My vision of graduate mentoring – Isabel Gauthier – Professor of Psychology – Feb 3 2010

I was recently a panelist at a workshop on graduate mentoring in the sciences organized by our Center for Teaching. As each of us expressed our views on mentoring, I realized that those vary more than I thought. I believe there is value in mentors realizing that there are many ways that this is done, and likely many successful ways, and that if they aren't comfortable with their own mentoring, there are different models one can try, or license to come up with their own approach.

I do not believe in one set fixed of rules in mentoring. I take the role of the mentor to facilitate learning from point A to point B, and perhaps our first tasks as mentors is to i) evaluate what point A is for any given individual, what the individual set of strength and weaknesses is and ii) get a good sense for what point B is and make sure the mentor and mentee have a mutual understanding of this. Goals can change, and there must be many opportunities to revisit them.

The only other thing I want to say about goals is that while the goal **may be** to help the mentee become something like the mentor (e.g., become an accomplished scientist), it may be important for mentors to look around them and remind themselves that there is variability in what makes a successful scientist (for instance).

I think of what happens in graduate school as a process of acquiring expertise in a set of skills and acquiring the self-confidence necessary to believe you are a qualified expert in a field. It makes sense for mentors to make at least a mental list of these skills (in my field, I would say they are:

1) Learn from and integrate a complex and novel literature
2) Technical skills (programming, statistics, data presentation)
3) Design sound experiments
4) Oral communication
5) Choosing good questions to study
6) Writing (which is really a thinking skill)

   There are for sure other skills, but these are the main ones I find myself paying attention to (other ones seem to come naturally as a result of working on the basics).

In the first couple of years of graduate school, I typically find myself helping students to master skills 1 to 3 and then 4. At the same time, I learn a lot about students strengths and weaknesses during this time. Sometimes in the start of the 3rd year, I find myself sharing my impressions with students. Maybe I will ask them to re-state their ultimate goal if I have any doubts. Then I will tell them what I think they have mastered and what our next goal may be. The reality is that at this point, students vary much more than one might expect. In fact I think that may be the point where our graduate students vary the most and when they can benefit from a mentor who is in tune with their current reality and challenges.

I believe that efficient mentors should help mentees learn by adjusting the learning challenges to be "just right". This is based on learning theories that I will not cite here but is certainly not something I came up with. We learn best when we are challenged enough but not so much that we cannot function. This "zone" changes constantly in graduate school (and beyond) and we do no service to a 1st year student if we expect her to write a paper like a 4rth year student. But we also are wasting the senior student's time if we write the paper for them.

I think the key is to adjust and crank up expectations, and adjusting, at different pace for different students is much more difficult than setting the rules of the game at the outset and following them. Mentoring is never easy: it is challenging, sometimes mentally exhausting but it can be incredibly rewarding.

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