



Mentoring and Coaching: Annotated Bibliography

A selection of practice-oriented books and articles about mentoring in higher education. This broad field has generated a large number of excellent resources. There are relevant resources at the end of the Executive Briefing on this topic, and a separate document, “Additional References,” offers a list of publications from this extensive body of literature that are not included and annotated here.

Practical Guides for Excellent Mentoring Programs

Career toolkit: Mentoring. *Nature*. Retrieved from https://www.nature.com/naturejobs/science/career_toolkit/mentoring

This website article summarizes some of the key components of several resources: “Nature’s guide for mentors”; the US National Academy of Sciences’ guide for mentors; “Advisor, teacher, role model, friend: On being a mentor to students in science and Engineering”; and the US National Postdoc Association (NPA)’s postdoctoral mentoring toolkit. This is not a thorough overview, but rather an introduction to these and other resources for which links are provided.

Committee on Science, Engineering, and Public Policy. (1997). *Advisor, teacher, role model, friend: On being a mentor to students in science and engineering*. Washington, DC: National Academy Press.

This brief handbook covers all the general principles of mentoring, and pays special attention to matters of welcoming and socializing minority and underrepresented students into disciplinary environments, holding all students to highest expectations, and avoiding cultural biases.

Johnson, B. (2016). *On being a mentor: A guide for higher education faculty*. New York, NY: Routledge.

In practice-oriented fashion, this book covers mentorship from many angles; it is addressed to those who are likely to be involved in the various aspects of the mentoring process. The author discusses the who, why, and how of being a mentor and gives pointers for mentoring at different levels, from undergraduates to junior faculty, as well as across race and gender. Also Johnson offers advice for how to manage mentoring programs. Lots of practical advice and best practices from the perspectives of managing a program, the mentor, the junior partner, and institution.

Lee, A., Dennis, C. & Campbell, P. Nature’s guide for mentors. (2007, June 14). *Nature*, 447, 791–797. Retrieved from <http://www.nature.com/nature/journal/v447/n7146/full/447791a.html>

This article summarizes findings from applications for Nature’s award for creative mentoring. Presenting and drawing from key quotes from mentors and mentees, the article highlights key aspects of the mentor-mentee relationship in their own words. Readers of this article will appreciate the importance of these mentor-mentee relationship themes: An advisor is a mentor for life; personal characteristics (e.g., enthusiasm and appreciation for individual differences); teaching and communication; building communities within the lab group; developing skills (e.g., writing); and networking (e.g., introduce your mentees to your contacts). The article also offers tips for mentors, such as be available, balance risky work assignments with more “sure thing” assignments, and celebrate your mentees’ successes. The article is concise yet filled with excellent advice and written in a unique and interesting style.

Taking Advantage of Mentoring Programs

Misra, J., & Lundquist, J. (2017, July 13). Faculty-to-faculty mentoring. *Inside Higher Education*. Retrieved from <https://www.insidehighered.com/advice/2017/07/13/how-find-mentors-and-be-good-one-yourself-essay>





Although mentoring is often looked at from the viewpoint of the person mentored, faculty members also benefit from being in a mentoring relationship with other faculty. This informal column discusses identifying potential faculty mentors, recognizing your own role as a mentor, and successful approaches to mentoring.

Mullen, C.A. (2006). *A graduate student guide: Making the most of mentoring*. Lanham, MD: Rowman & Littlefield.

This book, by one of the leading writers on mentoring, is aimed at giving practical advice to graduate students on how they can take advantage of mentoring to succeed in graduate school and their careers. The author functions as a mentor herself, giving good, practical advice to early-career scholars. Her advice is enlivened with examples and case studies.

NIH. Broadening Experiences in Scientific Training. <http://www.nihbest.org> and <http://www.nihbest.org/2017best-practices-workshop/>

Academic jobs are very competitive, and in many fields they are only a subset of jobs available to PhD graduates. Yet, the mentoring and career preparation offered by PhD mentors and programs tends to prepare PhD students almost exclusively for academic positions. The National Institute of Health suggests a different, innovative way to prepare PhD graduates for a variety of careers. This NIH website outlines the program, called "Broadening Experiences in Scientific Training (BEST)" and offers resources to help programs and mentors adopt a more holistic approach to career preparation. This approach shifts some of the responsibility for career preparation from the faculty mentor to other sources, such as peers and alumni, as well as to program-provided elements, such as individual development plans, courses in professional skills, and career development cohorts that span departmental and professional boundaries. Seventeen high-level US institutions (e.g., University of Chicago and Michigan State) are already employing this BEST approach, and the website offers insights from their experiences as well.

Being a Good Mentor

Brent, M., & Dent, F.E. (2015). *The leader's guide to coaching and mentoring: How to use soft skills to get hard results*. Harlow, UK; Pearson Education.

This book is a mentor's toolkit or manual for meeting, guiding, and coaching junior partners. Using personal examples, the authors describe in detail the "soft skills" that go into good mentoring: being an attentive listener, questioning, giving feedback. They also give practical advice for a variety of mentoring situations.

Misra, J., & Lundquist, J. (2017, 24 August). What do the best mentors do? *Inside Higher Education*. Retrieved from <https://www.insidehighered.com/advice/2017/08/24/lessons-about-mentoring-those-who-do-it-best-essay>

In this informal and friendly column, the authors report on their interviews of mentors identified as excellent. These excellent mentors recognized the whole person, kept regular contact, and gave constructive feedback. Authors list some challenges to good mentoring.

Miara, J., & Lundquist, J. (2017, June 15). Key factors in successful student mentoring. *Inside Higher Education*. Retrieved from <https://www.insidehighered.com/advice/2017/06/15/how-individual-faculty-members-well-their-institutions-should-mentor-students>

This friendly column reminds mentors that not all students are alike, and no single mentor may meet the needs of one student. Mentors should remember that students come with different resources and backgrounds, and should provide clear instructions and expectations, consistent feedback, guidance for professional development, and discussion about career goals.





Moody, J. (2012). Faculty mentoring: Replacing dysfunctional practices with good practices. In J. Moody, *Faculty diversity: Removing the barriers* (2nd ed.; pp. 158-191). New York, NY: Routledge.

This book chapter discusses in a compact and detailed way the many issues that arise when mentoring junior faculty members—although the insights can apply elsewhere. With a view to encouraging and promoting diversity, it offers useful insights about myths and assumptions about mentoring, skills and knowledge needed by the mentor, essential elements in a formal program, and roles of academic leaders and staff.

Particular Challenges in STEM

Mendoza-Denton, R., et al. (2017) Differences in STEM doctoral publication by ethnicity, gender and academic field at a large public research university. *PLoS ONE*, 12(4): e0174296. Retrieved from <https://doi.org/10.1371/journal.pone.0174296>

This article reports on survey research into disparities in rates of publishing for graduate students in STEM disciplines. The authors find significant disparities in publishing rates based on both ethnicity and gender. However, one department they researched (Chemistry) had no such ethnicity- and gender-based publishing disparities. The authors suggest that this is due to the high level of structure and clear, explicit expectations that Chemistry provides all of its students, beginning in the first two years of graduate study.

