Lessons I Learned in Graduate School*

COES Graduate Seminar April 2012

Dr. Jenna P. Carpenter

* Adapted from “So long, and thanks for the Ph.D.!” by Ronald T. Azuma
Introduction

• Succeeding in graduate school requires traits such as **intelligence** and **technical skills**. But it also requires other character traits and social skills – traits and skills that separate the top graduate students from the ordinary ones!

• Being **self-motivated**, taking **initiative**, the ability to **find ways around obstacles**, good oral and written **communication skills**, and the ability to **get along** and **work well with others** are KEY to success in graduate school.

• Let’s take a look at some of these key skills (which are also the skills that will help you succeed once you graduate).
Initiative

- What is initiative? According to Webster’s Dictionary, initiative is *energy, aptitude displayed in starting something, done independent of outside influence.*

"The difference between people who exercise initiative and those who don't is literally the difference between night and day. I'm not talking about a 25 to 50 percent difference in effectiveness; I'm talking about a 5000-plus percent difference, particularly if they are smart, aware, and sensitive to others."

- Stephen R. Covey, *The 7 Habits of Highly Effective People*
Initiative

• A dissertation/thesis requires focused, personal research effort.
• You have to take the lead!
• Your adviser shouldn’t hold your hand or tell you what to do every step of the way.
• Successful students MUST show initiative to complete their project.
• Guidance from your advisor is important – but it should be at a high level, not at a micromanaging level.
• You need to develop a “can-do” attitude, be assertive and productive.
• Your goal is to learn which tasks require permission and which don’t.
• You need to prove that you can work independently and initiate and complete appropriate tasks.
Tenacity

"Let me tell you the secret that has led me to my goal. My strength lies solely in my tenacity."
- Louis Pasteur

- Finishing a dissertation/thesis requires tenacity!
- It is hard to determine how long it will take, where the end lies, you run into unexpected problems and obstacles, you can become unmotivated – you HAVE to be tenacious to finish.
- Tenacity means sticking with it, even if you get depressed or things don’t go well.
- You can’t “give up” when you run into difficulty.
- Work on it every day – not just when you feel like it.
"The Chinese call luck opportunity and they say it knocks every day on your door. Some people hear it; some do not. It's not enough to hear opportunity knock. You must let him in, greet him, make friends and work together."
- Bernard Gittelson

- Flexibility means taking advantage of opportunities, working around problems, being willing to change plans when necessary.
- You have to be flexible in your approach and your research. You have to wait on your adviser, use lab equipment when you can get it, re-direct your research at times.
- You have to recognize opportunities when they come along!
Interpersonal Skills

• You may think that as an engineer or scientist, it is your technical skills that matter most (and they are important), but your success now and later depends largely on your ability to build and maintain relationships – with your adviser, fellow students, your committee, administrators, staff, secretaries, and later colleagues, co-workers, your bosses, and students. You will HAVE to work with other people to achieve your goals. The top performers know this – how to respect others, be mindful of using their time and expertise, maintain a good attitude, navigate organizational “politics” (who is allowed to do what and who gets resources), and be a good citizen. It is your technical skills that get you in the door. It is your interpersonal skills that determine if you get to stay.
Organizational Skills

“Failing to plan is planning to fail.”

You will have multiple responsibilities in your job – if you are not well-organized, you will have trouble meeting your obligations! Find a system that works for you – to keep track of email, appointments, deadlines, tasks, responsibilities, plan for upcoming events, due dates - planners, electronic calendars, email reminders, etc.

No one has time to remind you to do your work.
No one has time to ask you (repeatedly) to do your work.
No one has time to wait for you to do your work.
No one wants to work with you if you are not dependable and responsible.

Disorganization will eliminate opportunities for advancement and destroy your chances for progress.
Communication Skills

"What is written without effort is, in general, read without pleasure."
- Samuel Johnson

Oral and written communication matter! Your dissertation or thesis need to be well-written. Your defense needs to be a good oral presentation. Your job will require you to write and present to multiple audiences. You communicate to teach, explain, ask for funds, learn what others know or need, present results, lead and work in teams, etc. You have to be clear, organized, interesting, and more!

Check out COES Grad Seminars on writing and speaking or Dr. Azuma’s article – it has some great advice!
Balance and Perspective

"Life goes by so fast, that if you don't stop and look around, you might miss it."
- from the movie Ferris Bueller's Day Off

"Generally speaking, people provide better maintenance for their cars than for their own bodies."
- Scott Adams, The Dilbert Future

Keep your health, your sanity, and your family intact. Pay attention to what you eat, get enough sleep, exercise, make time for one hobby that you enjoy on a regular basis. Cultivate some friends. Stay in touch with your family. Keeping in touch with the “real world” helps you maintain perspective – self-esteem, confidence – and refuel your mind and body so that you reach your goals!
• Azuma, Ronald, “So long, and thanks for the Ph.D.!, ”

• COES Grad Seminars on Communication:
  http://www.latech.edu/coes/owise_seminar.shtml

  Keys to Delivering an Effective Talk
  How to Submit-Present a Poster
  How to Communicate Effectively
  How to Write-Submit a Conference Paper
  Tips for Effective Presentations
  Tips on Effective Time Management

References