

Pascal R. Deboeck
Teaching

Notable Summer 2016 — Spring 2021

Since moving to the University of Utah five years ago, I have created three new course preparations: 1) PSY 6556 Temporal Data Analysis, a mid-level graduate course designed for developmental students or anyone interested in repeated measures data, 2) PSY 6550 Structural Equation Modeling, a mid-level graduate course that has allowed some flexibility/redundancy among the departmental quantitative offerings, and 3) PSY 6510/5510 Quantitative Methods II, a core course for as psychological graduate students and advanced undergraduates. The latter course was the largest undertaking, as with my arrival and taking on of this course Dr. Baucom, Dr. Butner, and I took it as an opportunity to revamp this course to better connect with the prior course, while preparing students for subsequent mid-level courses.

Quantitative Methods II ended up requiring two preparations, as 9 years of prior experience teaching quantitative courses with course reviews generally at or above departmental averages, produced poor reviews at the University of Utah (Instructor questions/Course Questions 4.99/4.67 compared to departmental averages of 5.43/5.34). Rather than merely adjust the course, the reviews suggested a more substantial change in my teaching style was required. While it was time consuming to change my teaching style, in every class since, my instructor and course averages have exceeded the department average. The last three offerings of Quant II have averaged instructor/course ratings of 5.66/5.73, and the midlevel courses have had averaged instructor/course ratings of 5.89/5.95.

Other:

- Director of the Undergraduate Certificate in Quantitative Research Analytics in the Social Sciences, which includes working with undergraduates completing capstone projects to identify and define a capstone project, as well as review these projects. Seven undergraduates completed the certificate in 2018-20, and nine are expected for 2020-21. See “Service” statement for more details.
- I was invited to write a chapter and give a presentation on *Teaching Statistics and Quantitative Methods in the 21st Century*. This was an honor, as my name falls along side many quantitative psychologists well respected for their excellent teaching.
- With support from the Consortium for Families and Health Research, I prepared and implemented a week-long ICPSR summer course (35-40 hours of class in 2019 & 2020) as part of a quantitative set of courses organized in collaboration with Dr. Baucom and Dr. Butner. These courses are attended by researchers from across the United States.

Teaching Philosophy

Since I began teaching in 2007, my teaching philosophy has evolved with each of my career transitions. In graduate school, at the University of Kansas, and at the University of Utah I have sequentially added components focusing on my classroom environment, concepts from the education literature, a focus on individual outcomes, and better supporting students in the face of high demands. Taken together, these experiences form a teaching philosophy that might be best described as focusing on having *high expectations*, coupled with *substantial support*, and *genuine investment* in my students. At both the University of Kansas and the University of Utah my classes have typically consisted of students with diverse research interests and backgrounds, including psychology graduate students (clinical, cognitive, developmental, social, quantitative), non-psychology graduate students (e.g., education, business, nursing, physical therapy, political science, communication studies, East Asian studies, etc.) and undergraduates completing minors, certificates, or honor's theses.

Coming out of graduate school, my teaching philosophy was focused on the idea that students' questions were the key to effective learning. I saw this as essential to creating the right environment in my classes, as statistics classes can often leave even advanced students anxious about the material. Student questions help refine learning, give an instructor ongoing feedback, and empower students to actively contribute to the class dialog.

While at the University of Kansas, I began to make additions to how I teach statistical methodology. Evidence from the education literature in areas such as the physical sciences indicates that students tend to learn to solve problems better in reverse classroom settings where less time is spent listening to lectures and more time is spent participating in hands-on experiences. I began experimenting with a non-lecture based format starting in Spring 2013 (PSYC 993, Modeling of Intraindividual Observations). In many renditions of these courses, students were asked to watch a lecture before class and to arrive in class with questions and ready to work on problems. In these classes I spend very little time delivering prepared materials, but rather primarily spend my time addressing questions from students in small groups or one-on-one as the students work to select, implement, and interpret statistical analyses. I have written a book chapter on these experiences in a book edited by Dr. Joe Rodges on *Teaching Statistics and Quantitative Methods into the 21st Century*.

My University of Kansas experience not only led me to focus more on practice and repetition in my classes, but also think increasingly about the learning outcomes for individual students and how to provide significant amounts of individual-level feedback and interaction. The reversed classroom, and other tools I have used, are aimed at trying to better meet each individual student at their current ability level. As my courses have often been diverse not only with regards to students' research interests, but also students' prior statistics ability, tools like reverse classrooms allow students already familiar with a topic to ask questions well beyond the class material, while students less familiar with a topic can ask more fundamental questions to ensure their grasp of the course material. It has been my plan to use reverse-classroom strategies at the University of Utah,

and I am presently preparing materials in order to transition Quantitative Methods II.

While at the University of Utah, I have come to further appreciate the increasingly diverse and complex range of statistical methodologies and requisite skills that is being demanded of substantive researchers. As a context without a quantitative area, it also becomes increasingly clear that if I am instructing students well, the entire department benefits from students' abilities to implement analyses of interest. With time, I have also come to understand better just how much statistical methodologies have changed in only a decade or two. I have become more structured in the repetition and practice of elements of my classes, how frequently students are challenged to engage with materials, and in building exercises that will require them to struggle with making statistical decisions and weigh imperfect solutions. Increasingly, I also try to illuminate a broader understanding of statistics, making connections across classes and seemingly different methodologies, and offering perspectives of where things have been and where they seem to be going. These pieces come from a genuine interest in students' long term development, as they are aimed at providing foundational skills for continued growth in methodological skills well beyond their time at the University of Utah.