

Mentorship Philosophy Statement

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I once told a friend that being a professor is like being a parent, just in a much shorter timeframe. It rang so true for me that I have been repeating it ever since.

It is true.

The first step is: you decide to become a faculty member with equal importance given to research (finding out solutions and methods for solving interesting open problems) and education (passing on the knowledge learned in a way that is easier to understand than when you were in college!). Then, you get into a relationship with your mentee without knowing where it will lead, you nurture them, you show them what you know, you teach them how to develop their own ideas, you set the bar slightly higher every time, you try to understand their limitations, you see their *aha!* moments, you relish their successes. At some point, you notice they are cognitively ripe for an almost peer relationship, disagreeing with you, pointing out better ways, discovering shortcomings on the data collection, and doing the analysis of the data themselves. Then, it's time for you to let them go, to show them the World out there, to be happy when they choose their own path. And if it turns out that they themselves enjoy it, you are even happier...

Although some people hate this expression, "being there" for my mentees is *part of* what this particular work is all about. However, it is not only listening and helping them navigate difficult times, pointing them toward resources and working with them through their personal problems whenever asked to. It is also about developing thought processes and showing them that sometimes all it takes is effort, while some other times it is about making a plan, dedication, risk-taking, looking at it from a different perspective, and optimism.

Reflecting on that relationship, I see that my having nurtured a great support network for myself allows me to take these risks; conversely, providing gentle but firm guidance and an initial support network allows others to engage in endeavors that are risky (sometimes they perceive it as risky, but experience tells us that it is not so risky!) and creative (sometimes they think it is creative, but experience tells us that it is not *soooo* creative!). Discerning the different ways each mentee needs to be guided, and how much guidance they need at the onset, is the hardest part. Showing each one how to enjoy creating the little puzzle pieces and putting them together to form a big, finished puzzle, leading to simple yet beautiful solutions, is extremely satisfying. I show them the pieces of the puzzle include also teaching/passing on your knowledge, and service to your community (Department, School, University, town, research community, friends, collaborators, you name it!).

"Half of getting your PhD is what you know, the other half is what you show!!" That is the phrase I often used to open the first PhD course, to illustrate my philosophy; that phrase

became a cliché of mine, when I had to critique a student's paper. Every experienced person understands that effective communication skills are crucial for being understood by others. It is fun to have the opportunity to show people that step. I teach them to think about how to polish each one of the pieces of the puzzle they must construct, what is the most efficient way to do so, the connection between pieces, culminating in the story line that the whole solution will tell. This requires understanding the attention span and focus of each person, as well as figuring out the intensity of their introversion/extroversion, when to push and when to accept, when to the demand and when to nurture, when to reward and when to criticize (constructively).

Mentoring does not stop at the academic work or its written form. I always go with the student to their first conference presentation, to help them with traveling, networking, and presenting. I often demonstrate, by example, a different way of life: play and work at your full potential and desire (for me, work is also play). This can be seen from an eccentric travel style ("Why be normal? Let's stay two days at the conference hotel and two days elsewhere, from where we will ride bicycles on bike paths and see the town before arriving at the conference"), a different networking style ("there is no need to drink to be pleasant;" "for some, mixing work and personal conversations leads to good collaborations"), an alternative presentation style ("It's OK for you to start with a joke; you have to be accurate with your words; you have to remember you know more about your subject than 99 percent of the audience"), or other "different" ways. I recall one trip to San Francisco, I took a student walking in the Castro, the Mission, and the Haight-Ashbury districts for cultural exposure.

In the end, I always form a bond with my mentees. It is extremely rewarding, emotional, touching, intellectually stimulating. And it is lifelong. I am still in touch with my students who graduated in the past millennium as well as in the last decades. Some of them have returned to Pitt as faculty members, and some serve as faculty at other institutions. Most, though, are in the high-tech centers of the world, working for the high-tech giants, or their home countries, accomplishing their goals, achieving their aims, most of them fulfilling their dreams.

Beyond that end, there's another period, a renewal. The bond perdures—endures the test of time—no longer as mentor and mentee but as colleagues and friends. And sometimes as collaborators, but creating mentee independence is almost always (always!) more important than having a close collaborator that comes as a product of effective and intense mentorship. Clearly, the measure of "importance" is different when you speak about "family," not number of publications, collaborations, or grants.

We've come almost full circle to the equivalence of mentor-mentee and family: the last part is when the mentees themselves either get together and form their own collaborations or are mentors of the new generation of mentees. I love to see the full family connected, when everyone takes advantage of the full support network.

Ah, as in my own family, I do not believe in timeouts. Or in the silent treatment.