Dear Colleagues,

Thanks very much to all who attended and provided such valuable input at the IRLI Brunch! One of the pleasures of that event was in meeting so many new people: We're very excited by the extent and level of interest across the schools at Tufts.

We're writing now to follow up, with an idea that came out of our discussions about what we heard in the tables and in the plenary discussion. This isn't the only follow-up; we're not going to do everything at once. But we think it touches on several themes, including interest by many people attending to (1) start collaborating in research, (2) using data in current courses, and (3) without serious prerequisite study of the literature.

We propose a pilot study, across schools at Tufts, of *how students approach learning* in our courses. This is a matter of ongoing interest in discipline-based education research, and researchers ask this question in many ways: How do the strategies students use in their studies relate to the practices of learning in the discipline?

One well-known study of a high school biology course distinguished "doing science" (working toward genuine understanding) vs "doing school" (doing what the course requires as a "display" for the instructor) (Jimenez-Aleixandre *et al* 2000). We've asked similar questions in our work, about whether Tufts engineering students are engaged in completing assigned tasks or working to understand ideas (Swenson & Wendell, 2017; Swenson, 2018); how a Tufts student in introductory physics shifts from memorizing equations to physical sensemaking (Radoff, Jaber & Hammer, in press); how Tufts students in biology lab learn to model phenomena and design their own experiments (Gouvea & Wagh, 2018).

For this current semester, we're thinking on a modest scale to explore what's feasible. We'd meet early in the semester and work with you to design a strategy of data collection for your course. In some cases, there's evidence already coming in, and we can just tap into the work students are doing already; in other cases, we'd want to record video of students working, and we'd pay some students to help with that. Maybe we'd ask students to keep journals, or design surveys…Part of the challenge of education research is that learning contexts vary significantly, in structure and substance so we need multiple approaches.

We're thinking we'd meet again during the semester to see how things are going. We'd look at some data, do some preliminary analyses see if the data is useful, and make adjustments as appropriate. Then we'd schedule a working session in the summer, for a couple of days (with stipends), for closer analyses and exchange, assess where we are and plan next steps.

Please let us know if you'd like to participate. Send us a note back, and please include some basic details about the course—the name, number of students, any initial ideas you have about possible data sources. And let us know if you are interested in potentially using collected data for a publication (now or in the future) and we can help you get started with the IRB process.

As we said, this won't be the only follow-up; in fact, we'll be writing again soon with a schedule of talks by candidates for the new Bridge Professorship in Engineering Education.

Thanks!

Andrew, Julia, Kristen, and David