

# Optimizing Mentoring Relationships:

## Assessing Understanding Equity and Inclusion Aligning Expectations

**April 24, 2018**

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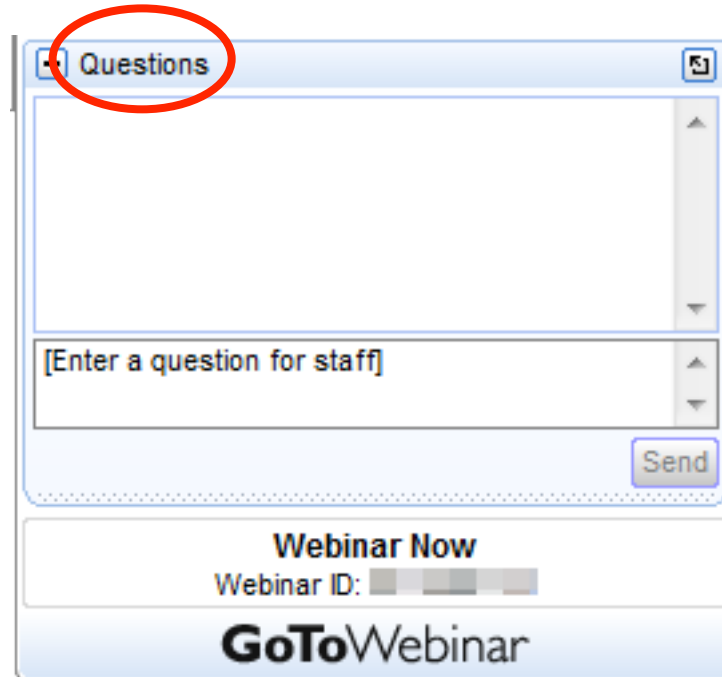
Wisconsin Center for Education Research

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# Interacting with the presentation via GoToWebinar



# Asking questions and responding to discussion prompts during presentation



The image shows a screenshot of a GoToWebinar interface. At the top, there is a window titled "Questions" with a red circle around the title bar. Below the title bar is a large empty text area for entering a question. Below this is a smaller text area containing the placeholder text "[Enter a question for staff]". To the right of the text area is a "Send" button. Below the "Questions" window, there is a section labeled "Webinar Now" with a "Webinar ID:" followed by a blurred grey box. At the bottom of the interface is the "GoToWebinar" logo.

## 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:

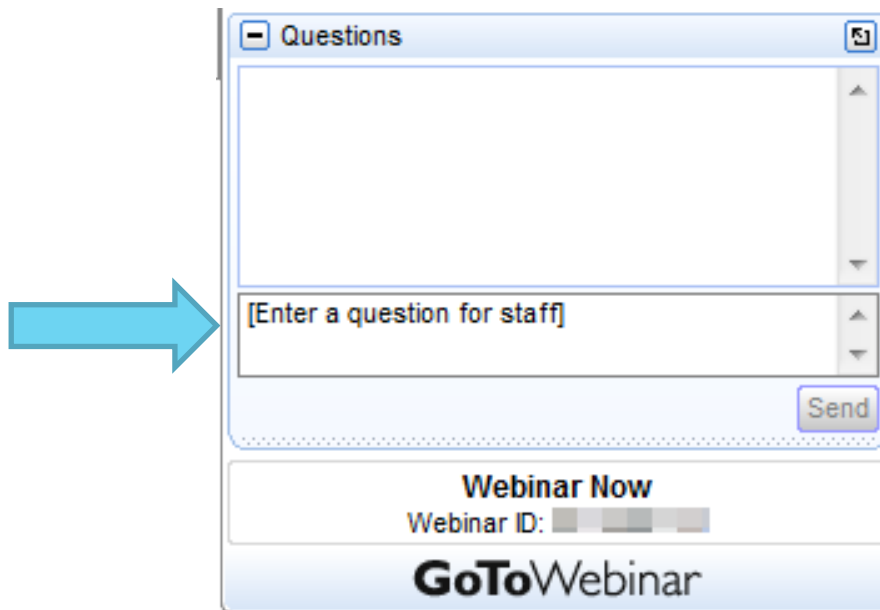
- Assessing Understanding
- Equity and Inclusion
- Aligning Expectations

This is the final of 3 webinars

# Introductory Activity

In Questions window, please share:

**Where do you currently work?  
(institution, organization)**



The image shows a screenshot of a GoToWebinar interface. At the top, there is a window titled "Questions" with a close button. Below the title bar is a large empty text area. Underneath this is a smaller input field containing the placeholder text "[Enter a question for staff]". A blue arrow points from the left towards this input field. To the right of the input field is a "Send" button. Below the input field, there is a section titled "Webinar Now" with a "Webinar ID:" followed by a blurred grey box. At the bottom of the interface is the "GoToWebinar" logo.

# 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:

- ▶ **Enhanced research identity, sense of belonging and self-efficacy** (Palepu *et al*, 1998; Garman *et al*, 2001; Paglis *et al*, 2006; Lopatto, 2007; Bland *et al*, 2009; Feldman *et al*, 2010; Cho *et al*, 2011; Chemers *et al*, 2011; Thiry and Laursen, 2011; Byars-Winston *et al*, 2015)
- ▶ **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)
- ▶ **Enhanced recruitment of URMs** (Hathaway *et al*, 2002; Nagda *et al*, 1998).

