietly and relax your minds and bodies for one minute

Read aloud, slowly, the entire text, each person reading one or two sentences, "passing along" the reading to the left to the next reader

One minute of silence and reflection

One person reads aloud a short passage that is chosen in advance. Another minute of silence and reflection.

Each person shares a word or short phrase in response to the reading—just giving voice to the word without explanation or discussion.

Another person reads the short passage again. One minute of silence and reflection

Each person shares a longer response to the text—a sentence or two. All listen attentively to one another without correcting or disputing.

Another person reads the short passage one last time, followed by another minute of silence.

[contributed by D Snyder]

Forest Bathing

First we read and discussed a dissertation from 2018: Contemplative Practices in Higher Education; Examining Faculty Perspectives by Daria Pizzuto.

I invited attention to Chapter IV Research findings, particularly the first three sections (the Hows and whys, which contemplative practices and how contemplative practice are implemented. That was about 20 pages of reading which centers on interviews of faculty about their experiences.

The last section of the chapter (15 pages) looks at how the practices affect academic professional identity so that could be saved for another discussion.

The survey and interview protocol are included in appendices D and E.

https://scholarship.shu.edu/cgi/viewcontent.cgi?article=3562&context=dissertations

Then we went outside under the trees near the Administration Building for a forest bathing exercise. Dr. Qing Le, author of *Forest Bathing: How Trees Can Help You Find Health and Happiness*, Viking April 2018, writes that the Japanese call this shinrin-yoku which translates literally to "forest bath". Le notes that shinrin-yoku is, "bathing in the forest atmosphere, or taking in the forest through our senses. This is not exercise, or hiking, or jogging. It is simply

being in nature, connecting with it through our senses of sight, hearing, taste, smell and touch." Le says that forest bathing acts as a "bridge" over a gap between us and the natural world around us. Anywhere with trees and natural surfaces will do.

Each of us chose a spot-under a particular tree, in shade or sun; sitting, kneeling, lying on our back, leaning on the tree or slowly circling-and simply absorbed the sights, the sounds, the feel of the breeze, the texture of grass or bark, the interplay of light through the leaves, the warmth or coolness of sun or ground.

After about 12 minutes of silent practice, we gathered close in a circle on the ground to share our insights and thoughts. These included never before having noticed a particular spot or tree as well as our physical bodies' reaction to slowing down and giving ourselves permission to notice and foreground what is ordinarily background. Some tuned in to the passing clouds or the feel of the breeze; others zeroed in on details of leaves, bark, twigs and grass. Such practices can be incorporated as 10-20 minute activities during a class session (ideally at the end of a class) with written reflections afterward on any differences students notice in stress levels, clarity of thought, ability to focus, etc.

[Contributed by Janet Gross]

Contemplative Reflection Exercise

My goal for this exercise was to explore and adapt activities to introduce mindfulness and contemplative techniques with an exploration of ageism and age-related implicit bias. This exercise was used early in the semester with the goal of setting an environment that allowed continuation of this work and awareness as we explored health, wellness, and aging.

There are many negative stereotypes and misconceptions about aging that are often very deep seated and usually formed as early as in our childhood. These are often based on 'compassionate or benevolent ageism' or the belief that all older adults are persons who need to be cared for and aging is associated solely with decline. This negates the diversity of the older adult population and neglects strengths, resilience, adaptation, and autonomy.

Researchers have identified that mindfulness techniques can reduce bias and various techniques have been explored such as journaling, dialog, experiential learning opportunities with self-reflection. Reflective, mindful questions allow students to explore their own beliefs and how they are formed and allow them to challenge assumptions (Erickson, 2021).

This exercise combines mindfulness and reflective writing. Various mindfulness exercises are available online that use leaves as an observation exercise and this exercise was adapted from those such as: https://www.ianbanyard.com/home/the-natural-mindfulness-leaf-exercise/ and https://www.calmsage.com/simple-mindfulness-exercise/ The question prompt was derived from Dr. Bill Thomas's (2004) book What are old people for? How elders will save the world.

Needed:

• Leaves (in fall, so their colors have changed and are vibrant)

- Alternatively I used this exercise in class at the beginning of the spring semester and used a printed visual of two persons holding hands (one younger, one older) with only the hands in the image and adapted the Part 1 prompt
- A printed prompt with the question: What are old people for? (this is not revealed until after the 1st part of the exercise

Prompt:

Part 1 (5 mins)

- Take time to focus on the leaves in front of you
- How do they look? How do they feel?
- How do you imagine this leaf's experience from a bud to as it is before you?

Part 2 (5 mins)

• Please turn over your paper and think about the question

Spend 5 minutes writing your response to that question

Part 3 (as needed)

We then discussed as a group (could be done small than larger group) our response to that question

Sources/Further reading:

Barbezat, D. (2019). What are people for? Cultivating connection and challenging self-interest. In Benefiel, M. (Ed.) *The Soul of Higher Education: Contemplative Pedagogy, Research and Institutional Life for the Twenty-first Century (pp. 75-85)*. Charlotte, NC: Information Age Publishing.

Edwards, S. (2019). Reflective journaling as a contemplative practice: Applications for a social justice educator. In *Contemplative pedagogies for transformative teaching, learning, and being* (pp.329-344). Charlotte, NC: Information Age Publishing.

