

It's intimidating to be standing up here, a newly minted PhD from Stanford, and to realize that I am a person whom others might look up to as an expert. It's big shoes to fill. In thinking about being an expert, I've often worried that I wouldn't live up to the title, and that if I had any shortcomings, it would make it hard for people to look up to me. But over time I've shifted my thinking about what it means to be an expert, and that has helped me to embrace the role. So today, as we all step into this new role together, I want to share three stories about the challenges of being expert that have taught me to re-think expertise.

My first story starts when I stepped into the role of an expert through teaching at Stanford. I was intimidated about instructing this highly accomplished student body. Stanford students have started companies and charities and worked as intelligence analysts with the U.S. military. I wondered – what can I offer to these extremely high-achieving students? When I first started TA-ing, my answer was to stay up late poring over the textbook to learn the course material as thoroughly as humanly possible. I wanted to come across as having the highest level of expertise in the subject matter, and be able to answer any question that students threw at me. My worst nightmare was a student asking a question to which I simply didn't know the answer. When I got my first set of course evaluations, I sat down eagerly to read them, to see how I'd come across to students. I was dismayed to see that students wrote things like, "I wish Lauren weren't as frightened of students" and "Lauren could be more confident."

Of course, this approach to expertise – believing that experts should know everything - had made me really nervous – especially when teaching classes where I didn't have as much background in the material. It made sense that students had felt that nervousness. But as I read further, there were some other things that I hadn't expected. The moments when I hadn't known the answers to questions were actually moments that came up in my most positive evaluations from students. Students wrote: "Lauren didn't know the answer to every question, but when she didn't, she took the time to find out and always followed up, either by sending an email out after section or talking about it the next class." Being a good instructor didn't necessarily mean being a walking encyclopedia, but showing students that I cared about their learning and would tackle challenging questions with them. Experts don't have to know everything, they just have to know where to look.

In future quarters, I decided to admit my struggles with difficult material rather than attempting to minimize them. I TA-ed a demanding graduate statistics course – subject matter that I was afraid I lacked sufficient expertise in, especially since I would be teaching my peers, many of whom might be more experienced than me with the material. I was worried that they might see through me – that they might realize that I was a fraud, still struggling to understand the concepts I was helping them to learn. It was scary to admit that I didn't know everything. But my own past challenges helped me connect with struggling students. One student mentioned

that me being comfortable saying that the material was difficult to master helped her to keep working towards building an understanding.

From this experience, I realized that experts don't always have to be perfect. We might worry that imperfections would undermine our expertise, but they can even be beneficial. Realizing earlier that flaws aren't a dealbreaker might have helped me to honor this different kind of expertise rather than anxiously focusing on where I fell short.

My second story starts when I stepped into the role of an expert through writing. During the third year of my PhD, I attended a workshop called the Op Ed project, to encourage those who don't usually speak up in opinion newspaper articles to add their voice to the discussion. Early on in the workshop, the facilitators required us to say, "I am an expert on..." and complete the sentence with our research topic. The word "expert" tasted strange in my mouth. I felt an uncomfortable awareness of my limitations. Why should people listen to me? What if what I tried to say sounded ridiculous? As students we are all too aware of what we don't know, so it can feel unauthentic to act as an expert. We fail to realize that we've studied something for years, know more about it than most people, and have something important to say. We assume that experts must have complete, perfect knowledge. And I think this pressure can prevent us from speaking up for the things that we care about. Maybe these fears explain why, for example, women only write about 10-20% of Op Eds. I'm glad to say that the experience with the Op Ed project really encouraged me to speak up despite recognizing my limitations, and science writing has been one of the highlights of my PhD. Reflecting on my struggles to start writing reminded me that as new experts, we might be hesitant to recognize our own expertise, and hesitant to use our expertise to weigh in on important discussions. And this hesitation might leave room for less knowledgeable voices to drive the discussion instead.

The third story happened just four days ago. I was sitting in Jordan Hall chatting with a colleague about writing this graduation speech. I explained that I was thinking of sharing this theme of the challenges of expertise in my graduation speech— and I mentioned to my friend that I was really struggling to write this speech. I felt a little ridiculous imagining standing up here being asked to share my advice. The same worries surfaced again: What if what I tried to say sounded trivial? What if I didn't actually have any important advice to share? My friend laughed and said, "Lauren, that's your third example right there." Again, all too aware of my own limitations, I still felt uncomfortable stepping into the shoes of an expert. And that just reminded me of how frequently these fears can creep in, as well as how critical social support can be in overcoming them. So today I want to thank everyone who has encouraged me along this way, and I am proud to be able to say that, thanks to your support: I do have something to say. I have advice that I want to share. I want to add my voice to the discussions I care about.

Being a new graduate is just one stage of life that comes with the realization that you've become an expert or an example for others, and we may find ourselves in these same shoes again as we take on new roles at work, or as we become parents. This role of an expert comes with an often very sobering responsibility, and we may feel the pressure to live up to high standards and worry about falling short of an ideal. But I hope that we will avoid letting our fears of our shortcomings lead us astray. I hope that we will remember that as experts, we don't have to know everything to have valuable insight to share. I hope that we will have the confidence to admit when we don't know everything, and remember that we know where to look to find the answers. Most of all I hope that we will all find what we want to raise our voice about and stand up for the causes we care about.

Congratulations to all of my fellow new experts and good luck.