As psychologists and neuroscientists, we are presented with a unique opportunity: we can use methods and insights from our research to support the learning of our students. For example, my Scholarship of Teaching and Learning (SoTL) research has broadly examined how believing that intelligence can be developed through effort and experience ("growth mindset") leads to greater academic efficacy and intrinsic motivation relative to believing that intelligence is fixed and cannot be developed ("fixed mindset"). In my joint first-author manuscript under review at *Teaching of Psychology*, my colleagues and I found that teaching and measuring intelligence mindsets by showing students where they fall on the traditional intelligence mindset scale and what language they use to describe their own intelligence is both empowering and insightful for students. Indeed, much research has shown that interventions aimed at promoting growth mindsets can help underachieving students graduate on time and improve their grades (Yeager et al., 2019). We are developing a web-application that categorizes language as belonging to each mindset, pushing students and educators worldwide to examine their approaches to learning, and we organized an art exhibit of this research on the Perkins Student Wall to show Duke students that they are not alone in their feelings of imposter syndrome. With this research and my teaching, I hope to encourage inclusive environments that grow the potential of all students.

My goals as a Scholarly Teacher (Gurung, 2008) are thus as follows: I hope to foster critical thinking, life-long learning, and problem-solving skills in my students so that they are aware of the reality beyond media talk on "mind-reading" and other popular psychology headlines, can independently assess psychological articles and research problems, and apply theories to address these problems within and beyond the classroom. I aim to achieve these goals through my three fundamental learning principles: 1) layered learning objectives that are 2) informed by SoTL research and 3) community building to create a diverse and inclusive environment for all students.

Layered learning objectives:

All curriculum should be relational and build on itself across introductory courses to advanced seminars. In introductory level courses, science communication pieces meet the goals of the American Psychological Association (APA): a knowledge base of psychology, scientific inquiry and critical thinking skills, ethical and social responsibility in a diverse world, effective communication of psychology theory and research, and professional development. Thus, in the eight-person Introduction to Cognitive Psychology course I taught as the instructor of record last summer, students described research done at Duke for a lay audience, created science

communication pitches for various audiences (e.g., politicians), and summarized other research for a scientist audience. Students learned about cognitive psychology theories during class and received formative feedback on their scaffolded assignments (e.g., opening paragraph, outline, and first draft). Final student feedback suggests that they had become better critical consumers of cognitive psychology research and all produced publishable summaries of Duke research (see examples [here](#) and [here](#)). Moreover, students worked with the Director of Research Communications, highlighting a new career opportunity in science writing. Meanwhile, the twenty-nine psychology and neuroscience students in the Thesis Distinction class that I TAed also received feedback on all sections of their thesis so that they improved the final product they handed into their supervisor. [Student feedback](#) suggests that they better understood current issues in psychology and neuroscience and developed their science communication skills. In both cases, the formative feedback was transfer-oriented, but the thesis students received feedback on their more developed critique of the research they were summarizing, demonstrating how courses can build on each other for layered learning objectives related to promoting communication skills per APA recommendations.

Using research to inform teaching:

SoTL research can help inform layered learning objectives by helping instructors get to know their students and iteratively improve course design. For example, in the two eighteen-person sections of Introduction to Psychological Statistics that I TAed, students filled out an introductory survey assessing how they would rate the intelligence of hypothetical students who succeeded either by expending a lot of effort or none at all. Subsequent lesson plans then used these data so that students could probe their own beliefs about how effort relates to intelligence, initiating a discussion on the myth of genius in American culture (Dweck, 2006). Even at its most basic level, these surveys allow instructors to understand whether students feel heard in the classroom: [30/31 of my Psych Stats students](#) (4 n/a responses) indicated that I improved and took their midterm feedback into account, and [all of my cognitive psychology students](#) strongly agreed that I made positive changes to the course based on midsemester feedback.

Community-building:

Finally, SoTL surveys can help build community, helping all students feel welcome. My cognitive psychology students summarized Duke research so that they could feel included in the Duke community and know the cool work done at their own

university. Their class website featured the photos of the Duke researchers so that students could see themselves in the science. Students also profiled underrepresented cognitive psychologists for Wikipedia so that we could carve out worldwide spaces for all scientists to belong. By using SoTL to assess student beliefs and incorporate their feedback into a collaborative environment between student and teacher, and by creating diverse and inclusive communities, I hope that my teaching helps to further the public welfare.

Looking Forward:

Learning, for students and teachers alike, does not end at the classroom doors. Teachers must continually improve themselves and adapt to the challenges posed by technology and changing societal demands. To this end, I have sought out specialized training. I am a scholar in the [Certificate in College Teaching](#) program, , which trains students to become better college teachers through coursework, workshops, and peer-evaluated teaching, and was a fellow in the [Preparing Future Faculty](#) program, which provides students with hands-on, institutional knowledge about the expectations and duties of new faculty. I am also working towards a [Certificate of Accomplishment in Teaching Writing in the Disciplines](#), which trains teachers to help students develop writing skills across disciplines. Furthermore, I read higher education journals and blogs like the *Educational Psychologist*, the *Teaching Professor* blog, and the *Chronicle of Higher Education* for ideas on how to improve my teaching. Finally, I have attended teaching-oriented conferences ([National Institute on the Teaching of Psychology](#), [Elon University's Teaching & Learning Conference](#), [Duke's PsychOne](#)) as well as workshops and forums (e.g., [How to Be an Ally](#), [Diversity and Inclusion in the Classroom](#), authored by me: [Becoming a Better Teacher: Trans* Inclusive Pedagogy](#)) that encourage the creation of safe spaces. When students feel safe, they engage with the material, ask questions, and learn more. Extending beyond the classroom, learning is a culture that we can all champion in our continuing development as scholars and critical thinkers.