Translating Equity-Minded Principles into Faculty Evaluation Reform



KerryAnn O'Meara (she/her) is a professor and distinguished scholar-teacher at the University of Maryland (UMD) who has studied issues of equity, faculty careers, and academic reward systems for over 20 years. Her grant-funded research on this topic is published in over 53 peer-reviewed articles and in over 100 book chapters, edited books, policy reports, and essays. She consults regularly with campuses engaging in equity-minded reform of faculty reward systems. As a faculty member herself, O'Meara has the lived experience of moving through the faculty ranks, serving on personnel committees, and being an external reviewer. She also has significant experience as an administrator, having served for 10 years as the director of the UMD ADVANCE Program for Inclusive Excellence and three years as an associate dean for faculty affairs. O'Meara was a 2021–22 ACE Fellow in residence at Towson University. She now serves as an assistant to the provost for strategic initiatives at UMD.

Lindsey Templeton (she/her) studies higher education with a specific focus on gender equity in academic leadership. A former coordinator for the ADVANCE Leadership Fellows program at UMD and current staff member at HERS (Higher Education Resource Services) Templeton comes to this work focused on academic leadership and organizational change. She has worked alongside O'Meara as a consultant to campuses on their faculty evaluation policies and procedures and brings a perspective outside of the faculty ranks.

Dawn Culpepper (she/her) is a research assistant professor and associate director with the UMD ADVANCE Program for Inclusive Excellence. With ADVANCE, she leads faculty development, education and training, and research efforts aimed at enhancing the recruitment, retention, and professional growth of a diverse academic workforce. Her research examines the strategies, policies, practices, and resources that enhance equity, disrupt bias, and facilitate organizational change within academic institutions, including recent projects on work-life integration, workload, hiring, and the development of allies. In addition to her campus work and research, she consults regularly with higher education organizations on these issues.

Damani White-Lewis (he/him) is an assistant professor of higher education at the University of Pennsylvania. Previously, he was a postdoctoral scholar in the College of Education at the UMD College Park. He studies racial equity issues in academic careers and contexts using theories and methods from organizational behavior and social psychology. His research has been funded by the National Science Foundation and National Institutes of Health and has been published in top education and science journals such as *The Journal of Higher Education*, *The Review of Higher Education*, *CBE-Life Sciences Education*, and *Teachers College Record*. He consults regularly with college campuses and external organizations to address issues related to racial equity, institutional transformation, and systemic change in higher education.



ACE and the American Council on Education are registered marks of the American Council on Education and may not be used or reproduced without the express written permission of ACE.

American Council on Education One Dupont Circle NW Washington, DC 20036

© 2022. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the publisher.

TRANSLATING EQUITY-MINDED PRINCIPLES INTO FACULTY EVALUATION REFORM

KERRYANN O'MEARA
LINDSEY TEMPLETON
DAWN CULPEPPER
DAMANI WHITE-LEWIS

Table of Contents

Introduction	1
Purpose of Faculty Evaluation Policies	
Holistic Assessment of Teaching	3
Definition of Scholarship and Scholarly Products	5
Measurement of Scholarly Impact	8
Recognition and Weighting of Institutional Service	11
Recognition and Weighting of Diversity, Equity, and Inclusion Work	14
Scholarly Collaboration and Credit for Joint Work	16
Work-Life Integration	17
External Letters	20
Alternative Tracks to Tenure, Promotion, and Longer Contracts	22
From Policy to Practice: Stewardship of a Strong Faculty Evaluation Process	
Conclusion	
Appendix	25
References	



Introduction

Higher education leaders are making many promises. They've promised to create a more racially and socioeconomically diverse student body, while also bringing back those students who withdrew during the pandemic. They've promised to recruit and support the advancement of more Black, Latino, and Indigenous faculty and staff. They've promised institutional transformation by taking on issues of racial justice across policies and practices internal to the campus and as members of communities. And they've promised that they will create stronger ties between faculty scholarship and the impact of their findings in professions—and on the world of practice. More than ever before, higher education leaders are offering to tie their fates to the fate of democracy and the public good.

