Leaving Academia

Karen Saxe

Some academic friends tell me that my career path has been “alternative.” In fact, it was all but that for most of my career.

I completed my PhD; enjoyed a two-year post-doc; then settled down for 28 years of teaching and leadership at one institution. At all points in that 30-year run, everything seemed “conventional,” if extremely fortunate. I appreciate that it is hard to land jobs in academia that are as satisfying and wonderful as mine have been. I am still surprised that I was able to raise three children, stay married, sustain meaningful friendships outside of math, get tenure, be promoted to professor, and become department chair. In retrospect, I’ve succeeded in achieving my graduate school hopes. But it was hard: I worked nonstop at my job and struggled to be a good mom. I know many of you are familiar with working all day, then heading home to prepare dinner; spending the evening with your family until the kids go to bed, then working again from 10 p.m. until midnight (or as long as you can manage to stay up writing lectures, grading, and answering emails).

The career I have now began in 2013, when I served as the AMS Congressional Fellow. During the academic year 2013–14, I worked for Senator Al Franken in his Washington, DC, office. I worked on education policy concerns: to establish a national STEM master teacher corps, to provide education stability for youth in foster care, to strengthen connections between community colleges and local industries, and to improve the net price calculator that higher education institutions must make publicly available. I also had the opportunity to support Franken’s work on the Senate Indian Affairs Committee.

One part of that position that I really enjoyed was the writing. It was mostly of two kinds: (1) background materials for committee hearings, which included providing suggestions for questioning witnesses, or (2) drafting speeches. These speeches were, typically, ones the senator would give when visiting a high school. After that year, I returned to my academic job and, honestly, had no idea I would end up back in Washington! Then in 2015, I learned that Sam Rankin, my predecessor at the American Mathematical Society, was planning to retire. Now here was a job I wanted! I began full time with the AMS in January 2017 as director of government relations. I did not apply for this position because I was trying to leave my academic

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DOI: https://doi.org/10.1090/noti2785
job—I loved my academic job—but I was wondering what else I could do, in particular how I could give back to the math community. Significant volunteer work for professional societies has always been important to me. As mentioned, I love writing, and—for me—writing for different audiences is a fun challenge. I also enjoy meeting and talking to people, all sorts of people. And, truth be told, I am into politics.

Since this essay is part of the Early Career theme, and I am now toward the end of my career, I will end with some advice:

1. In an academic job, we think we should do everything all at once and excellently—publish good mathematics, be a great teacher, be a department and perhaps campus leader, be a wonderful partner and parent. The list goes on (and obviously, some of us only engage in a subset of those activities). But, whatever is on your list, I encourage you to think of your career as an arc. You cannot excel in all of these roles at the same time. You can focus on research for some years, parenting for others. Go to your kids’ games and recitals, but don’t attend every evening event on campus—you can participate in these later, when your kids are older. During a sabbatical, focus on research and parenting—you can develop a new course another time. You don’t have to be on a major department or campus committee every year. Some of this, of course, involves letting go and letting others lead (incidentally, this is generally best for your department). You can have a messy house. Be kind to yourself.

2. In academia, many of us strive to land that one job that we plan to keep and love for our entire working life. Keep in mind, though, that hardly anyone outside academia thinks this way. Leaving a job you know well is scary—I know this firsthand. In my opinion, a university or college administration should be happy and proud when good faculty members leave for important work outside of the academy. Higher education is under fire in this country, and we academics bear some responsibility for this predicament; one way to alleviate this is to stop isolating ourselves.

3. Think about what you like to do best, and what sort of work environment you prefer. I decided I like writing, I like being with people, I like talking to people outside of math about how wonderful and useful math is and working with them to be comfortable with math (not necessarily to understand it).

4. Remember that there are many mathematicians (both with undergraduate and advanced degrees) working outside academia. Indeed, according to the NSF’s Survey of Doctorate Recipients, 2021, of the 36,600 PhD mathematicians and statisticians who reside and are employed in the US about 59% work in academia. Another 35% work in the private sector (including all of us who work for the professional organizations that support the math community), and roughly 4% work for the government (local, state, and federal). The AMS Congressional Fellowship, and also the AMS Mass Media Fellowship, are just two of many roads into “alternative” careers that—as the data show—engage a large minority of us. Mathematicians who work outside academia are, I have found, very willing to talk about their experiences. . . . seek them out!

Karen Saxe

Credits

Photo of Karen Saxe is courtesy of Macalester College/David Turner.

Disappointment

Danny Calegari

In high school I took part in many math competitions; the hardest (and therefore to my teenage mind the only ones that counted) were the competitions relating to the international mathematical olympiad (IMO). In Melbourne there was a program of competition and training that culminated in a nine hour exam spread over two days to determine the makeup of the Australian IMO team. I remember very well the first time I took the exam. It was 1987, and the IMO was to be held that year in Cuba. As I sat at my carrel in the Morris library, I took the February sunlight for fortune smiling on me, inspiration spilled liberally from my Pelikano steel nib fountain pen, and I went home at the end of the second day in a blur of fatigue and self-congratulation. Six weeks later a pregnant manila envelope arrived in the mail. From its girth alone I knew I had aced the exam and won my rightful spot on the team. Before even opening the envelope I could see myself in the green woolen team blazer with the Australian coat of arms.

See Table 12-1 at https://ncses.nsf.gov/pubs/nsf23319.

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DOI: https://doi.org/10.1090/noti2782