Jeanine Stefanucci: Teaching/Mentoring Statement

Above all, when I teach and mentor, I try to let the students know that I care about their success. I believe that finding new and different ways of presenting concepts allows students to gain knowledge and enjoy learning. I also hope that my eagerness to engage them as individuals broadens their understanding of the material and my own understanding of how to foster it. My goal as a teacher is to reach out to every student whether inside or outside of the classroom in order to inspire lifelong learning. I strive to show students that the topics covered in my courses relate to many aspects of their daily lives. My goal as a mentor is to advance my students to the career they desire. To that end, I present information and mentor in diverse ways so I can connect with students who differ in learning styles, needs, perspectives, and familiarity with the material.

Teaching in the Classroom. While at the University of Utah, I have taught two courses required for Human Factors certificate students: Human Performance and Engineering and Human Factors. I also offered a new upper-level seminar for the department, Introduction to Cognitive Science, which is now an Honors course as well. I taught two large service courses, Psychology as a Profession and a Science, and Introduction to Sensation and Perception, to over 700 students (half of whom were enrolled online). I have also developed graduate-level seminars on emotion and cognition and human-computer interaction, both of which draw students from other departments at Utah. Finally, I teach the graduate core course on cognitive psychology.

Whenever possible, I use psychological research to guide my pedagogy, and I point out to students when I do this in order to deepen their understanding of the applicability of basic psychological research. For example, I implemented a retrieval-based learning approach in the classroom. Cognitive psychologists have shown that practicing retrieving information increases learning more than re-exposure to the material. To that end, I require my students to take online quizzes at the end of each week that make them practice retrieving what they learned that week. I make it clear that the quiz questions may reappear in pop quizzes in class or on exams. I give them the published article documenting that practicing retrieval increases learning. I quiz repeatedly over the semester, with points given for simply practicing retrieving without regard for whether questions were answered correctly. I have noticed that this approach to learning really resonates with the students. They appreciate the technique and see that it works once they take the first exam.

In addition to my emphasis on retrieval-based learning approach, I also cite recent published psychological research suggesting that taking notes by hand is more beneficial for learning than typing lecture notes on a laptop. I tell them that taking notes by hand better allows them to perceive the gist or important concepts of the lecture more quickly compared to typing the lecture word for word (they physically cannot do this when taking notes by hand!). Many students take my advice, and the classroom becomes more interactive as a result. They often comment at the end of the course that this approach helped them in other courses, too.

I am quite interested in the national movement toward online classes (my large service courses include over 100 online students when I teach them), but more information is needed to assess whether the online students learn as much and receive the guidance they need to succeed. During the fall of 2015, I helped collect data on whether learning was equivalent in online classes as compared to in-class lectures. This is a major issue facing education now that there is such a push for offering online courses. To contribute, I filmed lectures for my Human Factors course over the summer and then offered the course as a hybrid of in-class and online. In

collaboration with Dr. Carol Sansone (who had an internal grant from the U to investigate online learning), we surveyed students in this hybrid class about their preferences and also analyzed their grades from an exam taken on online material as compared to in-class lecture material. Interestingly, students expressed a strong preference for the in-class lectures and real-time interactions but did not show large differences in learning across the two experiences.

    Teaching Out of the Classroom. At the University of Utah, I have graduated six PhD students. One (Michael Geuss) was my sole advisee, three others (Erica Barhorst-Cates, Kyle Gagnon, Ian Ruginski, and Lace Padilla) were jointly advised by myself and my colleague Sarah Creem-Regehr, and my most recent graduate (Ascher Munion) was jointly advised with my colleague Jonathan Butner. Currently Dr. Creem-Regehr and I jointly mentor three PhD students (Holly Gagnon, Grant Pointon, and Mirinda Whitaker). I am the sole adviser to one more student as well (Morgan Saxon). I also had the pleasure of advising a diverse postdoctoral scholar, Dr. Brandon Thomas.

    I feel that interacting with and teaching students how to conduct research is one of the most rewarding and important parts of my job. To that end, I have submitted papers and conference presentations with many undergraduate students (both at Utah and at the College of William & Mary), and all of them learned how to design experiments, analyze data, and write for publication. As you will see on my vita, many of these projects have been published and/or resulted in grant funding for research or for the students to further their educations. I was also invited to write a peer-reviewed article on practices I employ to publish with undergraduates (see *Stefanucci, 2019*). I could not be more proud of the students who have worked with me. Over 75 of my undergraduate students have conducted research in my laboratory across institutions.

    Future Directions. I am constantly honing my skills as an instructor and mentor, and I genuinely enjoy doing so. There is nothing better than getting an email from students who graduated years ago that tells me they applied something learned in my course to their lives. My course evaluations at both the undergraduate and graduate level have been consistently above average. In the spring of 2019, I was awarded the senior faculty superior teaching award in my College. I have also been nominated for the University-wide superior teaching award. However, I know I can improve. I work hard to maintain a good, professional relationship with all of the students I mentor to keep their productivity high and to ensure timely completion of the program and theses. I was once asked in a job interview how I was going to "change the world." I responded simply with "one student at a time."