Optimizing Mentoring Relationships:

Assessing Understanding
Equity and Inclusion
Aligning Expectations

April 24, 2018

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University of Wisconsin-Madison
Interacting with the presentation via GoToWebinar
Asking questions and responding to discussion prompts during presentation
Responding to polls

Just for practice: What are you looking forward to in the next month?

1. End of the semester
2. Completing a project
3. Vacation
4. Family celebration
5. Other
Webinar Agenda- April 24, 2018

Introductory Activity: Who is in the ‘room’?

Recap of Webinar #2

Today’s topics:

• Assessing Understanding
• Equity and Inclusion
• Aligning Expectations

This is the final of 3 webinars
Introductory Activity

In Questions window, please share:

Where do you currently work? (institution, organization)
Poll: What Career Stage are You?

1. Faculty
2. Research Staff
3. Post-doc
4. Graduate Student
5. Other
Poll: How many mentees are you currently mentoring?

1. 1
2. 2
3. 3
4. More than 4
5. None
Poll: What Career Stage are Your Current Mentees?

1. Junior Faculty
2. Research Staff
3. Post-doc/ Graduate Student
4. Undergraduate
5. More than one of the above

If none of the above, skip this question.
Recap of Webinars #1 and #2

• Webinar #1:
  • Effective Communication: Providing Feedback
    • Culture and Communications
    • Research Self Efficacy
    • Resources

• Webinar #2:
  • Fostering Independence
  • Growth Mindset
  • Personal Factors including Mental Health

Webinar and resources posted at:
http://www.aps.org/programs/minorities/nmc/webinars.cfm
A Mentored Research Experience and Strong Mentorship has been linked to:


- **Persistence** (Gloria *et al.*, 2001; Solorzano 1993; McGee and Keller, 2007; Sambunjak *et al.*, 2010; Williams *et al.*, 2015; Bordes-Edgar *et al.*, 2011; Campbell and Campbell, 1997)

- **Research productivity** (Steiner and Lanphear, 2002; 2007; Wingard *et al.*, 2004)

- **Higher career satisfaction** (Schapira *et al.*, 1992; Beech *et al.*, 2013)

Defining Mentoring

A collaborative learning relationship that proceeds through purposeful stages over time and has the primary goal of helping mentees acquire the essential competencies needed for success in their chosen career.

It includes using one’s own experience to guide another through an experience that requires personal and intellectual growth and development.

Applies to research mentoring, career coaching, peer mentoring, virtual mentoring, and in some cases advising.

## Skill Building Across Attributes for Effective Research Mentoring Relationships

<table>
<thead>
<tr>
<th>RESEARCH SKILLS</th>
<th>DIVERSITY/CULTURALLY-FOCUSED SKILLS</th>
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<tbody>
<tr>
<td>· Developing disciplinary research skills</td>
<td>· Advancing equity and inclusion</td>
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<td>· Teaching and Learning disciplinary knowledge</td>
<td>· Being culturally responsive</td>
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<td>· Developing technical skills</td>
<td>· Reducing the impact of bias</td>
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<td>· Accurately assessing mentees’ understanding of disciplinary knowledge and skills</td>
<td>· Reducing the impact of stereotype threat</td>
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<td>· Valuing and practicing ethical behavior and responsible conduct of research</td>
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<tr>
<th>INTERPERSONAL SKILLS</th>
<th>SPONSORSHIP SKILLS</th>
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<tr>
<td>· Listening actively</td>
<td>· Fostering mentees’ independence</td>
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<tr>
<td>· Aligning mentor and mentee expectations</td>
<td>· Promoting professional development</td>
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<tr>
<td>· Building trusting relationships/honesty</td>
<td>· Establishing and fostering mentee professional networks</td>
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<td>· Actively advocating on behalf of mentees</td>
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<tr>
<th>PSYCHOSOCIAL SKILLS</th>
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<tr>
<td>· Providing motivation</td>
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<td>· Developing mentee career self-efficacy</td>
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<tr>
<td>· Developing mentee research self-efficacy</td>
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<td>· Developing science identity</td>
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<td>· Developing a sense of belonging</td>
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Pfund et al. 2016
In partnership with NRMN (NIH), NSF, HHMI and others we have developed mentor and mentee training intervention

Training Types:

- Face-to-face mentor training workshops
- Face-to-face mentee training workshops
- Self-paced online training
- Synchronous online training
- Train-the-trainer workshops
- New modules
...and we studied them


Assessing Understanding: Case Study

*It Just Didn’t Work*

I have a really promising undergraduate mentee -- he’s getting great grades in all of his classes, and 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 the experiment?” “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 he’s been coming into the lab less and less often. How do I get things back onto the right track?

