

3. You Can Connect

Let us look at the third area of this teaching philosophy: The connections are yours to make. The problems are hard to solve, but you did come not here to *know* how to solve hard problems. You came here to *learn* how to solve hard problems. And you *can*. You *can* learn how to solve seemingly unsolvable problems—especially if you trust us not to expect to have already arrived. You are expected, rather, to embark and travel. Those who came before you also *came to know*—after time carved out in crooked lines. Whether they were your slightly older peers or your historical textbook heroes, the traces they left behind are deceptively alluring. Their final copies came after drafts; their drafts came after discards; their discards did not feel good. We might observe elegant outcomes, but we must infer and emulate rich processes. A John Jay physics class is not designed so we can *cover* chapters; it is designed so you can *uncover*, discover, and distribute the furnishings of your mind. How? By rigorously contemplating the furniture of the universe.

To this end, we benefit from tactics to which students have grown accustomed in 21st century gameplay. In physics, the key to gaming is not to make your victory predicated on my loss. Prior to COVID, the physics emphasis on cooperation over competition and socially discursive pedagogy over pedantry were best symbolized by the all-class *Board Meetings* we conducted approximately three times per lab semester, often right before exams (in navigation bar, see *Curricular Exhibit III. VOICES Board Meeting*). This student-driven circle-talk-with-whiteboards format still plays a central role in constructivist learning within the John Jay Physics Lab program. But is it all we have? How deeply can we trust our connections when we are not sitting in a circle with our flesh and blood peers? This question found gripping expression at the height of pandemic-driven quarantine. The concern remains relevant, as we navigate the territory of remote synchronous learning (*Zoom*).