# 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

<p><b>RESEARCH SKILLS</b></p> <ul style="list-style-type: none"> <li>· Developing disciplinary research skills</li> <li>· Teaching and Learning disciplinary knowledge</li> <li>· Developing technical skills</li> <li>· Accurately assessing mentees' understanding of disciplinary knowledge and skills</li> <li>· Valuing and practicing ethical behavior and responsible conduct of research</li> </ul>	<p><b>DIVERSITY/CULTURALLY-FOCUSED SKILLS</b></p> <ul style="list-style-type: none"> <li>· Advancing equity and inclusion</li> <li>· Being culturally responsive</li> <li>· Reducing the impact of bias</li> <li>· Reducing the impact of stereotype threat</li> </ul>
<p><b>INTERPERSONAL SKILLS</b></p> <ul style="list-style-type: none"> <li>· Listening actively</li> <li>· Aligning mentor and mentee expectations</li> <li>· Building trusting relationships/ honesty</li> </ul>	<p><b>SPONSORSHIP SKILLS</b></p> <ul style="list-style-type: none"> <li>· Fostering mentees' independence</li> <li>· Promoting professional development</li> <li>· Establishing and fostering mentee professional networks</li> <li>· Actively advocating on behalf of mentees</li> </ul>
<p><b>PSYCHOSOCIAL SKILLS</b></p> <ul style="list-style-type: none"> <li>· Providing motivation</li> <li>· Developing mentee career self-efficacy</li> <li>· Developing mentee research self-efficacy</li> <li>· Developing science identity</li> <li>· Developing a sense of belonging</li> </ul>	

# 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

Pfund, C., Pribbenow, C., Branchaw, J., Miller Lauffer, S. and Handelsman, J. (2006). The merits of training mentors. *Science* 311:473-474.

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Fleming M, House S, Hanson VS, Yu L, Garbutt J, McGee R, Kroenke K, Adebini Z, Rubio D. (2013). The Mentoring Competency Assessment: Validation of a New Instrument to Evaluate Skills of Research Mentors. *Acad Med.* 88(7):1002-1008.

Sorkness CA, Pfund C, Asquith P, Drezner M. (2013). Research Mentor Training: Initiatives of the University of Wisconsin Institute for Clinical and Translational Research. *Clin Transl. Sci.* 6(4): 256-258.

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Pfund, C., Spencer, K., Asquith, P., House, S., Miller, S., Sorkness, C. (2015). Building National Capacity for Research Mentor Training: An Evidence-Based Approach to Training-the-Trainers. *CBE Life Sciences Education* 14 (2).

McDaniels, M., Pfund, C. and Barnicle, K. (2016). Creating Dynamic Learning Communities in Synchronous Online Courses: One Approach from the Center for the Integration of Teaching and Learning (CIRTL). *Online Learning*.

# Assessing Understanding



# 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.**

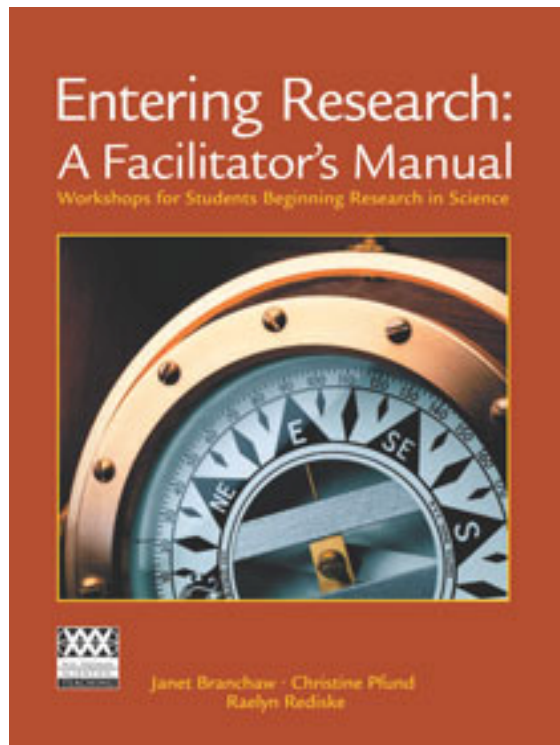
# Assessing Understanding: Questions to Consider

- 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: Compiled 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](mailto:branchaw@wisc.edu)  
Amanda Butz, [abutz2@wisc.edu](mailto: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 feelings 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

*from Branchaw, J. L., Pfund, C., and Rediske, R. 2010 Entering Research Facilitator's Manual: Workshops for Students Beginning Research in Science, WH Freeman & Company.*

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:

# Tool: Research Expectations Interview

**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?



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You!



UNIVERSITY OF WISCONSIN  
Center for Women's  
Health Research



# Join the APS National Mentoring Community today!

<http://bit.ly/NMCMentor>

- ✓ 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