*In the questions box, please share one approach you could use to figure out what is going wrong.*
Assessing Understanding: Questions to Consider

- What could explain a mentee having difficulty understanding?
- How can you help your mentees accurately assess their own understanding?
- We all unconsciously make assumptions about ability and level of understanding based on other cues and factors such as race, ethnicity, gender, English fluency, prior experience and background, types of questions someone asks, etc. How can you acknowledge those assumptions and remain open-minded?
List of Assessing Understanding Approaches: Complied from Prior Workshop Participant

- Walk through the process together
- Check in on progress “more” frequently
- Ask mentee to explain method/ concept back to you
- Ask mentee to teach someone else the technique/ concept
- Give mentee option of how to convey their understanding to you (draw it, make a flow chart, explain it verbally, etc)
- Use a variety of teaching methods to help mentee understand
- Ask mentee how they learn best
- Break the method/ concept up into parts
- Ask open ended questions
- Ask mentee to “use the language” to explain something else
- Ask mentee to apply method/ knowledge to a new situation
- Give mentee time for repetition
- Show the mentee a new technique, then do it together, then have them try it alone while you watch
- Share you own experiences with mentee about trying something new so as to normalize the pressure they may feel to perform
- Ask mentee to use an analogy to explain their understanding
- Stress to mentee that there are no “dumb” questions
Assessing Understanding: Tools for Research Skill Development

Facilitator Training Workshop (October 25-26, 2018)

Help us pilot test this summer!

To get more information, sign up here: https://bit.ly/2JDC7dP

Questions or follow up contact: Janet Branchaw, branchaw@wisc.edu Amanda Butz, abutz2@wisc.edu
Equity and Inclusion
Equity and Inclusion: 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 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 wondered how the white-majority environment might impact her experience. 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 feeling may have affected her experience.
Poll: Would you ask?

1. I would definitely ask
2. I would consider asking if I knew the mentee well
3. I would not ask, but willing to talk if the mentee raises the topic
4. I would not feel comfortable discussing this topic
5. I am unsure about what I would do
Please share your response to one or both questions in the Questions Box:

1. What might the mentor’s intent have been in asking the question?

2. What might have been the impact on the mentee?
Assessing Understanding: Questions to Consider

• 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?
Aligning Expectations
Mentoring Compacts: An Overview

Description:
• A written document used to articulate expectations between mentors and mentees/protégés
• Differs from an Individual development Plan (IDP) which focused on short and long-term career plans;
• Focused on expectations for the working relationship on a regular basis
• Compacts vary in their format and level of detail

Rationale:
• Provides written documentation of expectations which can be revisited and revised over time
• Serves as a shared reference point for regular progress reviews
• Makes invisible expectations, visible
• Levels the playing field among mentees/protégés
Poll: What is your experience with Mentoring Compacts?

1. I have never heard of a mentoring compact
2. I have heard of a compact, but never seen one
3. I have seen a compact but don’t use one
4. I have used one as a mentor or mentee
Mentoring Compacts: Example Domains to Consider

What I expect from you
• You will take ownership of your career path and experience
• You will develop your personal research skills
• You will contribute to the department/ unit

What you can expect from me
• I will encourage you to advance along your career path
• I will be available for regular meetings and will provide timely review of your progress
• I will provide a space that is supportive, safe, and free from harassment.

Nuts and Bolts
• Individual meetings
• Group meetings
• Means of communicating and responsibility for reach out
• Annual Evaluations
Example of a Mentee Compact

Mentee: __________________________
Mentor: __________________________

This contract outlines the parameters of our work together on this research project.

1. Our major goals are:
   
   A. research project goals –
   B. mentee’s personal and/or professional goals –
   C. mentor’s personal and/or professional goals –

2. Our shared vision of success in this research project is:

3. We agree to work together on this project for at least ____ semesters.

4. The mentee will aim to work at least _____ hours per week on the project.
5. On a daily basis, our primary means of communication will be through (circle):
   face-to-face / phone / email / instant messaging / ______________

6. We will meet one-on-one to discuss our progress on the project and to reaffirm or
   revise our goals for at least _____ minutes _____ time(s) per month.

   It will be the (mentee’s / mentor’s) responsibility to schedule these meetings. (circle)

In preparation for these meetings, the mentee will:

In preparation for these meetings, the mentor will:

   At these meetings, the mentor will provide feedback on the mentee’s
   performance and specific suggestions for how to improve or progress to the
   next level of responsibility through (circle):

   a. a written evaluation       b. a verbal evaluation       c. other:

7. If the mentee gets stuck while working on the project (e.g. has questions or
   needs help with data analysis) the procedure to follow will be:
Objective: Students will articulate their motivations and goals for doing research, what they bring to the experience, and what they aim to learn from the experience.

1. Why do you want to do research?

2. What are your academic and personal goals for your research experience?

3. What values, experiences, and/or perspectives will you bring to your research team?

4. What is your greatest concern about doing research?

5. What most excites you about doing research?

Acknowledgements

Monica Plisch
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Angela Byars-Winston

You!
Join the APS National Mentoring Community today!


✓ Monthly support to facilitate a deeper mentor-mentee relationship
✓ Professional development opportunities for mentors and mentees
✓ An annual conference (next one is Nov. 16 – 18, 2018, Palo Alto, CA)
✓ Access to an emergency fund for mentees experiencing unexpected financial challenges
✓ Free