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Statement of Teaching Philosophy

My teaching philosophy is founded upon three fundamental principles, that are contextually informed by my experience teaching economics courses. These principles apply to teaching in public policy and administration contexts as well, and they help students apply their learning to real-world situations, that they might encounter as practitioners in these spaces. Firstly, I believe that economics and public policy require incorporating analytical and mathematical tools into students' critical thinking toolkit. This not only bolsters their ability to think rigorously, but also equips them to frame policy questions precisely, and communicate effectively through structured arguments. Secondly, economics, as a social science, spans various disciplines and is intrinsically linked to people's welfare and inequality. Thus, it is our responsibility as both students and educators in the field, to emphasize the role of economics in informing social policy using evidence-based and scientifically robust methods. Lastly, I consider teaching to be a collaborative endeavor, and it is most effective and equitable when it helps students actively construct their own knowledge and understanding. As educators, it is imperative that we recognize the need for equity and diversity in our field, and using active, collaborative, and inclusive learning techniques and helping educators adopt them is an effective way to take steps towards thinking more about these problems and addressing them.

Principle 1: Incorporating Analytical and Mathematical Tools into Critical Thinking

Working in the field of economics and public policy requires us to critically evaluate complex social and economic phenomena, and mathematical and analytical frameworks are crucial elements of our toolkit. As the economist Dani Rodrik says: "We need the math to make sure that we think straight- to ensure that our conclusions follow from our premises and that we haven't left loose ends hanging in our argument." I strongly believe that building a solid foundation in the mathematical frameworks used in applied economics and public policy is imperative for becoming effective practitioners in the discipline, and I emphasize this in my teaching. I primarily facilitate this in three ways.

Firstly, I assess students' familiarity with mathematical concepts covered in prerequisite courses through a diagnostic quiz at the beginning of each course. This initial assessment helps me identify the support that students may require throughout the course, and allows me to offer contextual feedback tailored to their needs.

Secondly, I promote collaborative learning by linking mathematical tools to economic concepts. For instance, in my intermediate microeconomics course, I organize a group-based learning activity to teach my students utility maximization and the properties of demand functions. Each student in a group is assigned a specific role, with one student solving an optimization problem, another connecting the solution with a graphical representation, and a third relating both the mathematical and graphical constructs to the concepts learned in their introductory microeconomics course (such as how quantity demanded links to prices of substitutes and complements). The groups then collectively present their work, which is intended to hone their ability to communicate problems using both words and equations.

Thirdly, I use formative assessments, such as short questions or quizzes, following these activities to gauge students' understanding of mathematical constructs and their application in economics.

I believe that incorporating analytical and mathematical methods in critical thinking and analysis is a crucial skill for teaching any quantitative social science, where students are expected to grapple with complex, real-world challenges scientifically. The ability to think analytically and mathematically equips them to approach these challenges with rigor and precision, a skill set that is invaluable in the classroom and the field. Effectively understanding mathematical concepts and being able to link them to economic principles is the first step in this process, and my approach towards teaching quantitative courses is rooted in this belief.

Principle 2: Economics for Informed Social Policy

Economics, as a social science, encompasses diverse frameworks that offer various perspectives on the functioning of individuals, communities, and governments, with equally varying implications for public policy. In my teaching, I emphasize the strengths that economic reasoning brings towards informing social policy in a scientifically robust and evidence-based manner.

For instance, in a Master's course focused on Applications in Microeconomics, I conduct an in-class activity to help students grasp the concept of wage inequality between high school graduates and college graduates. We

begin by having students express their salary expectations under different scenarios (after their Master's program, after their undergraduate degree, and after graduating high school). I then ask them to discuss in groups why their salary expectations are different in each scenario, and how they would change in response to factors like technological changes favoring high school graduates, or college education becoming cheaper. Next, I guide them through a profit maximization problem with two inputs – high-skilled and low-skilled labor – enabling them to verify the mathematical validity of their predictions in a model, and to understand the assumptions underpinning their predictions. We then discuss real-world wage inequality movements and the historical and political factors influencing them, drawing upon the work of labor economist and recent Nobel laureate Claudia Goldin.

In the context of economics and public public policy, students must not only be familiar with theoretical constructs and empirical facts, but also see how these theories directly impact the policy decisions that they might be a part of, in their role as voters, professionals, or stakeholders in policies. Learning activities that connect economic reasoning with real-world public policy challenges offer students a valuable opportunity to understand the practical implications of their knowledge.

Principle 3: Promoting Active Learning and Equity-Minded Pedagogy in Economics Classrooms
Teaching extends beyond the classroom, encompassing collaboration among instructors and a commitment to equity and diversity. Women and racial minorities are considerably under-represented in economics classrooms, and it is important for me and my peers as educators to be aware of this under-representation and any equity gaps linked to it.

To work towards fostering a deeper understanding of these gaps in my current department, I have mentored fellow educators in active learning modalities and equity-minded teaching. I initiated a new professional development program for economics graduate student teaching assistants, and developed and led a series of interactive workshops on infusing active learning modalities into the standard economics curricula, utilizing equitable student assessment, and providing effective feedback. This initiative received significant interest and enthusiastic participation, even from those graduate students for whom the training was not mandatory, and it involved activities such as designing classroom exercises for commonly taught and difficult topics in economics courses, and tackling feedback scenarios for students facing specific constraints. This project has led to a new collaborative initiative with Economics department faculty, wherein faculty and graduate students will produce active learning-based lesson plans for Teaching Assistant sections in key gateway courses that are essential to the major and that often have existing equity gaps.

In conclusion, my teaching philosophy emphasizes the incorporation of analytical and mathematical tools into critical thinking, with the aim of helping students address complex policy questions with precision. I underscore the role of economics in informing social policy and guide students through practical applications to enhance their understanding of economic concepts and their real-world implications. My commitment extends to promoting active learning and equity-minded pedagogy to address under-representation in economics classrooms and create an inclusive learning environment. These principles are designed to equip students with the skills and awareness necessary to succeed as thoughtful practitioners and advocates in the field of economics and public policy.