Teaching Philosophy

Bo Ning, Ph.D. candidate,

Department of Statistics,

North Carolina State University

Teaching requires practice and reflection, just like learning, and effective teaching requires the adoption of teaching objectives. Based on the five semesters I spent as a teaching assistant during my graduate school education in the Department of Statistics at NC State University, I believe there are two indispensable objectives that teachers should adopt to promote effective learning: develop clear course plans and teaching tools with achievable course outcomes for students and encourage continuous, open communication with the teaching team members and students.

Developing course plans and teaching tools are important in promoting student learning. I developed the class material for one week of lessons in an online SAS programming course. I realized that having a clear plan would keep me and the students focused while we studied the material. When I design course material, I ask four important questions: how do I match my material plan to the course objectives, how do I convey the usefulness of the material to the students, what is the level of difficulty of the course materials, and how do I create questions that promote learning or knowledge retention. I believe the students understood and found my course materials useful because this understanding was reflected in their homework grades.

In addition to developing effective course plans, designing teaching tools, such as summaries and other study tools, helps improve students' learning efficiency. For example, during the 2015 spring semester, I created an ST 555 SAS programming learning kit to help the students prepare for the professional test. The kit had two parts: frequently asked questions from the online discussion board and professional test materials. I asked the students for feedback on the kit, and

several mentioned that they planned to keep the kit after they finished the class. One student who was awarded her certification told me that the kit was very helpful during her exam preparation. I have also found that using various technologies in class improves learning efficiency. For example, to measure the students' learning outcomes, I created an online quiz the students took during class. The students were interested in the quiz website, and I was able to instantly identify areas in which they were struggling.

Communication is another indispensable part of my teaching philosophy. I fostered open communication in both the online and lab environments in which I taught. To create a comfortable communication environment, I tried to remember students' names, and I made myself to them available outside class. I also distributed three student feedback questionnaires each semester. The first questionnaire was given on the first day to identify students' learning styles, motivation for taking the class, preexisting knowledge of the subject, and final grade expectations. The second was given after the midterm to ask for feedback about my teaching performance so I could make adjustments. The final questionnaire was given during the final class and asked the students to rate my overall teaching performance. The feedback I received guided me as I adjusted my teaching materials and style to meet the students' needs. Communication with other instructors is also important. To keep the instructors' teaching plans consistent, regular meetings to discuss homework and teaching materials should be scheduled.

In conclusion, having a course plan and creating an environment that promotes open communication has helped me improve my teaching skills during the last five semesters. However, I understand that teaching ability does not develop overnight. Reflection, practice, and dedication are necessary to improve my teaching ability. I have enjoyed my teaching assistant experience as a graduate student; it has helped me prepare to become an independent instructor. I believe continuing my current teaching techniques and seeking feedback will help me fulfill my teaching philosophy.