Teaching Pays Many Dividends:

I see teaching as an opportunity for professional and personal development. Teaching allows me to return to the basic, relatable elements of economics that are easily lost when diving deep into research. Each time I revisit the fundamentals, I expand my understanding of my own work. But looking beyond its useful synergies with research, I feel that teaching is a rewarding experience. Here, I will try to make my passion for teaching apparent and describe what I would value and strive for as a professor.

My primary teaching goal is to inspire critical thinking. I value this skill more than any other because it provides the backbone for success across all fields and encourages a disciplined, thoughtful type of learning. The typical economics course provides many opportunities to promote reasoning over rote memorization, and I try to design assessment that makes critical thinking as incentive compatible as possible. In the econometrics class I taught, for example, it was necessary for students to understand the mechanics behind statistical inference, but paramount that they craft a story that justifies a causal interpretation when addressing their regression results. It is very rewarding to witness a student nail this type of creative explanation.

I think great teaching involves adapting to the evolving preferences of the student body. During my first instructor role, I asked my students to fill out a survey early in the term. This provided valuable feedback that I used to improve my lectures and homework design. For example, most students preferred my transition to a tablet/projector setup, which allowed me to always be facing my students and more easily facilitate dialogue. I also used the survey as a self-evaluation tool; students acknowledged what they could be doing to improve as well. The student connection following this evaluation exercise was extremely rewarding.

Teaching does not end with the term. There are always a few students who are interested in continuing their studies, and I'm happy to share additional resources and ideas to help them explore their interests. I've matched students with professors for undergraduate research and written recommendation letters for students in my econometrics class as well (two have gone on to graduate school). Recently, a student informed me that an essay she wrote about what she learned in my econometrics class got her a data analyst job in Sacramento. Being able to leave an impression like that feels like a bonus dividend to me.

Student Welfare and Inclusion:

As a student, I found college to be stressful. This drives me to be available and provide support for my students. I am invested in the welfare of my students and I encourage them to talk to me if they ever feel overwhelmed. When I recognize the need for a professional, I play an active role in referring students to therapy and advising services on campus. At UC Davis, I've attended several mental health training seminars (conversation therapy, crisis prevention) to better assist my students and connect them with the resources they need.

I also provide support with the hope of retaining the diversity of the student community. Students benefit greatly from having people around them that grew up in different social or

economic circumstances. I want to ensure that students lacking traditional support structures have the same chance of academic success as those lucky enough to have always had this support. This dimension of inclusion [and retention] is most important to me.

Office Hours and Exams:

Office hours are an integral part of the learning process, and I encourage help-seeking behavior as soon as any material starts to feel challenging. As an instructor, I stress the importance of in-person contact and prioritize this in my schedule. I also organize small-group study sessions before each exam and create more discreet meeting opportunities for those who want them. When I see students struggling, but still refrain from going to office hours, I make an effort to establish regular contact—a high yield investment. This keeps students from falling in to the harmful cycle of *don't know what's happening, don't know what to ask, didn't ask anything*.

Using my mid-term survey, I found that office hour attendance and exams scores were highly correlated. When I discussed the potential reasons for this with my class, we found that those who went to office hours had a much higher exposure to the additional study materials that I had prepared each week. My exams were not designed to be surprising; those that made an effort to look at the supplementary matter were more inclined to agree with this statement.

Rather than hand out answer keys, I provide opportunities to learn through discussion, either in class or in office hours. This promotes a timely review of the material for effective material retention and helps me discover potential weak areas in my instruction. Most students appear to approve of this in their reviews, often writing that they "actually learned" something or formed better study habits.

Undergraduate Econometrics Philosophy:

In Summer 2018, I taught *Econometric Theory and Applications*, an upper-division course at UC Davis. I took a design-based approach, which starts with the randomized controlled trial and uses that as a base to explore the challenges of causal inference with less-than-stellar data.[β] I think teachers can best capture the interest of the budding statistician by aligning their classes with the current trends in economic research. For example, discussing the "storytelling" aspect of a clever natural experiment can be inviting to undergraduates with a diverse set of interests. Modern econometrics is as much creative identification logic as it is statistics and algebra, and an introductory course should reflect that.

Mechanically, regression is no more than a tool for controlling confounding factors. But economists use this tool to isolate causal relationships between variables, and a great introductory course would help build a deep intuition for *when* regression can be used and *how* it provides valid estimates of causal effects. In the same way we hope for the public to read beyond the title of a news article, it is imperative that our students reflect on how they have arrived at their empirical results. This was the core belief on which I designed my class.

[β] My class was influenced by Joshua Angrist and Jörn-Steffen Pischke's call-to-action in *Through Our Classes, Darkly*, and I ultimately chose their book *Mastering 'Metrics* as the main reference for my course.