

This was my teaching statement in 2004, as I was almost finishing my PhD and going into the job market. It is being shared as a sample to provide students with a concrete example of a statement. It is not meant to represent a model of what a great teaching statement is supposed to look like. The best statement for **you** will depend on your philosophy, goals, and experience. Good luck!

Teaching Statement

by Talys H. Yunes, PhD candidate,
Tepper School of Business, Carnegie Mellon University

Teaching Philosophy

My teaching philosophy is based on four simple words: *fun*, *motivation*, *intuition* and *interaction*. When I am teaching, those are some of the main goals I strive to achieve.

For learning to be effective, it has to be *fun* (for the students). For learning to be fun, teaching has to be fun (for the instructor). If you do not like teaching, your students will feel it in your voice, in your gestures, on your face. Excitement is contagious, as is boredom. Fun facts and anecdotes, when placed in context and at the right times, make the class more lively and interested in the discussion. I honestly have a lot of fun while I am teaching, so I believe that the first important step is taken.

Motivation is key. Unmotivated brains are blindfolded even to the most well delivered lectures. Therefore, I am always concerned about the three W's: "What is this for?", "Why is this important?" and "When should we use it?". Connecting the material to real world examples and situations is fundamental.

Intuition is what remains when everything else vanishes (i.e. the details may eventually be forgotten). I always try to show the students the intuitive reasoning behind a concept, a proof or an idea. Here, pictures, graphs and metaphors play a very important role. The lessons I never forget are those for which I was given a simple and colorful intuitive explanation.

Finally, *interaction* between the students and the instructor must be present in every lecture. The learning process is never a one-way street. I believe that one learns from doing and, even more, from trying to explain to others how to do it in the right way. It is crucial that students feel comfortable asking questions, expressing their opinions and approaching the instructor. Bidirectional feedback has to be frequent and often encouraged.

Formal Training and Certification

This statement contains a letter from the *Eberly Center for Teaching Excellence* at Carnegie Mellon, in which some of my teaching experience is described. I have attended the following teaching seminars offered by the Eberly Center (<http://www.cmu.edu/teaching/eberlycenter/index.html>):

- Overview of Student Cognition
- Knowledge-in-the-Making: The Role of External Representations in the Active Construction of Knowledge
- Writing in the Disciplines
- Reflecting on Your Teaching Style: Microteaching Workshop
- Communicating Across Cultures
- Course and Syllabus Design
- Assessing Student Learning and Providing Helpful Feedback
- Building Shared Understandings: Collaboration and Peer-Critique During Teaching and Learning
- What Makes a Comfortable Classroom Climate?
- Overview of Student Motivation
- Planning Effective Lectures
- Conducting Productive Discussions
- Strategies to Increase Active Learning
- Teaching First-Year Students
- Working Well One-on-One
- Teaching from the Heart
- Inclusive Teaching for Our Queer Students

- Using Case Studies to Actively Engage Students.

In accordance with both CMU policy and Pennsylvania State Law, any student whose native language is not English must pass the *International Teaching Assistant* (ITA) test before being allowed to work as a TA who interacts with students. The ITA test consists of a teaching simulation in front of a panel of four to five trained raters, one or two of whom are undergraduates who are familiar with the candidate's subject material and can ask authentic questions. The panel rates each candidate on comprehensibility (pronunciation, fluency and grammar), the ability to explain a concept in English, listening comprehension and question handling, and familiarity with American pedagogical style. I passed the ITA test with the highest score (Category 1).

From 2001 to 2003, I was invited by the Assistant Director of the Eberly Center for Teaching Excellence to serve as a member of the selection committee for Carnegie Mellon's annual *Graduate Student Teaching Award*.

In June 2003, I became one of the Teaching Fellows of the Eberly Center for Teaching Excellence (by invitation). Teaching Fellows are formally trained to conduct classroom observations and provide feedback to TAs and graduate student instructors. They also attend TA meetings to discuss early evaluations or other course-specific issues, and assist with departmental TA orientation.

