



I Also Teach

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Recently, my son and I picked up Steve Sheinkin's (2012) book *Bomb* to read together. A history lesson disguised as a spy caper, the book immediately drew us both into the history of the race to build the first atomic weapon. As we sat down comfortably in our Berkeley, California, home and opened the very first page of the book, we both startled at this sentence:

"Let's start 3,000 miles to the west, in Berkeley, California, on a chilly night in February 1934" (p. 7).

I am embarrassed to admit that up until that moment, after more than 15 years at UC Berkeley, I did not know that Robert Oppenheimer, who is widely known as the father of the atomic bomb, had been a professor at my university. The story immediately gained personal relevance for us. We sought out the building where Oppenheimer taught, his pictures, his office. As it turns out, I walk almost daily through "Oppenheimer Way," which connects the faculty club to the north side of campus—where many science, technology, engineering and mathematics (STEM) departments are located—on my own way to classes.

Sheinkin portrays Oppenheimer as an eccentric genius, the very epitome of the professor that, despite a lack of social graces, had the kind of awe-inspiring mind that can change the course of history. Most striking to me, however, was that in the dawn hours of a February 1934 morning, the police showed up to J. Robert Oppenheimer's Berkeley home to ask him to explain why he had deserted his date in a car by herself all night. Professor Oppenheimer explained that he had gone for a walk, got lost in his thoughts, and walked home. He had forgotten about his date. The story made the papers on Valentine's Day in 1934. As another example showing that Oppenheimer was so brilliant that he could not be bothered by the mundane, Sheinkin relates that when one of his students asked him to clarify an equation he had written, Oppenheimer told the student that the explanation was underneath the equation. To the students' dismay, the equation was already at the bottom of the blackboard. Oppenheimer didn't mean physically below: He meant literally what he had written over. Oppenheimer would scribble formulas all over the blackboard, speaking and smoking furiously, and when he ran out of space he'd wipe sections of the board clean and write more. Knowing they were in the presence of genius, the students did their best to keep up.

Part of Oppenheimer's mystique lies not only in his scholarly prominence but also in the fact that he so fully embodied the cultural archetype of the brilliant professor: absent-minded, slightly disheveled, and socially awkward. These quirks are tolerated and even embraced, however, because we know that he (the archetype is, after all, a man; see Leslie, Cimpian, Meyer, & Freeland, 2015) is too busy pondering the deepest questions of the universe. In the face of deep questions, the affairs of the world—social niceties, the state of one's hair, students—become background noise.

Over my time in academia, particularly at a researchintensive institution, I have come to realize how deeply the brilliant professor archetype is embedded within our community. As a graduate student, I was taught implicitly and explicitly that the deep thoughts came first and that, ultimately, teaching takes time and energy away from this important work. Although I believe attitudes are slowly changing around this, the prestige associated with the Carnegie Classification of Institutions of Higher Education (n.d.)—"R1," "R2," and "R3" for the "highest," "higher," and "moderate" levels of research activity, respectively—remains a persistent hierarchy within the academy. An R1 classification "is sort of the pinnacle of higher education—a shorthand for institutions to identify themselves," according to a professor at an R1 institution (Anderson, 2016).

Buying out of teaching is standard practice in many universities, and finding ways to insulate oneself from

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students almost becomes the norm. Being too busy with research, professors are often expected not to know the requirements of the major or the Ph.D. program. Many students remain hesitant to disturb professors outside, and sometimes within, office hours. And professors, particularly those at research-intensive institutions, are all too often willing to behave according to expectation, in the noble pursuit of deep thoughts.

The proposition of this brief essay is to defend educating our students as a core part of what should define all of us as academic psychologists. I was pleased to learn that professors are not allowed to buy out of teaching during my interview at Berkeley, and I always had a sense that, somehow, teaching benefitted my scholarship. In leading a course called "The Teaching of Psychology," I continue to find that the primary concern among a sizeable number of students is how to teach as little as possible so as to privilege their research. For years, I tried to convince these students to engage with an archetype-consistent message: Teaching will benefit your scholarship by giving you practice in public speaking and communication, from conferences to job talks, to make your deep thoughts more accessible to others.

This framing is not exactly wrong, but it was also never satisfying. That's not why I love teaching. A few years ago, I came across a quote attributed to John C. Maxwell that crystallizes what I have been wanting to say to my students all these years:

Students don't care what you know until they know that you care.

This quote helped me realize that the unifying theme of my teaching strategies is to communicate to students that I care about them and their well being. My research, I now realize, has been similarly aimed at showing that a feeling of belonging, of being seen and acknowledged, is not just about feeling good—it is a direct determinant of academic achievement. I have helped document that feelings of acceptance and belonging are related to academic achievement (e.g., Rheinschmidt & Mendoza-Denton, 2014) and that trusted mentoring relationships not only help mentors provide more helpful feedback but also help students receive critical feedback as well (Mendoza-Denton, Patt, & Richards, 2018).

I feel almost silly realizing that my research and my teaching practices have been so closely aligned all these years, but I, like so many professors aspiring to the archetype, was working under the mind-set that research and teaching are antagonistic to one another.

