My second life as a teacher

For most of my educational and professional life, I pursued a fairly standard trajectory. A bachelor's degree in physics and astronomy, a master's in optical physics, and a Ph.D. in astronomy prepared me for a postdoctoral fellowship and subsequent work as a scientist at NASA's Goddard Space Flight Center. I moved on to a visiting professorship and then a research professorship at Tufts University. I thought I was well on my way to a stable career as an astronomer. Then it stalled, and my second life beckoned.

The turning point came in 2008, 18 years after I got my Ph.D., when my luck securing grants dried up. It can happen to any of us, and that was my year. Over the next 2 years, I applied for several more grants, hoping that I could sustain my career in academia, but none got funded. In the meantime, I began considering options beyond the hallowed halls.

During those years, I spent a summer teaching a high school astronomy course, worked on a book about the Milky Way, and served as a subject matter expert for an online textbook project. Yet, for the most part, I was either unemployed or severely underemployed. It was hard to not feel disappointed and frustrated. I wondered whether my hard-earned scientific background would ever be put to good use again.

That's when my community service paid off. For several years, starting before I left my university post, I had been volunteering in the local public school system, serving as a member of a council dedicated to making sure that the educational environment was safe, welcoming, and enriching. So, when a physics teaching opportunity opened up in the high school, the principal—who knew me through my volunteer work—asked whether I would like to apply. I had truly relished teaching at the undergraduate and graduate levels, so I was happy to dive into teaching high school students. Besides, the salary was decent enough—certainly more than an adjunct college professor makes.

Now, 7 years later, I am glad my career path took this unexpected turn. Making the adjustment felt like a new and exciting challenge, not a downgrade in my prospects. In some ways, teaching high school students has been even more rewarding than my college-level teaching. I teach physics and occasional astronomy-related courses at levels that are typically more rigorous than the introductory courses I was teaching at Tufts. I also get to interact with my high school students in a more personal way, as the class sizes are smaller and I see the students more often over the course of the year. Yes, they are still teenagers who are prone to lapses in their executive functioning and who can manifest a fair degree of silliness and drama. But they also can be delightful, especially if given a chance to express themselves. I particularly enjoy mentoring students as they conceive and carry out research projects that they can then present in competition. For me, the experience is surprisingly similar to mentoring undergraduate and graduate students, and it is just as rewarding.

Teaching also leaves enough room in my life for my own intellectual interests, including reading scientific journals and magazines; attending professional meetings; and co-editing The Galactic Inquirer, an online journal for students and astronomy enthusiasts. During the summers, I can focus on writing and editing, hosting occasional astronomical workshops for educators and enthusiasts, and attending more far-flung scientific meetings.

It's not perfect, of course. Although I feel fulfilled in my second life as a science teacher and part-time science popularizer, I miss carrying out cutting-edge research. Over the years, my skills in data acquisition and analysis have waned, while my skills in classroom management and instruction have grown. But I've enjoyed building my new arsenal. I've also come to appreciate that my background in science has true and lasting value, regardless of where or how I apply it. By being flexible and open to new possibilities, I have become one of the many scientists who find joyful and rewarding work in unexpected places.

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