SUCCESS STRATEGIES FROM WOMEN IN STEM: A PORTABLE MENTOR

An important question often asked by aspiring professionals in STEM fields is: "What are the important skills that I need to climb the ladder while successfully managing my career, both academically and professionally?" According to Christine. Grant, coeditor of the book *Success Strategies for Women in STEM: A Portable Mentor*, mental toughness, personal style, networking, mentoring, transitions, time stress, leadership, balance, and negotiation are all core skills required to succeed in STEM fields (Pritchard and Grant, 2015).

Grant emphasized the importance of cross-cultural mentoring and asked participants about their own experiences being both a mentor and a mentee. She said that everyone should have a portfolio of mentors, not just one mentor, because what they need will change over time. Sometimes those mentors will have obvious programmatic connections, but Grant pointed out that often the best mentors come through unofficial channels. She encouraged everyone in attendance to seek out alternative mentoring if they felt their department was not providing the support they needed.

Mentors can learn from mentees as well, she said. After a time the mentoring relationship often becomes a peer relationship as the mentee's career advances.

Grant presented some feedback from mentees on the good and bad parts of mentoring that she collected at various meetings. Respondents believed that a good mentor will champion and foster a mentee's goals, give honest feedback, help problemsolve, share good opportunities, and celebrate a mentee's success. A good mentor should make time to meet, should recognize when they do not have the necessary knowledge to mentor on a specific topic, should always be respectful, and should never discourage a mentee or limit their ambition.

Grant touched briefly on the mechanisms for mentoring: assigned mentors, cluster mentors (mentoring a group together), naturally occurring mentors, and peer mentors. Grant also discussed the points made by the coeditor of her book, Peggy Pritchard, of North Carolina State University, in a chapter on mental toughness. Students need strength of will, mental agility, awareness and mindfulness to help them be successful. Women can develop these skills through career and personal and professional development, but institutional infrastructure is also important and may need to change. "One could argue that institutional change is fostered by leadership, informed by beneficiaries and implemented through allies, and that's critical for change to occur," Grant said.

She invited participants to work in groups on an intervention that they would want to see implemented at their institution, using a model with those three groups: beneficiaries (women and underrepresented minorities), allies (faculty, mentors, program leaders), and leadership. "How can the beneficiaries engage the allies and educate the leaders without putting themselves at risk?" she asked. For allies, how can they connect with the beneficiaries and represent interventions to organizational leadership? And how does the leadership develop an authentic partnership with the allies and participate in an intervention that will benefit the entire institution?

Grant argued that interventions are often very siloed, and encouraged the workshop participants to think about obstacles and opportunities with their proposed intervention. "There is a tug of war between the obstacles and opportunities," she pointed out, asking the workshop groups to think about which would come out on top. Having a

great intervention is not enough, she said. It is important also to consider how to get it noticed, how to get more people involved, and how to get through potential roadblocks.

When thinking about opportunities, Grant said, the question is what the different groups need in order to actually effect change. She presented an example of non-tenured faculty at North Carolina State University, who are primarily women. That group was feeling disempowered and isolated, because only tenured faculty had voting power.

As the associate dean of faculty advancement, Grant was able to manage conversations between these groups and also influence new policy at the university to help non-tenured faculty. She found that non-tenured faculty did not believe they could get promoted, but once they saw the potential of the promotion process, they felt more empowered and more positive.

Grant also asked the workshop groups to consider what the different groups (allies, leadership, and beneficiaries) could learn from each other and how to pull obstacles into the realm of opportunity. "I'm hoping that the process we went through has enabled you to start thinking about interventions differently," she said.

Finally, Grant addressed the issue of time pressure, which is one of the biggest barriers to successful interventions. She said that the biggest benefit is finding a way to make a program a win-win for everyone involved.