

Laurel Joy Gabard-Durnam Teaching Statement

I embrace teaching and mentoring as a central privilege of my academic research career. I have been very fortunate to train under dedicated educators, including Dr.s Charles A. Nelson, Nim Tottenham, and Takao Hensch. I draw from these exemplars of effective teaching as well as my training in different learning frameworks as a developmental psychologist to inform my own approach. Specifically, I incorporate active learning practices to meet three primary teaching aims: 1) *Facilitate students' critical thinking skills*, 2) *Foster enthusiasm for learning*, and 3) *Engage students with the science process*. To achieve these goals, I provide an inclusive, constructive environment for students of all backgrounds and abilities to explore new ideas and contribute comfortably. I promote student development through my teaching and mentoring in the following ways:

Facilitating students' critical thinking skills

The ability to solve problems systematically and rationally question what we know is an important skill for students' academic and career success. As a student, my undergraduate science curriculum was overhauled to facilitate critical thinking and knowledge synthesis, and this skill-based foundation been valuable for me in and outside of academia. Therefore, I carry many of those curriculum techniques into my own teaching to promote critical thinking skills that will serve students throughout their lives.

In particular, I scaffold the transfer of responsibility for problem solving to students over the duration of a course with regular practice and feedback. I have used undergraduate sections as interactive learning opportunities to demonstrate and then guide students through leading their own discussions evaluating peer-reviewed articles. Students learn how to interpret evidence, assess whether they agree with the authors' conclusions and why, and generate suggestions to address outstanding issues. These weekly discussions model the written test format where students are presented with study summaries and asked to interpret and critique study design and results to assess their critical thinking skills. I also incorporate real world situations in my teaching to provide students with opportunities to think critically about the role of science in society. For example, at the end of a course on brain and behavior development, I have asked students to synthesize across the articles we read to discuss how this knowledge could inform the *Roper v. Simmons* Supreme Court case about juvenile sentencing for capital crimes. I then guide discussion to the broader questions of the role of science in law and society generally. Students have shared that my applied examples challenge them to generate evidence-based arguments and give them a deeper appreciation for the "real world" implications of academic research.

Fostering enthusiasm for learning

Because I am passionate about both psychology and teaching, students see me as very enthusiastic. I aim to make this energy contagious and inspire an appreciation for the learning process in my students. One way I strive to make everyone welcome is by making my course material accessible to diverse learning styles. Students often report that my ability to explain concepts several different ways helps them gain a deeper understanding of the material. For example, when I teach graduate statistics, I incorporate equation or variable representations along with visual depictions for each new concept. I am also sensitive to different student strengths in my learning assessments, and I include a combination of styles for each course, (e.g. papers and written reflections, oral presentations and discussions, and written exams). Thus, no single evaluation style determines student outcomes, and they practice the variety of skills that are essential in science. To facilitate student learning, I also welcome students to talk with me about different study and writing strategies. I am mindful that students may be juggling other responsibilities that prevent them from attending office hours, and I welcome additional appointments to make sure I am available to connect with all of my students.

I also aim to build students' intellectual confidence as learners. I maintain an inclusive and respectful environment for students to ask questions about the material or even question my understanding of the

material. In addition, I provide weekly open-book, ungraded quizzes in class to help students identify any knowledge gaps they have far in advance of exams in low-stakes settings. I use these quizzes as feedback for myself as well so I can revisit difficult concepts and recalibrate how I present material if needed. I begin each section with these quizzes and review them as a class to refresh prior material and to generate an interactive, relaxed, and open environment for presenting new concepts. For example, when students volunteer incorrect answers in my statistics class, I explain how the incorrect answers can shed light on the correct answer, and I emphasize that these mistakes are opportunities for everyone to deepen their understanding of the material. Students report that my approach to this quiz format is especially helpful for reducing math anxiety and increasing confidence to ask for clarifications during lecture.

Engaging students with the science process

Understanding how the scientific method is performed and communicated enables students to become informed consumers of research and ideas throughout their lives. I believe that showing students how science is an active, exploratory process can also draw new thinkers and future scholars to the field. I incorporate active observation exercises that students have appreciated in my mentors' teaching, where students are shown video clips of child behavior (e.g. scenes from the documentary "Babies") and asked to note their observations. Students have regularly shared that these exercises are an enjoyable way to generate their own hypotheses and questions about human development. I also demonstrate research paradigms in my lectures to actively illustrate study design. To demonstrate the need for experimental controls in research, I have simulated a seminal study with scent and learning (Rasch et al., 2007) and then asked students to use their own experience to identify extraneous factors that could have influenced their outcome, and propose how they could control for these factors in a future related experiment. These opportunities for active mental exploration help students understand how to "think like a scientist". Importantly, these strategies are useful in creating a dynamic environment regardless of class size.

Participating in a research lab contributed greatly to my desire to pursue science as my education and career path. So, I have eagerly sought out ways to incorporate student mentees into my own research. I adapt my mentoring style to fit the learning needs of each student to foster their success. In all cases, my mentees gain fundamental research skills in biological and behavioral data collection and analysis. Many of my senior students have also completed independent research projects under my guidance, resulting in multiple poster presentations and publications. I am proud to have supported mentees, including first generation college students and students from diverse backgrounds and identities that are under-represented in science, through these undergraduate research experiences and into top-tier doctoral or professional education programs.

