The Art of Mentoring

Winston Anderson says mentors need to prepare science students to be adaptable to meet real-world demands. The cell biologist and HHMI professor at Howard University says it’s short sighted to mold students in your own image.

Remember that Bill Withers song? “Lean on me, when you’re not strong, and I’ll be your friend, I’ll help you carry on.” That song sums up my philosophy of mentoring. Students—undergraduates, graduate students, and postdocs—need someone they can depend on who can provide opportunities and encouragement to do better.

We don’t need to create clones of ourselves. As mentors, we can provide foundational support, promote creativity, and enhance a student’s abilities to analytically reason. We want to shape young people who will be independent. Who will listen and benefit from mentoring, and then go out into the world and be mentors themselves—to pass on the tradition of helping people grow, test boundaries, and contribute.

Several mentors have supported me throughout my career. When I left Washington, DC’s, historically black Howard University to attend graduate school at Brown University, in Rhode Island, I was scared. I was one of two African Americans. I saw no Latinos or Asians. But I found mentors, none of whom looked like me. They communicated with me about ideas in science and academics. They were compassionate. They became colleagues. I was in a place surrounded by peers who were moving fast, competitive, and accomplished. I knew I had to produce.

If you look around at all the accomplished black scientists today, each one had mentors like mine who provided the environment, the means, the encouragement, and the guidance. My mentors offered opportunities to develop skills as a scientist as well as a teacher. Harvard’s Morris Karnovsky was what I’d call an “ideas” person. And Hewson Swift at the University of Chicago was a compassionate fellow who championed his students. The first African American scientist I met in my career was Harold Amos, department chair at Harvard and an excellent example of what a good scientist is.

Students have to master basic skills so they can explore and branch into new areas that stimulate them. We must train our students to be adaptable. Some of the most adaptable students I’ve encountered have come to the United States from other countries. Because their access is limited, they are very motivated and learn to adjust. This is what we should do with many of our U.S. minority students: put them in environments where they must learn to adapt. And then support them. Keep the students on their toes by creating an environment where they are continuously forced to produce.

I gave a talk at the Massachusetts Institute of Technology, where they are turning out brilliant, fantastic scientists. One student asked, “What if I can’t meet those expectations of being a great scientist?” I told her there are so many other ways to contribute to greatness: by being a good researcher and communicator, by working with students, by being a compassionate scholar. I’ve suggested that the PhD be viewed as equivalent to a law degree. A science background can open doors to a variety of career paths, just as law sets the foundation for myriad fields, such as politics.

To mentors: Don’t train students to be scientists above all. If you teach them to be scientists and teachers, you’re prepared scholars.

To students: Don’t be afraid to get mentors. Find mentors with compassion; that is what will bind you. You are not a servant to these individuals; you are a colleague. Know that you can be adaptable and choose your mentors based on ideas over accomplishments. Be ready to reach back into your community in turn. We all need someone to lean on.

—Interview by Cori Vanchieri
Winston Anderson says every student, regardless of level, needs a mentor.