

Learning Objective:

Employ various strategies to build their mentees confidence, establish trust, and foster independence. Learn to identify the benefits and challenges of fostering independence, including the sometimes conflicting goals of fostering independence and achieving grant-funded research.

Case Study **Forced Guidance**

I started working with a new undergraduate on a thesis this semester, and I just can't seem to get along with her! I told her at the beginning of the semester that I thought we should have weekly meetings to talk about her progress, and she agreed. At our next meeting, I asked her to run through a list of the things she'd accomplished that week. She had no notes and seemed pretty unprepared for talking about her work in the level of detail that I expected. She's been canceling most of our meetings at the last minute -- either she doesn't feel well, or she suddenly remembers an assignment for another class that's due the next day! I know that she's doing the work, because at the few meetings she keeps, she has a lot to say -- but her progress on this project is very uneven, both in time taken and in quality, and I'm often forced to suggest that she redo crucial pieces. I fear these critical meetings leave her demoralized and less interested in accepting guidance from me, but I don't know how else to get her to understand that she needs my help.

Guiding Questions:

1. What are the main themes raised in this case study?
2. What other issues might be at play in this case? What should the mentor's next steps be?
3. How can you determine if you are making assumptions about a mentee's ability based on their productivity or work style, especially if they differ from yours?
4. What is your responsibility to "force guidance"?

From Multidisciplinary Research Mentor Training Seminar (2010).

For additional information, resources and detailed facilitator notes—visit: CIMERProject.org

Learning Objective:

Assess their mentee's understanding of core concepts and processes and ability to develop and conduct a research project, analyze data, and present results.

Activity

Scenarios

- **READ (2 min):** Distribute the “Assessing Understanding” scenarios. Assign each small group one of the scenarios. Let participants read their assigned scenario individually.
- **DISCUSS (10 min):** Have each small group discuss its assigned scenario among the group's participants. Each group should come up with three specific approaches to avoiding or resolving the described situation.
- **ASK (13 min):** Ask each group to share two approaches with the entire group. You may want to record the ideas generated in this discussion on the whiteboard or flip chart. Here are some additional questions for discussion:
 1. How do you know if your mentee understands something?
 2. How can you help your mentees accurately assess their own understanding?
 3. How often should a mentor check in with their mentee about their understanding?
 4. Mentors can make assumptions about a mentee who does not understand. They may think the mentee is blowing off the work. How do you determine the difference between a mentee not understanding something and a mentee not trying?
 5. How can you deal with the fact that a mentee may be embarrassed by a lack of understanding?
 6. How can mentors balance promoting independence with confirming understanding?
 7. How can you tell the difference between a miscommunication and a true lack of understanding?

From *Pfund, C., Branchaw, J. and Handelsman, J. (2015). Entering Mentoring 2nd Edition. New York, NY: W.H. Freeman & Co.*

Part of the W.H. Freeman Entering Mentoring Series, 2014.

For additional resources and complete curriculum—including information on competencies and facilitator notes—visit: CIMERProject.org

“Assessing Understanding” Scenarios

Scenario A: Revealing Abstract

You have just spent the last month working intensively with your new undergraduate mentee. You have given her multiple papers to read and have had several discussions about your research. In addition, she has engaged in several different aspects of an ongoing project over the last month. She is hardworking and seems to understand the group’s research, and things seem to be going well. On Monday morning, she hands you a draft of the introduction section for a possible senior thesis project. After reading through the draft, you are forced to conclude that she does not understand the work of your lab.

What can you do to address this situation? How can you avoid this situation in the future? Come up with at least three strategies for avoiding this situation.

Scenario B: It Seemed So Clear When You Explained It

You have recently explained a complicated technique to your mentee. While you were explaining, he nodded the entire time as if he understood every word you were saying. When you were finished with your explanation, you asked him if he had any questions. He said no. Just to make sure, you asked him if everything was clear. He said yes. Three days later you asked the mentee how his work using this technique was going, and he told you he hadn’t started because he did not understand the technique.

What can you do in the future to make sure your mentee understands what you are saying?

Come up with at least three strategies for assessing your mentee’s understanding.

Mentor Training for **Undergraduates**

Assessing Understanding

Scenario C: It Just Didn't Work

I have a really promising mentee who's doing well in all of his upper-division major courses. When we work through experiments together, he knows all the right techniques, but he doesn't seem to be able to get experiments to work right when he's by himself. I'm trying to help him figure out what's happening in his failed experiments, but our conversations all seem to go like this:

"So what happened with your reaction?" "It didn't work."

"What happened?"

"Nothing. It just didn't work." "What do you think went wrong?"

"I don't know. But I tried it twice and it didn't work either time."

We're both getting a little frustrated with the lack of progress, and I've noticed that he's started spending less time in the lab.

Suggest approaches to get things back onto the right track.

Come up with at least three strategies for dealing with this situation.

From *Pfund, C., Branchaw, J. and Handelsman, J. (2015). Entering Mentoring 2nd Edition. New York, NY: W.H. Freeman & Co.*

Part of the W.H. Freeman Entering Mentoring Series, 2014.

For additional resources and complete curriculum—including information on competencies and facilitator notes—visit: CIMERProject.org

Learning Objective:

Recognize the impact of conscious and unconscious assumptions, preconceptions, biases, and prejudices on the mentor-mentee relationship and acquire skills to manage them

Case Study **Is it OK to Ask?**

Last summer I worked with a fantastic undergraduate mentee. She was very intelligent and generated a fair amount of data. I think that she had a positive summer research experience, but there are a few questions that still linger in my mind. This particular mentee was an African-American woman from a small town. I always wondered how she felt on a big urban campus. I also wondered how she felt about being the only African-American woman in our lab. In fact, she was the only African-American woman in our entire department that summer. I wanted to ask her how she felt, but I worried it might be insensitive or politically incorrect to do so. I never asked. I still wonder how she felt and how those feelings may have affected her experience.

Guiding Questions:

1. What are the main themes raised in this case study?
2. As a mentor, would you feel comfortable asking a mentee about how their racial or any other identity affects their experiences? How do you decide when asking questions about these issues is appropriate?
3. How might you react differently to this case if the mentees' difference was one of sexual orientation? How do you engage in such conversations based on interest without sounding judgmental about differences? How do you ask without raising issues of tokenism?

From Multidisciplinary Research Mentor Training Seminar (2010).

For additional information, resources and detailed facilitator notes—visit: CIMERProject.org