Teaching Interests

I am just as dedicated to my teaching and mentoring as I am to my research, and I look forward to continuing my development in these areas over the course of my career. My experiences so far give me a strong foundation for teaching at the undergraduate and graduate levels, and suggest students have found them rewarding and effective as well (see excerpted student feedback below). These experiences translate well to the teaching environments at Northeastern University. Here, I would appreciate the opportunity to teach introductory courses including biological psychology (course number: PSYC 3458), developmental psychology (PSYC 3404), statistics and research methods (PSYC 2320), and their associated lab courses. I would also be excited to design and teach upper-level and graduate courses in specialized topics to meet the Psychology department's needs, including brain plasticity in health and injury, cognitive neuroscience (PSYC 4674), neuroimaging analysis, developmental cognitive neuroscience, infancy, social and affective neuroscience (PSYC 4678), Autism and neurodevelopmental disorders, adversity and stress in development, experience-driven brain and behavior development, music and the brain, and brain x machine (examining the intersection of brain plasticity and artificial intelligence approaches).

Student Evaluation Excerpts

Overall impressions across courses:

“[Laurel’s] zest and passion for mentorship, for science, the way she cares...it is seriously special and rare. I can say with complete confidence that she is one of those unique people that is meant to teach, to care for her students, to cultivate the kind of connection with people that brings them into her work and motivates them to stay driven and to go after what they want.”

“...She was very patient without doing the work for us...Laurel was there to help empower us. She gave me greater faith in my statistics abilities, and that’s one of the best things that has happened to me in grad school.”

“Laurel’s gift is in finding examples that resonate with her students and make the material crystal clear.”

“Laurel shows a level of empathy and compassion for students and subject matter that is rare. She took responsibility for our learning and made an effort beyond all expectations. She is an adept teacher, finding ways not just to make course material more interesting, but to make it easier to learn and expand upon.”

Undergraduate Introductory Course (Developmental Psychology):

Facilitating students’ critical thinking skills:

“...[Laurel’s] real-world application examples also helped my bring theory into practice. I get excited about whatever Laurel has to say.”

“Laurel went out of her way to accommodate me into her office hours as I had work. Having background knowledge on the process of learning is a great strength that Laurel possesses. She encouraged me to come to her office hours for further explanation on concepts and provided examples on the level of my understanding...she provided strategies for improving...”

Fostering enthusiasm for learning:

“Laurel is inspiring in her enthusiasm and extremely engaging. She is so knowledgeable[able] and positive. I went to her office hours and emailed her several times this semester, and came out each time with a much better understanding of course material and a general feeling of positivity!”

“Laurel is clearly passionate about the material and makes it tangible for the students...I would love to have her as an instructor in the future!”

“Laurel has an intuitive understanding of knowing where students have lapses in their understanding. She is very clear and extremely funny. Laurel explains herself very well...”

Engaging students with the science process:

“Laurel was extremely helpful ...she made extra time besides her office hours to accommodate questions about both the course, and a career in developmental psych. [She] presented information with enthusiasm and prowess.”

Undergraduate Upper-Level Courses (The Developing Brain; Brain and Behavior Development):

Facilitating students’ critical thinking skills:

“...[Laurel] Always tried to make learning the material as easy as possible by integrating the material with more relevant, real-life examples...very clear and explained the material very well.”

“She made connections to real life situations that also helped us to learn and understand the material.”

“[Laurel] is understanding...[she] gave me better study skills for the next exams.”

Fostering enthusiasm for learning:

“She knows her material and is passionate about it, she has such great energy and enthusiasm to help us out that it is contagious and makes us want to ask her questions!”

“She knows how to make the information very memorable and make it interesting. She was very knowledgeable and I felt very comfortable going to her for help.”

“[Laurel] clearly knows her stuff and has a fresh, quirky way of presenting the concepts so that students can grasp them more easily and firmly. She really tries to make the info accessible.”

Engaging students with the science process:

“She always seemed eager to offer help when we needed it...she obviously cares about the students.”

Graduate Upper-Level Course (Advanced Statistics: Regression):

Facilitating students' critical thinking skills:

“I appreciated the extent to which she went above and beyond to make sure I left feeling more confident in the answers to my questions as well as the process of breaking down a challenging concept into something manageable...I took away helpful teaching strategies I hope to incorporate in the future.”

“She can take concepts that we're not understanding and explain them in three different ways that all make sense, and use...easy to follow examples to drive the important points home.”

“Her creativity in presentation material and dynamic teaching style allowed students from all different statistic backgrounds to grasp difficult topics.”

Fostering enthusiasm for learning:

“I am impressed at her use of visual aids and the way she has increased our enthusiasm for the course material. She goes above and beyond to facilitate student learning.”

“She cares which makes us care.”

“Laurel is the best, most amazing TA I have ever had, and every student in this class is in unanimous agreement about that... her ability to make things make sense is outstanding and unrivaled.”

“She is very bright and her ability to communicate complex ideas in comprehensible language was impressive. She was also extremely respectful of us as students...Laurel is a natural teacher, and extremely likable!”

Engaging students with the science process:

“She's really smart, and she's a really good teacher, and every student in this class absolutely loves her. Nobody wants to miss a Laurel section or a Laurel lab because everyone knows they'll benefit immensely if they go...”

“Laurel is...incredibly effective in communicating complex information... It's clear she has a passion for teaching ...She is creative, clever, and sensitive to the student's needs. She is the exemplar.”