Teaching Statement – Patrick R. Heck

Students experience countless social interactions before they take their first psychology class. These experiences generate similarly countless theories and opinions about how people think and behave. Because of this, a unique challenge in psychology is to teach students how to question and evaluate theories that they already hold to be true. A core tenet of my teaching philosophy is that students who learn to think experimentally and draw conclusions from data are better equipped to understand themselves and others, think critically, and make informed decisions about their own futures. This crucial skill, which the field of psychology is uniquely well-suited to develop, can aid in the pursuit of truth, self-knowledge and a meaningful career.

Goals for Student Development. My most important goal is to teach students how to generate and test hypotheses of human psychology. Thinking from a psychological perspective equips students with the tools necessary to answer questions about relationships, goals, and themselves. For example, most students are surprised to learn that friends and family members are often better judges of a person's personality than the person herself. To develop this capacity in my students, I teach two specific skills. First, students should be able to use classic and modern theories in psychology to generate novel predictions about others' and their own experiences. Second, the tools of psychological science – logic and inference, experimental methods, and quantitative analysis – empower students to test the theories and predictions they generate. I teach these skills in accessible and memorable ways by demonstrating the scientific method in real time, including collecting, analyzing, and presenting data from students themselves (see Sample Classroom Activities, below).

Approach to Pedagogy. I am as vulnerable to psychological biases as my students. To combat my own status quo bias and the sunk-cost fallacy, I reevaluate my course design, goals, and activities at the start of each new term. To accomplish the goals I set, I often treat the classroom as a laboratory to exhibit psychological phenomena in real time. Recreating biases in decision-making, or showing how easy it is to fall prey to reasoning fallacies, is a convincing way to demonstrate students' own vulnerability to them. Doing so can also be a memorable, humorous, and effective method of addressing fraught and difficult topics (i.e., stereotyping, prejudice, and statistics), as long as the classroom culture is supportive and inclusive. I find that students who have recently experienced the intuitive pull of the bias blindspot, the endowment effect, or egocentric projection are more eager to discuss the underlying psychological mechanisms, and to reflect on their own experiences and beliefs. Similarly, students who have themselves experienced an empirical article's experimental procedure immediately have a clearer interpretation of the data and conclusions. For example, I recently asked students to play a round-robin version of the Prisoner's Dilemma game before reading a journal article on the topic. Later class discussion and mid-semester evaluations indicated that this activity improved student understanding of the experimental design and psychological theory. I vary how these activities are presented, using full-class, small-group, and online forums for demonstration.

Evaluation and Encouragement. I use two data-driven approaches to assess learning goals in the classroom. The first adheres to the traditional model: assignments and exams are tailored to the challenges and desired outcomes of each course. Objective grading rubrics, distributed in advance, reveal measurable variance in student learning and performance. Second, I regularly check in with students formally (using mid-semester evaluations and exam/assignment feedback forms) and informally (making myself available after class and in

office hours). Finally, I make a point not only to reach out to struggling students, but also to check in with excelling ones. Because of the barriers to entry faced by underrepresented groups in STEM fields, many capable students have never considered the possibility of pursuing a scientific career. I encourage skilled and passionate students to seek research experience and more junior students or nonmajors to consider psychology as a major. This approach has resulted in two mentored student co-authorships on peer-reviewed publications.

Instructor Training, Effectiveness, and Course Competencies. I have earned four certificates in teaching from Brown University's Sheridan Center for Teaching and Learning, including 1) reflective teaching, 2) course design and application, 3) professional development, and 4) reflective mentorship. These programs developed my teaching skills by creating an inclusive classroom, analyzing recordings of my own teaching, writing objective rubrics, organizing online material, and moderating classroom and online discussions of difficult topics.

Across my complete teaching record of 204 students, 97.1% of my evaluation scores are 'Very Effective' or 'Effective' (M = 1.28, ranging from 1: 'Very Effective,' to 5: 'Very Ineffective'). In addition to offering introductory courses in psychology (general, social, personality, cognitive, and abnormal), I am particularly interested in teaching accessible and engaging approaches to any level of Research Methods and Statistics. Finally, I would be interested in teaching first-year or advanced courses on a combination of any of the following topics: Social/Personality Psychology, Social Judgment and Decision Making, The Self, Creativity, Happiness/Positive Psychology, Psychology of Gender, and Moral Psychology.

Sample Classroom Activities

Social Psychological Phenomena: I aim to demonstrate the key results published in journal articles in real-time settings using students' own data. Examples of this include revealing the consistently egocentric correlation between what students believe and what they think the university president, God, or a popular icon like Taylor Swift believes (Epley, Converse, & Delbosc, 2009). Students are often surprised to learn that their signature size correlates positively with their need for uniqueness score (Snyder & Fromkin, 1977), and that their own bragging behavior is perceived by their peers as intelligent but unlikeable (Heck & Krueger, 2016).

Social and Strategic Interaction: By playing real, incentive-based economic games in the classroom (e.g., the prisoner's dilemma, public goods game, and trust game), students gain a better understanding of the psychological tensions we experience when making social decisions under uncertainty. This activity is particularly effective for students who express math or number anxiety when faced with complex designs and payoff matrices.

Online Discourse: As an exercise in creative and pragmatic discourse, each student in my seminar course composed a 140-character tweet to Dr. Paul Bloom (with his permission), a public scholar who recently published a popular book in psychology. Asking students to both shorten their arguments and frame them in a clear, respectful manner was challenging for students, yet immensely rewarding when he responded to each of them on Twitter.

Generalizability and Research Ethics: Finally, social psychology often lacks generalizability due to an overreliance on convenience sampling and undergraduate populations. I typically devote one full class session to deconstructing a classic journal article in social psychology to demonstrate how the claims made in articles and popular media often misrepresent the data (and often, the ethical issues involved in collecting those data). Similarly, I strive to include updates to, reinterpretations of, and failures to replicate popular and classic findings in the field. Doing so helps students develop a skill that every scientist should have: the ability to decide for oneself what constitutes scientific evidence for a theory or hypothesis.