Teaching is not only about the transmission of knowledge. It's not just about writing formulas or psychological theories on the board and waiting for students to upload the knowledge that I impart. Instead, it's about taking care of the whole student—their feelings, their struggles, their ideas. Of course, I am not the first to come to this realization. This ethos is embodied by many of our field's greatest teachers. But at many R1 institutions, in the lecture hall—the one forum where students arguably have the greatest access to professors the wall separating the students from the professor remains stubbornly in place. Here, the "sage on the stage" model of knowledge transmission reigns. I hope to one day be able to write cogently about a new model in which students feel like they can be whole and fully present. In the meantime, however, I know one thing that helps: for me, the professor, to also be whole and fully present when I teach.

To start, I make an overt point of learning my students' names. It sounds simple, but in a large classroom, this can be exceedingly difficult to do. The effort is worthwhile: Students move from the back to the front of the class, attendance improves, and dialogue begins. This is the first step in breaking down the "sage" stereotype—the approach is more of a guided conversation and a joint discovery. Rather than trying to scribble down everything I say and yielding to the temptation of Facebook, my students grow intrinsically motivated and engaged.

A second strategy that I use is to show my fallibility, as an explicit challenge to the brilliant, inaccessible professor archetype. For example, I am frank with my students that there are times, in my efforts to learn students' names, that I sometimes confuse students on the basis of gender, skin color, or other surface characteristics, yet I also share how hurtful it is for me to be similarly confused on the basis of my ethnicity. I use this double role as both enactor and target of stereotypes to begin more nuanced conversations with respect to categorization and stereotyping. Nevertheless, when I say or do something that can upset a student, I make a point of apologizing, publicly when necessary, or to check in with them after class. This helps communicate my interest in their well-being and to emphasize that we can grow from our mistakes.

I also try to be a little, well, goofy. I want my students to know that behind the professor, there is someone who makes bad jokes (and sometimes good ones), who has a family, who struggles with the very issues that they ask about. How do I do this? I show pictures of my kids, I share experiences in my day-to-day life that remind me of the lessons I want to convey, and I purposely tell students about details of studies I forget so that they know that I will not hold them to any standard that I myself cannot fulfill. This approach is based in

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science: My own lab's work has shown that self-disclosure encourages feelings of trust and interpersonal closeness, which in turn is shown to lead people to be more open to potentially negative feedback (Leitner, Ayduk, Boykin, & Mendoza-Denton, 2018).

I work to establish this rapport not only between myself and the students but also among the students themselves, in part also because when one teaches about prejudice and bias, there will inevitably be difficult and uncomfortable conversations, raw emotions, and a need for deep self-reflection. We build rapport together to allow the students to engage in courageous conversations around social identity, so that ultimately, they can become social justice leaders themselves.

Teaching as a Vehicle to Promote Diversity in the Field

Leslie et al. (2015) asked close to 2,000 academics in 30 disciplines whether inborn brilliance is required to succeed in their field of study. The results indicated a clear linear trend, such that the more that brilliance was considered a requirement for success in a given field, the less gender and racial diversity there was in that field. The highest expectations of brilliance, and where the least diversity is found, are in the fields of mathematics, physics, and philosophy.

How does one explain this link between expectations of brilliance and diversity within the field? To address this question, it is worth pointing out that mathematics, physics, and philosophy are also often characterized by a lack of clear blueprints for success. In such environments, the ability to succeed without guidance is, in fact, part of the litmus test for whether one has the brilliance to succeed one one's own—an archetypal genius, like Oppenheimer's, that does not need social relationships. The irony here is that in these environments, information and access are all informally and invisibly negotiated in an interpersonal context. Underrepresented students often find themselves "out of the know": They end up uninvited to the informal conversations where ideas bubble and collaborations are outlined and where deep learning occurs, and they may avoid relationships with professors—all while experiencing a deep sense of alienation. Such feelings are not evenly distributed across identity groups.

One of my goals is to ensure that underrepresented and stigmatized students, who experience a lack of belonging on university campuses with particular severity, also feel like they can aspire to brilliant scholarship at Berkeley. Using Berkeley data, I have examined structural barriers to scholarly success that I hope will inform our campus (Mendoza-Denton et al., 2017). In my own classes, I constantly experiment with ways to

help my students examine (or reexamine) their relationship to data. Many students come to my classes deeply interested in social justice yet also deeply suspicious about statistics. Sometimes this is a disciplinary mindset in which data and numbers are seen as positivist and reductionist. Other times there is the threat about simply not being "good" at math. Often, it is both. Using the methods of trust and rapport described above, I devote significant time to the scientific method in my classes on prejudice and stigma. We cover main effects, interactions, and significance, and until recently I had my students design and describe ideal findings for an experiment as their final project. Just this year, I have taken advantage of support from the Data Science Initiative at Berkeley to allow students to analyze their own real-world data and engage in the process of discovery through data for themselves. I feel this is a very concrete way for students to see that data and social justice are not incompatible with one another. It is a work in progress.

Teaching is a central part of who I am and, I have slowly realized, who I am as a scholar and thinker. Knowing this makes me feel whole. I want my students, prospective teachers and scholars themselves, to feel whole, too. I choose to write about this aspect of my profession in this volume because a dedication to teaching, among all of us, can only strengthen our field and fuel the diversity it needs.

Action Editor

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