The angst before the first lecture, the excitement as the quarter progresses and students demonstrate understanding and participation in class, the bitter feeling of separation as the quarter finishes; it was not until I had repeatedly gone through these series of feelings that I finally realized it: Teaching is about building a relationship; a relationship that in this case encompasses an entire class, but which, as any other human relationship should be built, nourished and developed. Based on this observation, during my teaching I employ the following building blocks of a successful relationship:

(a) Motivate students. I have found that students are more likely to become interested in the class material if they can relate to it. To this end, I like to explain in my classes how the presented concepts affect the students’ lives. For instance, during the first lecture of my undergraduate database class I describe how databases affect all aspects of a student’s day, starting from the moment they get their first cup of coffee (which results in updates to their bank’s account database and the coffee shop’s inventory database).

(b) Build trust. In addition to being motivated, for the learning experience to be most effective, students should also trust their teacher. Only after this trust has been established, are they likely to both express their concerns and follow their teacher’s suggestions. During my classes I aim to earn the students’ trust on three different levels: Trust in my expertise, trust in my impartialness, and trust in my caring about their learning. I have found that by being carefully prepared for the class, I can quickly earn students’ trust on my expertise. To build trust on my impartialness, I try to be transparent about the scoring methodology (which has also the positive side-effect of virtually eliminating students’ disagreements on grading). Finally, showing students that I genuinely care about them is a process that happens progressively, as they see me paying close attention to each question asked.

(c) Make learning engaging and fun. Learning is always more effective when one is actively involved in the process. Therefore, I try to make students part of the teaching process as much as possible. A few methods of student engagement that I have employed in the past and have been positively received are (i) having students solve problems in class and explain the solutions to their colleagues, (ii) utilizing interactive software that allows students to have many attempts at solving the homework problems, and (iii) designing implementation projects. To make the projects even more enticing, I try to employ real use cases and data from my own research when possible (such as the health-related data for the county of San Diego, collected in the context of the DELPHI project, as explained in my research statement).

Finally, as in any other relationship, each teaching experience is unique and cannot be replicated. Having taught various classes at different levels (ranging from a one-week graduate seminar to a quarter-long undergraduate class), and presented my research at different audiences, I am always trying to find the right level of abstraction for each audience, as well as each individual within the audience. Although challenging, I firmly believe that this is also what makes teaching so rewarding. This personalized approach to teaching seems to be well received as reflected on the student evaluations (92% student recommendation in my last undergraduate class) and on the positive comments received after my conference presentations from several members of the database community. I look forward to employ this method in your department, while teaching classes on both databases and other core Computer Science subjects.