Erickson, M.A. (2021. Contemplative pedagogy as a framework for education about ageism. *Gerontology & Geriatrics Education*, 42(3), 297-307.

Majeski, R.A., & Stover, M. (2018). Contemplative pedagogy in hybrid and asynchronous online undergraduate aging services/gerontology courses. *Gerontology & Geriatrics Education*. 39(1), 75-85.

Thomas, W.H. (2004). What Are Old People For?: How Elders Will Save the World. Vanderwyk & Burnham. ISBN: 1889242209 **[Contributed by Louise Murray]**

Grounding activity and meditation practice on pain relief

We often experience emotions directly in the body. Numerous studies have established that emotion systems prepare us to meet challenges encountered in the environment by adjusting the activation of the cardiovascular, skeletomuscular, neuroendocrine, and autonomic nervous system. We looked at an article that maps of bodily sensations associated with different emotions (PNAS, 2014, 111, 646-651) and studies related to meditation practice and neural mechanisms of mindfulness on pain (Neuroimage, 2013,1; 64: 538–546). How meditation helps to reduce the duration of the pain. As reported in the article, compared to novices, expert meditators reported equal pain intensity, but less unpleasantness as shown in Figure 1.

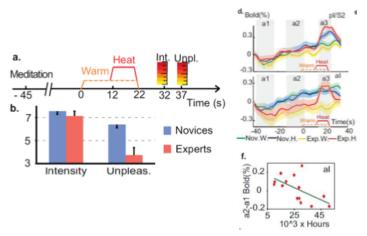


Figure 1.Experimental design and behavioral results from the Neuroimage article. **a.** Trial structure. Each trial consisted of a visual cue followed by a 45 s meditation period, a 12 s warm thermal stimulation followed by either a warm or painful thermal stimulation. After each trial, subjects rated pain intensity and unpleasantness on a visual analog scale. **b.** Pain intensity and unpleasantness ratings for novices and experts performing OP. Error bars are SEM. Experts rated less unpleasantness than novices but rated intensity as comparable. **d.** Average activity across time. **f.** The amount of meditation practice in life for experts was negatively correlated to anticipatory activity in left **Classroom Activity**

As a classroom activity we did the following simple 5-minute activity to calm anxious thoughts and keep someone focused and mindful in your environment.

5-4-3-2-1 Grounding Exercise:

Before starting this exercise, pay attention to your breathing. Slow, deep, long breaths can help you maintain a sense of calm or help you return to a calmer state. Once you find your breath, go through the following steps to help ground yourself:

Sit quietly. Look around you and focus on:

- 5 things you can see: e.g., your hands, the sky, plants around you, spider web, etc.
- 4 things you can physically feel: e.g., your feet on the ground, leaves, coffee on your hand
- 3 things you can hear: e.g., the wind blowing, your breath, the sound of traffic
- 2 things you can smell: e.g., fresh-cut grass, coffee, the smell of your cloths
- 1 emotion you can feel

[Contributed by Gautom Das]

Readings throughout the year:

- a. From the book: The Soul of Higher Education: Contemplative Pedagogy, Research and Institutional Life for the Twenty-first Century CHAPTER 3: The Contemplative Classroom, or Learning by Heart in the Age of Google: 12 pages
- b. From the book: Contemplative Pedagogies for Transformative Teaching, Learning, and Being CHAPTER 2 MINDFULNESS, MEDITATION, AND THE CULTIVATION OF EMPATHY

- c. From the book: Contemplative Practices in Higher Education: Powerful Methods to Transform Teaching and Learning Chapter 6: Contemplative Approaches to Reading and Writing
- d. Online Essay: Samuel, Sigal, "It's hard to be a moral person. Technology is making it harder" Vox, 8/3/21,
 https://www.vox.com/the-highlight/22585287/technology-smartphones-gmail-attention-morality
- e. Dissertation 2018: Contemplative Practices in Higher Education; Examining Faculty Perspectives by Daria Pizzuto: Chapter IV Research findings. The survey and interview protocol are included in appendices D and E. https://scholarship.shu.edu/cgi/viewcontent.cgi?article=3562&context=dissertatio
- f. Mindful Assessment in Support of Student Learning (click on pdf once at the site to download it) from the 2019 issue of The Journal Of Contemplative Inquiry.
- g. From the book: Contemplative Pedagogies for Transformative Teaching, Learning, and Being CHAPTER 3: REFLECTIVE JOURNALING AS CONTEMPLATIVE PRACTICE p.329-344
- h. From the book: The Soul of Higher Education: Contemplative Pedagogy, Research and Institutional Life for the Twenty-first Century CHAPTER 6 WHAT ARE PEOPLE FOR? P.75-85
- i. Book Chapter. From the book: Contemplative Pedagogies for Transformative
 Teaching, Learning, and Being CHAPTER 11: THE WAY OF THE CLASSROOM p.189-206
- j. Body Maps of emotions, PNAS, 2014, 111, 646-651 (<u>Link</u>)
- k. Lutz et al. Neuroimage. 2013 January 1; 64: 538–546 (<u>Link</u>)