WINTER BREAK BOOK CLUB

Join us for another campuswide book club!
The author will join us for a conversation and Q&A on February 3, 2020 at 12pm!

EQUITY IN SCIENCE

REPRESENTATION, CULTURE, AND THE DYNAMICS OF CHANGE IN GRADUATE EDUCATION

JULIE R. POSSELT

Sign up to join a discussion group:
https://diversity.caltech.edu/events/RSVP
Dec 10, 2020 - Jan 30, 2021

Download e-book:
(THANK YOU CALTECH LIBRARY!)
**December 10-18, 2021**  
**Intro Meeting:**
- Introductions: Names, Pronouns, Why did you sign up for this book club?  
- What is your comfort level with discussing issues of identity?  
- Where and with whom do you currently talk about issues of identity? (i.e., on-campus, off-campus, with family, with friends, online, which social media platforms?)  
- What do you hope to gain from reading this book and talking about it with the group?  
- Logistics: Write down: names, email addresses, and general availability for three dates you’ll follow up for your meetings.  
- Optional: Write down common fears/themes that come up from the comfort level of each person around discussing issues of identity. This will be helpful to reflect on throughout your meetings.

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**Preface & Chapter 1: Equity Work as Science**  
**Key Concepts:** positionality, equity, culture, institutional change, complex systems  
**Suggested Questions:**
- What is your positionality as it relates to the research/work you conduct?  
- What are traditional metrics we find within STEM to determine achievement or progress towards equity? How would you add to those?  
- Beliefs of meritocracy and objectivity are at the crux of academic culture, how are those concepts both beneficial and harmful?  
- Are there current feedback loops within your local cultures? If so, how much agency do you feel to enact systemic change?

**Chapter 2: Managing Complexity in Institutional Change**  
**Key Concepts:** agency, continuity, boundaries, small wins  
**Suggested Questions:**
- Have you noticed any “small wins” within Caltech as we advocate for DEI initiatives and organizational change?  
- How can we identify if cultural humility exists in people, groups, organizations, and/or systems?  
- Dr. Posselt’s use of symbolism, disciplinary language and metaphors is helpful in drawing parallels between equity and science. What were some parallels you can draw from your own discipline to understand some of these social justice concepts and dynamics?
Chapter 3: Eroded Boundaries & Everyday Interactions in Geoscience Fieldwork

Key Concepts: scientific culture, harassment assault, workplaces and learning environment climates and toxic cultures for women (p35)-eg togetherness reward for toughness (p41), male gaze (p36), institutionalization of women’s silence (p58), spatial & interpersonal boundaries (p39), ideas, methods, and people p44, lack of responsiveness, accommodation p47 informality, glass ceiling, marginalization, challenging pedagogy/authority p54--women in historically male dominated disciplines, professional development & bystander intervention p60

Suggested Questions:

● scientific culture/ climates are defined as cultural knowledge engrained routines that are socially constructed--embedded in it is harassment, assault. Swimming in norms” the way we do things around here”, which make up the curriculum. Talk about this concept as it relates to your community of practice.
  ○ The culture and climate in this chapter was defined as chilly environments with toxic cultures for women. How would you define your climate/ culture?
  ○ There was a discussion of cultural norms. Examples of these norms within included the following:
    ■ Reward for toughness→ alcohol consumption as a gage for reward
    ■ Institutionalization of women’s silence→ women who speak up are shamed
    ■ Informal culture and togetherness → (p37) sayings like “keep up, no complaining, roll with it” normalized leaving no room for accommodation
  What are some norms that you swim in in your experience? You can write them out in this format and discuss.

● Part 2: Chapter 3 talks about women in historically male dominated disciplines. The author talks about professional development and bystander intervention, also reducing barriers to speaking up, and that leaders must advocate for change. After reading this chapter, what are some strategies that can be implemented specifically in your field for navigating a field which was not made for them?

Chapter 4: Impression Management & Organizational Learning in Psychology and Chemistry


Suggested Questions:

● What are your thoughts about the concept of top down vs bottom up admissions to increase diversity?
● In your personal experience have you heard microaggressions on the basis of race? How does that affect the overall culture within the graduate experience?
Chapter 4 talks about the “bait and switch” method when it comes to diversity in STEM where diversity talk is classified as happy talk and performative in nature highlighting how campuses are so diverse and inclusive of URM students. This narrative stops the rotten core from surfacing. p 79, In reality, there is a mismatch with a lack of discussion on race and silence when talking about race as well as a colorblind and post racial approach etc. What is your response to this? Does it ring true to your experiences? Talk about some ways where you have seen this tactic used. Why is it harmful? What can be done to change things in theory vs. in practice?

Chapter 5: Inclusive Design & Disciplinary Boundary Work in Applied Physics

Key Concepts: old systems, boundaries (racial and faculty)(disciplinary, organizational, “family= shared identity”, policies, practices, & interpersonal relationships, inscription, erasure, and activation, deactivation, relocation p 91, administrative staff as cultural translators, admissions “intellectually adventurous” p 96 “family” & belonging and how that translates to the STEM field p101, building faculty consensus compared to “herding cats” p 106-- designing for inclusion

Suggested Questions:

- The past and current chapters talk about the concept of boundaries for example, racial boundaries and boundaries between faculty and students. Name some of these boundaries that are present in your area of study/ experience at Caltech.
- Creating an inclusive culture is a theme in the chapter. The example of a family with a shared identity was used. Roles are defined within including mother, father, and administrative staff as cultural translators. Do you agree that this metaphor is present in your culture? If so, how would you elaborate on this? If not, what are ways that an inclusive culture can be fostered?
- There is mention that building faculty consensus on creating inclusive design was compared to the metaphor of “herding cats” p 106. Taking this a step further, discuss how inclusive design can be implemented to build consensus in the Caltech community.

Chapter 6: Advocacy & Management in Astronomy & Physics

Key Concepts: Dual Institutionalization, Cultural Beliefs

Suggested Questions:

- How does the Dr. Posselt describe dual institutionalization? How can institutions bridge the gap between dual organizational structures (i.e. the university level vs. divisions and departments?)
- Dr. Posselt describes and compares “managerial” and “advocacy” cultural styles between Astronomy and Physics. How can cultural styles impact divisions and departments’ practice of inclusion, and support to students?
- How can grassroots efforts promote inclusion? Are there examples to draw from at Caltech?

Chapter 7: Retooling Science for Equity through Cultural Translation
Key Concepts: Radical inclusion/Inclusion practices, cultural translation, Resistance

Suggested Questions:

- What are some of the inclusive practices suggested (pg. 147) to increase and retain diverse populations of students, faculty and staff? How many of these do you see at Caltech?
- What is the role of a cultural translator?
- What are some factors and tensions related to collaborative change? How can these be addressed and overcome?
- How do we incentivize and value equity mindedness: listening, learning, and humility within our community?
- How can we better define success beyond metrics?

Author Debrief: February 3, 2021 at noon
Faculty Workshop February 4, 2021