Engaging the Student Body

Fall 2021

You should consider your students' bodies because bodies impact their attention and focus, physical health, and mental health. In this workshop we explore 3 potential ways to engage student through their bodies:

- setting students up for success
- taking breaks
- seeking out opportunities for movement

Suggestion 1: Set students up for success

Ergonomics is "...the study of people in their working environment." The goal of ergonomics is "to eliminate discomfort and risk of injury due to work."

- Office of Environmental Health and Safety, University of North Carolina at Chapel Hill

Early in the semester (and/or on the syllabus and the course site) consider reminding them that during online classes—whether synchronous or asynchronous—they should sit in a chair. Ideally, this should be a chair with back support, and one that allows them to sit with their knees approximately level with their hips. The computer/laptop/other device on which they are attending class should be at least arm's length from the face and the screen should be kept at about eye level.

These suggestions are just the tip of the iceberg when it comes to ergonomic considerations. There are lots of expert resources available online to learn more. You might check out the UNC Chapel Hill office ergonomics page, the Mayo Clinic's office ergonomics how-to guide, UCLA's 4-step workstation setup guide, or this article from PC Magazine on "Everything You Need to Set Up an Ergonomic Home Office."

Suggestion 2: Take breaks

Breaks during class can provide opportunities for students to move. Incorporating breaks is among the easiest ways to introduce moments of movement during class and has several other potential benefits.

In a study about the role of breaks in maintaining mental focus, researchers found that "vigilance decrements are not about an exhaustion of attention, they are about a loss of control over the contents of our thoughts." This strongly suggests that *breaks help students refocus*. In shorter online classes, you may find that taking a 2-minute break helps students come back to the material with more focus and energy. Longer classes may require longer breaks, or a combination of longer and shorter breaks.

¹ Ariga, Atsunori and Alejandro Lleras, "Brief and rare mental 'breaks' keep you focused: Deactivation and reactivation of task goals preempt vigilance decrements." *Cognition*, vol. 118, no. 3, 2011, pp. 439-443, https://doi.org/10.1016/j.cognition.2010.12.007.

Further, "the evidence base linking prolonged sitting with a number of adverse health outcomes, including premature mortality, is now sufficiently strong to suggest that physicians should be advising patients to reduce daily sitting time and avoid prolonged unbroken sitting periods." This means that breaks also promote physical health. When you take class breaks, encourage students to stand up, stretch, take a walk around the room, do some jumping jacks, etc. And remember to get up from your seat yourself if you can.

In addition, a study in the journal *Mental Health and Physical Activity* "found a relationship between sitting at work and moderate psychological distress for men and for women, moderate and high psychological distress, independent of leisure-time physical activity and work stress." This suggests that, in addition to benefitting physical health, breaks during working period (i.e., class sessions) could benefit students' mental health. Student survey data collected by the CTL indicates that students are experiencing high levels of stress even as classes begin to shift toward a new normal, so a simple stress reliever such as a 2-minute break during class may have outsize impact on students' wellbeing.

Suggestion 3: Seek out opportunities for movement

There are opportunities for movement in <u>every</u> class. For example, do you expect students to take notes? Encourage them to take notes on paper. Writing is not aerobic exercise, but it is certainly movement. Research shows that physicalizing notetaking during lectures may improve learning outcomes by forcing students to be selective about what they write down. One study found that "on multiple college campuses, using both immediate and delayed testing across several content areas…participants using laptops were more inclined to take verbatim notes than participants who wrote longhand, thus hurting learning."⁴

Does your class include oral presentations? Introduce physical and/or vocal warm-ups. These could include:

- deep breathing
- stretching
- yoga poses
- guided visualization
- vocal warm-ups
- tongue twisters

² Dunstan, David W., et. al. "Too much sitting – A health hazard." *Diabetes Research and Clinical Practice*, vol. 97, no. 3, 2012, pp. 368-376, https://doi.org/10.1016/j.diabres.2012.05.020.

³ Michelle Kilpatrick, et. al. "Cross-sectional associations between sitting at work and psychological distress: Reducing sitting time may benefit mental health." *Mental Health and Physical Activity*, vol. 6, no. 2, 2013, pp. 103-109, https://doi-org.ezproxy.gc.cuny.edu/10.1016/j.mhpa.2013.06.004.

⁴ Mueller, Pam M. and Daniel M. Oppenheimer "The Pen Is Mightier Than the Keyboard: Advantages of Longhand Over Laptop Note Taking." *Psychological Science*, vol. 25, no. 6, 2014, pp. 1159-1168, https://www.jstor.org/stable/24543504.

Deep breathing is the simplest option. It can be done sitting or standing, in a private space or a public one. It has also been shown to reduce stress using both self-reported and objective measurements. It can also be used in conjunction with many of the other options, such as stretching, yoga, or guided visualization.

Vocal warm-ups and tongue twisters can introduce a note of silliness and humor to the class, in addition to possibilities for movement. Like deep breathing, humor is a good stress reliever. A recent study stated that their "results support the notion that the stress-buffering effect of positive affect also applies to situations in which stress and positive affect occur in close temporal approximation." 6

Next steps

Take some time to think about the suggestions from this document and the accompanying video presentation. Specifically, consider:

- Is there a place for discussing ergonomic considerations on your syllabus or course site?
- How might breaks fit into your allotted class time? Would you want to schedule them, or does it feel more "you" to improvise?
- Do you currently have unused opportunities for movement in your class?
- Can you create new opportunities for movement?

You may find that freewriting on one or all of these prompts will help you develop a plan for incorporating more movement into your class sessions and intentionally engaging your students through their bodies.

This text resource and the accompanying video was created by Pamela Thielman for the Baruch College Center for Teaching and Learning.

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⁵ "The results obtained...support the possibility that deep breathing technique is capable to induce an effective improvement in mood and stress both in terms of self reported evaluations (MPS and POMS) and of objective parameters, such as heart rate and salivary cortisol levels." Perciavalle, Valentina, et. al. "The role of deep breathing on stress." *Neurological Sciences*, vol. 38, no. 3, 2017, pp. 451-458, https://doi.org/10.1007/s10072-016-2790-8. ⁶ Zander-Schellenberg, Thea, et. al. "Does laughing have a stress-buffering effect in daily life? An intensive longitudinal study." *PLoS ONE*, vol. 15, no. 7, 2020, pp. 1-11, https://doi.org/10.1371/journal.pone.0235851.