Teaching Philosophy

I believe that teaching is not so much about what you do to students, but more about what you do for students. A teacher cannot force learning to take place, but they can do a great deal to create an atmosphere where students want to learn. Learning is so personal and varied from individual to individual that it is unreasonable to believe that a teacher can use a traditional teacher-centered approach to instruction to effect real learning to much of any percentage of the students in their room. I say real learning to differentiate from rote memorization of facts and figures to merely pass a test. Real learning means the student has well understood the concept and can apply it in other situations and solve related Physics problems. I believe that for real learning to take place the following conditions need to be present: Learning must be Objective-Oriented, learning must be personal, and learning must be fun. I say that learning must be objective-oriented because students need to know what they are going to learn and how they will be evaluated. If a school or a department offers a course, the objective of the course must be clearly stated: pre-requisites, who can take the course, what content will be covered, and how the students will be evaluated. Once the objective is set, an instructor must follow what is necessary to achieve the goal. The best results are always obtained through personal interaction. That's why I spent a large portion of my teaching career trying to perfect techniques for one-on-one situations. The most effective methods require the appearance of equality. I try not to impose myself on my students. When they are lost I try to show them several ways, but always make them choose the right way under supervision, than with no supervision. I believe students must take responsibility for their own learning. I definitely ascribe to the belief that when a student is told something, that information will soon be forgotten, but when a student discovers an answer for himself, he never forgets it. With this in mind, I make a serious effort to protect a student's right to individual discovery, that they find the answer out for themselves. This involves more than just not allowing choral responses to question and answer sessions; in my class it means that students cannot expect me to give them an answer immediately without they think themselves, but only if I feel that they have made full efforts but needs my advising at this stage and then I'll answer the question to keep them encouraged and on climbing track. Making learning fun means the class environment will be friendly so that the students enjoy learning and do not hesitate to ask questions if they don't understand something. Without this friendly environment, some students can hesitate to ask questions and hence they will go through a problem without learning it and the class and subject will be a burden for them. From my past experience I have found that this friendly environment in the class not only makes learning easy for students but also the subjects becomes an interesting field for them and they pay full attention and importance. Hands on projects and experiments in the labs allow students to convert theory into practice and hence whatever is taught in the class, students will work on that experiment