

Carol Ormand ('89)

What have you been up to since you graduated?

I worked for a couple of years, went to graduate school in geology at the University of Minnesota, earned a Ph.D., then taught as a Visiting Assistant Professor for five years at a couple of small liberal arts colleges. At that point I moved to Madison to be with my then-fiance, now-husband, and accepted a half-time, four month position at the Science Education Resource Center at Carleton College, of all places. Five years later, I'm still working for SERC. For the first two years, I also took classes, part-time, in architectural drafting – a field I recommend highly to anyone who enjoys problem solving and visualizing 3D geometry.

What do you do for a living?

SERC exists to help college and university science faculty teach better. My work supports that goal in a number of different ways: I conduct research on how students learn spatial thinking skills, I help orchestrate faculty development workshops in which we show faculty what we know about how students learn and give them the tools to utilize that information in their own classrooms, and I develop websites that showcase effective teaching methods and supporting materials. Because I live in Madison, I telecommute.

How has being a math major helped you get where you are?

Well, it's been a fairly circuitous path. My Ph.D. advisor was willing to take me on as a student, in part, because of my degree in math. Many geoscience majors are less than eager to tackle quantitative geological problems, and he knew I would not mind the mathematical aspects of structural geology, which was my area of specialty. You could say that structural geology is the study of the evolution of 3D geometric configurations.

My Ph.D. in structural geology got me my faculty positions, and my experience as a faculty member was key to my original position at SERC: developing a website of resources for new faculty members in geoscience. So, while there's no direct connection between my undergraduate degree in math and my current job, there is a direct chain of connections.

Are there classes you wish you had taken while you were at Carleton which you didn't?

Statistics. My research on learning involves statistical analyses of large data sets. I am learning on the fly, always feeling that I'm missing the big picture, the contextual information that would help me make sense of particular analyses.

A related question would be which classes am I particularly glad to have taken. I don't remember the name of Prof. Galovich's Math 236, but much of that course focused on heuristics, or problem-solving strategies. It was invaluable. It taught me a way of thinking about my own thinking and learning – one of my early forays into metacognition.

What advice would you give current math majors?

As trite as it sounds, I would say follow your heart and be open to whatever possibilities come your way. I never would have imagined my current occupation when I was an undergraduate; in fact, all I ever wanted was to be a faculty member at a small liberal arts college in the Midwest. I

tried that, and I liked it, but I like what I do now even better. I also very much enjoyed architectural drafting. If my current position hadn't materialized, I would be working in the architectural field today. Unless I'd found something else I liked better....