

Romi Lynn Burks: Statement of Teaching Philosophy

Teaching is the quintessential learning process. There is a beginning but no end. The journey is wrought with obstacles and challenges but the potential for success is always within one's grasp. The finish line is imaginary; the work is never done. Yet, the look of understanding on a student's face is often worth the largest blue ribbon available. Learning to teach well is a skill that requires time to master, as occurs with all other worthwhile pursuits of knowledge. I am learning the value of time more and more each day.

I think I naively believed my years of dedicated studying would conclude with my doctorate, but they have only just begun. As I learn, my philosophy on how students learn changes, little by little mostly, but sometimes in dramatic leaps. The core elements of my teaching philosophy – providing challenge, mentoring effectively, stressing multi-disciplinary views, and respecting individuality – are the same as when I started thinking about pedagogy. However, my approaches to incorporate these core elements inevitably still require refinement.

PROVIDING CHALLENGE

There is a fine line between high expectations and perhaps unreasonable expectations. I dance around that line maybe too often. Yet we must teach who we are. I am a teacher because I set high expectations for myself and believe that students rise to a challenge. If they know that you believe they can overcome a challenge, then they begin to believe in themselves and the potential is released. My personal challenge comes in learning how to create appropriate tests, both in the classroom and with research students. Improvement only comes with time and effort.

Aristotle wrote “what we have to learn to do, we learn by doing” (*The Nicomachean Ethics*). I see the truth in that statement when I take students out in the field. Nothing can substitute for hands-on experience. In the classroom other skills can be developed. I stress effective reading, quality writing, class participation and critical thinking to prepare students for challenges they will face. Presentations and evaluations are integral components of my courses and research experiences.

It would be hypocritical to only challenge my students and not myself. I recognize the importance of refining my skills through reading pedagogical literature, soliciting frequent student evaluations, attending workshops, incorporating technology in my teaching, and through consulting with other teacher-scholars. This pursuit for excellent teaching has been recognized with a university-wide award for excellence in undergraduate teaching, departmental recognition, and teaching grants.

MENTORING EFFECTIVELY

In the lab, I ask students to connect with a question that interests them and then devise ways to answer it. Guiding students through the scientific process is my favorite challenge to create. Independent research encourages students to discover their own capabilities and take ownership of their education. English novelist W. A. Ward wrote that the “mediocre teacher tells, the good teacher explains, the superior teacher demonstrates, and the great teacher inspires.” I am pedagogically interested in what makes mentoring effective. One day I hope to be an inspiration to a student as I found much of my own personal inspiration in my education.

Educational expert Parker J. Palmer (1998) in *The Courage to Teach* writes, “Students who learn are the finest fruits of teachers who teach.” I am a product of quality teaching, and I hope to continue this tradition by challenging my own students to make the most out of their educational experience.

STRESSING MULTI-DISCIPLINARY VIEWS

To engage my students with the material, I seek out multi-disciplinary views for my teaching. While it requires significant time, I find I most enjoy branching out beyond my traditional training to include viewpoints from other disciplines. The greatest challenge is finding appropriate material. I created my own reading packet for my non-majors freshwater ecology course to provide the background science, but also essays on water scarcity, Rachel Carson’s influential stance on pesticides, and primary literature on the impacts of exotic species. I also press my students to think outside the “box” of science. For example, in my non-majors course *Fresh Water and Society*, students write about what they philosophically value about water or why water plays a central role in disciplines such as art, music, history or photography.

My own research focuses on interactions between a small, open-water crustacean, *Daphnia*, and aquatic plants found near shore in shallow lakes. For me, the ecological theory is exciting enough, but for students, demonstrating applicability of my research is key. In a lab exercise, I can show students why *Daphnia* matter - - as they improve water quality in lakes by eating algae. In a computer simulation, the world of lake management becomes reality as students learn about best management practices and the multi-faceted issues at play with environmental resources. In another exercise, they propose a law geared at protecting fresh water resources. Whether it happens by debating political editorials, discussing PBS specials or analyzing poetry in my classroom, I advocate that a multi-disciplinary approach is instrumental in connecting to different learning styles and interests of students.

RESPECTING INDIVIDUALITY

To further reach students, I adopt the person-centered approach from the Jesuit tradition. Students are individuals, and often busy. I take an active role in my students’ education and try to shape their educational experience to best fit their needs. Increased mentoring of women in the classroom helps bridge the gap that can exist between the numbers of women versus men in science. I extend mentoring into my own lab. I also take the time to be available for students. I stress that as long as students exhibit a willingness to learn, I will find a way that reaches them. My teaching involves multiple classroom techniques, from lecturing to group discussions to experiential and collaborative learning. I enjoy the rush that happens while lecturing. Yet, sometimes shifting gears and allowing students to learn on their own (or from each other) is a good alternative to lecturing. I try to find a balance between guiding learning and teaching my students responsibility for their own education.

Teaching is learning over and over again. It takes time, persistence, and wholehearted dedication. I am at the early stages of my teaching career. Yet, I know philosophically what I value in learning and that I possess the necessary qualities to one day become a superior teacher. Palmer (1998) writes “the imprint of good teaching remains long after the facts that they gave us have faded.” I try to make my imprint last in reality.