Teaching statement of Andre Adler

Teaching and learning takes time. Class time is not enough for what is truly a long-term process. That is at the heart of what I believe about teaching and learning.

As I was preparing to teach the Practicum for Teaching Physics last year I came across a truism "you teach the students you have, not the students you want." I believe, with experience, this became my practice, though I never articulated it as clearly. Such a practice requires flexibility on the part of the teacher and the need to interact with the students. This can be very challenging, especially with a large class but it can be done. It requires student access to me out of the lecture hall.

This is a primary reason as to why teaching has to go beyond the lecture hall. I have to learn what conceptual or quantitative difficulties my students are grappling with as they encounter new material. I have to diagnose their problems, not just tell them the answers. Ideally the understanding is built in their mind through analysis; it does not enter through their ears.

The objective I have for every course I teach is to have students leave the course behind, but not the subject, to see the course as a step in acquiring or deepening an appreciation for the discipline I have devoted so many years to mastering and to mastering the ability to communicate it through language and activity. Whether this is the first or the last course in physics or astronomy they ever take, I hope this is not the last time they ever read an article about it, or use it to understand something in their primary discipline. When the final exams have been given and the grades assigned I hope I never see my students on line at the NYU bookstore waiting to sell back their books, though I understand why they do it. I want them to want read the books again, or if it is appropriate, to pass them on to family and friends.

Talking to students is one way to assess course objectives and success in meeting them (if there ever is true success), another reason why contact outside the classroom is so vital. I also challenge myself to get them to attend class. I do not make attendance mandatory. When attendance is low I assume the fault lies with me. While I recognize there may be other reasons for their absence on any given day, I try to use this to think about ways to improve classroom time as a learning experience. Interaction through guided activities is an accepted method of building an effective learning environment, but this can be challenging to accomplish in a class of several hundred, especially if you do not wish to force attendance by using a personal remote system.

I find that in small classes attendance is aided by expectations and (I hope) a recognition that they need to attend if they are to reach their own objectives in taking the course in the first place. In large classes, you hope the same factors will encourage attendance but you fight the anonymity that comes with large numbers versus one teacher. The only way to overcome this is have numerous office hours – I don’t believe that it is sufficient to say to students that you are available by appointment and have a single office hour, especially for a very large enrollment class.