

## Statement of Teaching Philosophy for Dario Nardi

As a Ph.D. student I was handed a book called, "Teaching Engineering." I considered right away that book and I might not get along - I believed that teaching was really about students and how they go about learning. After four years I think this still fits, and teaching and good content must happen too. When one is teaching, one is acting as a leader - the kind of teacher that allows space, and insures checks, for students to have fun and also take responsibility for their own education.

I have taught in four disciplines: engineering, computer science, cognitive science, and psychology. These are exciting, evolving subjects that impact people's lives daily. This means what is taught must be relevant - grounded in principles yet capturing the imagination, straightforward in presentation but meaningfully advanced in application. I was lucky enough to teach as a graduate student and helped restructure SUNY Binghamton's freshman engineering program, to great success. Since then, UCLA has allowed me the freedom to explore the best ways to teach both large and small classes, to liberal arts and technical students. And Temperament Research Institute has allowed me to develop skills with adult learners. I believe these diverse experiences have been good tests and sources of insight into what makes teaching and learning work.

One on-going personal interest is undergraduate education; specifically, meeting the needs of various learning styles. Thus, I tend to consider laboratory, projects, group work, lecture, brief in-class activities, reading, and so on when creating a syllabus. There is a balance that maintains rigor and fairness while allowing for individual creativity.

I believe a good professor is responsive. One sleeping student might be inevitable. Many are not. Students provide many signs: laughter, expressions of interest, pride in solving an example worked during class, comfort in coming to office hours, comfort in asking challenging questions, strong test scores, strong attendance, requests for help with career interests and life problems, requests to take future classes, requests to do research, requests for extra credit, invitations to student functions, honesty when mistakes are made, and understanding that not everyone can or should get an "A" or a "B." Each of these, by themselves, is not sure. Yet I suspect I am doing something right when a student apologizes for being late, and when students clap on the last day of classes.

On the other hand, there is a proper distance to maintain as a professor. There can be no wavering from one's professional role and responsibilities. This role rules the day.

Technology plays an increasing role in education. I believe the Internet and other media support and can enhance but not replace a good teacher. At the Frontiers in Engineering Education conference this past October I presented small software packages I developed for students to download and play with - interactive software to understand dynamic systems such as weather, traffic patterns, and non-linear decision making, as well as genetic algorithms and a simple assembler. Software can make a subject come alive. I also developed for an AI class an on-line programming editor and interpreter, so students could work from the web. I could look at students' work, provide help, post examples, give grades, and students could even write programs that interacted with each other. Of course, technology is not everything. I still like the blackboard most. Yet there is also no replacement for bringing a real roving robot into the classroom or allowing an AI to help give a lecture (see "Daily Bruin" article at [www.darionardi.com](http://www.darionardi.com).) Clearly, technology is a challenge to do things even better.

Perhaps a more important measure than student course evaluations, and the insights of one's peers and seniors, is the test of whether students return. I often see repeat faces. I have happily written many recommendations. Cards and small tokens line my office. Admittedly, sometimes I am more than ready for the academic term to end. More often, I am just ready to depart for the day when an old student stops by on the off chance I am in, and before I know it, another hour has passed. It is a true pleasure to hear about how a life has unfolded in some positive way, and that I am a part of that.

To be honest, not everything I do works and I simply cannot teach equally to every learning style. Similarly, sometimes I am not sure what I do that does work. My very first term at UCLA, the PIC director commented after sitting in on a full class of mine, "attendance in this course has always been a difficulty but apparently they see value in coming." That value is what I see in teaching.