Teaching Statement of John J. Horton

Past teaching experience

I have been the sole instructor for two undergraduate level courses. One was an introductory probability and statistics and the other was economics sophomore tutorial that I designed. The statistics course was at West Point and I taught students that were cadets taking summer school. My seminar was taught to economics concentrator sophomores at Harvard and focused on online work and the digital economy.

At the graduate level, I was teaching fellow for two courses at the Harvard Kennedy School (HKS). One of the courses was a public economics for HKS masters students, which I only TA for one semester. The other course was "Analytics Frameworks for Public Policy" which was intended for advanced masters students and HKS Public Policy PhDs. I was the TA for this course for three years. I also was the sole instructor for the two week "Math Camp" for incoming PhD and DBA students for one session.

The "frameworks" course was an eclectic course that had modules in microeconomics, statistics, game theory, decision theory, simulation, etc. For this course, I designed and taught sections that introduced new material, i.e., was not just a re-capitulation of the professor's lecture. This course was my most extensive exposure to teaching and it is where I .

Courses I could teach in the future

I could teach an introductory micro-economics/price theory course, statistics course, econometrics course or decision-science course. At the PhD-level, I could teach labor economics or courses focused around my research interests. Like any professor, I would love to create a course or seminar oriented around my research interests. I would also be interested in teaching a research methods course or seminar to graduate students pursuing a PhD.

Thoughts on teaching

With regards to lecture preparation, I think the military adage "the more you sweat in training, the less you bleed in battle" also applies. I have found that it usually takes me an entire day to prepare for an hour-long lecture to ensure the lecture goes well.
Given that preparation is so time consuming, I am interested in finding ways to give my teaching more initial impact, durability and each.

Teaching has historically been thought of as a field with low productivity-growth, but one traditional way for a teacher to achieve greater scale is through the writing of exceptionally good course notes or textbooks. I know that some of the best professors I had in graduate school were also textbook authors or were known for their course notes. For example, one of my first mentors in graduate school was Nolan Miller, whose notes to accompany the classic graduate microeconomic textbook MWG were used world-wide. To this day, I think the best econometrics "book" is Guido Imben's unpublished notes (which I had printed and bound) from the micro-econometrics course he taught at Harvard.

In the past, writing textbooks was one of the few avenues for teachers to increase scale. However, there are numerous initiatives underway to make education more scalable through technology. Examples include Khan Academy, Udemy, Udacity, Coursera and all the private university initiatives. It is becoming increasingly easy to distribute courses electronically, but the real changes will probably occur as we figure out how to desgin materials and features that can take advantage of what technology offers. I think it is an exciting time to be a teacher and I'm looking forward seeing how I can use technology to improve the quality and reach of my teaching.