

Philosophy of Teaching

Introduction

I believe virtually any professor today must maintain a strong priority on teaching because that priority directly impacts every endeavor and activity on a daily basis. Various organizations and publications use the phrase “theory into practice” and this notion captures well the idea that research impacts teaching and that students are the ultimate recipients and, hopefully, the beneficiaries of all our work.

I take my role as a teacher very seriously and value my relationships with my students in every course. Every discussion, every interaction both in and out of classroom are all opportunities for education, enrichment and enlightenment. Aside from being prepared with state-of-the-art knowledge on the cutting edge of my discipline, I always strive to guide by example and to motivate students to involve themselves in our profession and subject area.

Philosophy

Basically, I follow a constructivist philosophy. In a general sense, I believe that learning (<http://carbon.ucdenver.edu/~mryder/itc/constructivism.html>) involves the development of meaning and that an understanding must be achieved. Learning is the process of building on prior learning toward the development of new ideas and new comprehension. Students need to develop that meaningfulness for themselves and an instructor serves as a guide or facilitator of that process. The development of a conceptual framework provides the basis both for using knowledge and for constructing meaning in and adapting to future experience.

It might be useful to contrast with what I describe as *procedural rituals*. Questions like "why" or "how this relates to that" are suppressed in favor of discrete steps to follow or sequential tasks rehearsed and memorized to achieve predetermined outcomes. A procedural rituals approach focuses only on the training of skills and ignores a broader perspective of conceptual understanding.

Occasionally, there are students who might prefer a procedural rituals approach as they balk at explanation and cringe when asked to understand. They may, instead, prefer succinct, one-dimensional answers however insufficient in scope they may be. They seem to pursue a

completion to the process of learning. They seek finality to the task as if jumping to the end of a path. Unfortunately, without understanding along the way, merely jumping to the end of the path does nothing to change the student and creates a superficial conclusion masquerading as success. It becomes my job to both motivate and inspire such students to both appreciate and to explore further the full scope of what lies in the experience.

The procedural rituals approach in instructional technology, for example, might involve preparing for students, charts or lists of keystrokes designed to yield the perfect completion to a computing task. Indeed, being a “good” teacher is too often viewed as little more than having a complete set of flawless charts. The quick and easy answers from such lists about what key to hit next are sometimes preferred by computing students as their primary goal is to have frustration and error-free experiences. Of course, without the demand of solving unforeseen problems and without the rich and complex experience of self-discovery consistent with constructivism, little change ever occurs in the learning process.

There are, of course, cases for rituals and step-by-step procedures, such as cooking recipes or changing a tire or opening a combination lock, etc. Still, without a larger perspective, understanding and deeper knowledge, even a recipe will never make one a master chef. Even changing a tire can demand a deeper understanding of important issues (when to rotate, or why select one type of tire over another, or how the pressure and tension of lug nuts might achieve optimal results, safety issues and more) – certainly more than just memorized steps.

So, learning is not something that can simply be delivered to someone. As a teacher I function more as a facilitator and seek to provide the experiences for students that provide an encounter with or an exploration of the relationships, tasks and situations to be mastered. I expect that students play an active role devoting time on task not only during scheduled classes but working sufficiently outside of class to master the material.

General Service in Teaching

I am always available for one-on-one consultation and hands-on assistance as students may need. I make sure students can always reach me after class, during office hours, by special appointment and also through email at all hours. While I manage my own schedule, I am essentially available to students 24/7 and respond immediately to any need.

Of course, it is fair to say that students who are active rather than passive participants tend to do better with my approach. Their acceptance of responsibility in the learning process serves them better as they seek a meaningful perspective rather than waiting idly for information to be delivered to them. As I seek to accommodate all learners, I am always aware of those less involved and I try to motivate and involve them in the learning processes.

Modeling a technological lifestyle for my students is important. They are aware of my use of technology in teaching. It is no secret to my students that I am involved in the same continuing process of learning and adapting that they face. Successful teaching, like successful computing, is being productive within the context of solving problems. Successful teaching, like successful computing, is achieving solutions with both intuition and experience in spite of the frustration of difficulties. I try to lead by example, correct misconceptions and, through modeling both the learning process and a professional lifestyle, students and I explore together.

Disposition and Duty

Being an educator is a noble undertaking and it should be viewed as such. It is unfortunate if teachers take on the role of mere clerks dispensing information or processing and administering the rituals of schooling. An educator sets themselves out as someone special: (a) a mentor and servant for those in need of and seeking knowledge; and (b) a connoisseur and curator of their discipline area. With this comes two fundamental responsibilities. The first is service. The educator has a duty to be available and to share that knowledge and the process of learning it. The condition of employment as a teacher is essentially incidental and an arrangement of convenience. I believe an educator has a broader duty to be available to society as a whole. For example, a call from a business or organization or even from a stranger calls upon the teacher as the oracle in service. Resources permitting, there is a duty to help, to share, to teach.

The second is integrity. Candid honesty, unfettered by political correctness, influence or even personal bias, is a critical part of teaching. Even though often lost in today's bureaucracies, our formalized and ritualized institutional processes, the teacher/student relationship is entirely dependent on trust.

The great physicist, Richard Feynman, spoke frequently of the importance, indeed, the

necessity of keeping an open mind in the pursuit of knowledge. It was critical, in his view, that one must recognize what is not known – more importantly, how it is that things cannot be “known” in an absolute sense. For him, asking questions in doubt was always more important than believing the answers in confidence.

It is, today, still a far too common problem, among many educators, that so-called best teaching practices and other methods in the profession are deemed to be established truths and absolutes and are dispensed to future educators legitimized as talismans of certainty and inevitability. From behavioral objectives to assessment rubrics, who continues to ask the questions that will spawn insight into the infinite subtleties of the Art? While perhaps an ideal, for which I have been duly criticized, I strive for a kind of intellectual honesty and an inquiring mind, in the spirit called for by Dr. Richard Feynman. Whether conducting formal research in a post-doc or trying to help one young child find a solution, I believe this to be the prudent and necessary posture of any educator.