Teaching Experience

My teaching skills have greatly benefited from the extensive experience I have had as a teaching assistant at the Tepper School (see below). I have also had the opportunity to attend many different courses. Those opportunities were invaluable in the sense that they helped me obtain an excellent understanding of the distinct needs and desires of MBA, PhD and undergraduate students when it comes to teaching. By carefully observing effective and ineffective teaching practices, I have been able to develop and improve my own style of teaching, which has constantly been praised by all students with whom I have had the chance to work. The high scores that I have obtained in instructor and course evaluations are indicative of this (see below).

As an Instructor

During the Summer of 2004, I was invited by the Executive Director of the MBA program at the Tepper School of Business (Prof. John Mather) to teach a course entitled *Quantitative Skills Review Program* (QSRP). This is a review of math skills offered for incoming students before regular classes start (enrollment is optional). Topics covered include: basic algebra, functions and graphs, mathematics of finance, differentiation and integration, probability, matrix algebra, and multi-variable calculus. My name was recommended by the professors in charge of teaching some of the courses that the new students would take in their first semester. Given that I would make the first impression that the students would have about Tepper's instructors, I was honored at the level of confidence the school placed in my teaching skills.

I was in charge of teaching two sessions of the QSRP course, over three weeks. One session for full-time students (76 students, 53 hours, Monday through Friday); and one for flex-time students (32 students, 24 hours, Tuesdays and Thursdays). My duties included preparing all the classes as well as 3 quizzes. The official scores are as follows. Full-time: instructor rating = **4.62/5.00**, course rating = **4.54/5.00**. Flex-time: instructor rating = **4.24/5.00**, course rating = **4.05/5.00**.

In the first half of the Fall of 2004 I am in charge of teaching an MBA elective course entitled *Sequencing and Scheduling*. Topics include various types of scheduling problems such as job-shop, workforce, reservation systems, timetabling and lot sizing. We study exact and heuristic solution approaches such as integer programming with branch-and-bound, the shifting bottleneck heuristic, tabu search, and constraint programming. This course is taught bi-weekly (1:50h lectures) over a period of seven weeks. My duties include preparing all lectures, 3 group projects, weekly in-class quizzes, and a final exam. Official instructor and course rating scores have not been disclosed yet.

As a Teaching Assistant

At the Tepper School of Business, I have been a TA 15 times, for the following MBA courses: Optimization and Decision Making (twice); Quantitative Methods for Management Science (once); Sequencing and Scheduling (once); Operations Research Applications (4 times); Managerial Economics (once); Production and Operations Management (twice); Decision Models (twice); Mining Data for Decision Making (once); and Operations Research Implementations (once). In addition, I have also been a TA 6 times, for the following PhD courses: Graph Theory (once); Integer Programming (once); Advanced Integer Programming (twice); Networks and Matchings (once); and Convex Polytopes (once).

My duties have ranged widely, from being a grader to being a head TA. In the MBA program, I have been involved with the preparation of course packets, homeworks, exams and case studies, and I have also helped with other administrative tasks such as coordinating multiple graders and maintaining course web sites.

I have interacted with students both in the classroom, as a recitation leader, and one-on-one, during office hours. In total, I have conducted 40 2-hour recitations. After collecting 87 TA evaluation forms, my average score for teaching effectiveness in recitations was **4.86/5.00**.

Final Comments

I have a sincere passion for teaching, as I do for research, and I consider it one of the joys of being in academia. I feel confident and qualified to teach courses related to any of the courses for which I have been an instructor or TA (see above), at both graduate and undergraduate levels. In addition, my educational background enables me to teach other courses in quantitative disciplines such as Operations Management/Research, Decision Sciences and Computer Science.

In this section, I'd also take the time to go to the website of the school I'm applying to and see if I can find the names of specific courses that they teach. I'd then list the ones I'd feel comfortable teaching right away and the ones I'd feel comfortable teaching after a few months of preparation.

Teaching References

The following members of the faculty at the Tepper School of Business have agreed to be contacted in case any additional information related to my teaching qualifications is required.

- Name and contact info of person 1.
- Name and contact info of person 2.