Yet these promises cannot be fully realized without changes to faculty appointment and evaluation systems. In Equity-Minded Reform of Faculty Evaluation: A Call to Action, we suggested that institutions begin by examining evaluation processes for the principles of transparency, clarity, accountability, context, credit, consistency, flexibility, agency, and representation (O'Meara and Templeton 2022). We call out these principles throughout this report, and we are even more concrete. We take a similar equity-minded approach (Bensimon 2006; Bensimon, Dowd, and Witham 2016; Gonzales and Griffin 2020; McNair, Bensimon, and Malcom-Piqueux 2020; Mickey, Misra, and Clark 2022; Posselt et al. 2020) here as we begin to apply the principles detailed in the first report and corresponding audit to common issues taken up in faculty evaluation policies and practices. 1 More specifically, we focus on areas that are primed to promulgate inequities, but for which biases are not addressed in the faculty evaluation process.

KerryAnn O'Meara and Lindsey Templeton, Equity-Minded Reform of Faculty Evaluation: A Call to Action (Washington, DC: American Council on Education, 2022) and Equity-Minded Reform of Faculty Evaluation Policies: Audit Resource (Washington, DC: American Council on Education, 2021).

We dissect several topics that are commonly found in faculty evaluation policies and well suited for reform by:

- Identifying the key problem from an equity-minded perspective
- · Outlining concrete reforms to policy based on the principles from the first report and complementary audit
- Providing a real-life policy language example from higher education institutions² that exhibits these
 equity-minded reforms
- Offering questions (from the audit) that may be used to critically assess faculty evaluation policies

The topics and policy areas we discuss are not meant to be exhaustive as much as illustrative of the kinds of issues we have seen equity-minded campuses tackle. The majority of the examples come from four-year public institutions that are midsize to large, in part because such institutions tend to make their policies publicly available on their websites. However, the purpose of the examples is not to be a fit for all institutional types, but rather to provide example language on issues that we think are relevant in equity-minded reform across institutional types. We encourage faculty and institutional leaders to use this report, in conjunction with the first report and audit tool, to apply the principles and related questions to these areas of faculty evaluation policy.

PURPOSE OF FACULTY EVALUATION POLICIES

Faculty evaluation policies differ greatly in length and format. Some are contractual agreements with unions, while some are for specific types of appointments. Other policies apply to all faculty. Across the many faculty evaluation policies we have reviewed, however, we think the most equity-minded policies provide a sense of the purposes of the faculty evaluation process, the relationship to the mission of the institution, and the principles that guide the process.

In the following example from Skidmore College's faculty handbook, the philosophy behind faculty evaluation is clearly articulated. The policy is *transparent*, acknowledging that "teaching of high quality is paramount and the primary criterion" and setting the expectation from the very beginning that teaching should be prioritized in the evaluation process. This policy introduction also provides *flexibility*, recognizing that "the balance of an individual faculty member's commitments and responsibilities will vary" and that "there is no single way in which all faculty are expected to excel." Though it is important that the rest of the policies align with the statements outlined here, this example demonstrates *transparency* and *flexibility* in stating the purpose of faculty evaluation.

EXAMPLE

Skidmore College seeks to hire, retain, tenure, and promote faculty members who, in addition to successfully performing their duties, bring intellectual acumen, commitment to Skidmore's mission, integrity, and energy to their work on behalf of their students, their discipline, their department or program, and Skidmore College as a whole.

Our academic community is enriched through the broad range of academic backgrounds, interests, and perspectives of its diverse faculty.

Decisions to reappoint, tenure, or promote faculty members are based on the quality of their credentials in three areas: performance as teachers, achievement as scholars or artists, and contribution to the welfare of the college community beyond the classroom. Teaching of high quality is paramount and the primary criterion. **No degree of**

We acknowledge that most of the examples provided in this report are from more research-intensive institutions, which are the places that have been shown to have some of the greatest inequities in terms of gender, race, and epistemology. Different institutional types have different approaches to policy, but we believe the examples provided here offer language to consider in policy reform at any institution.

excellence in scholarship or artistic achievement, no record of unusual productivity or service to the community will compensate for unsatisfactory teaching at any point in one's career. Yet high-quality teaching is but one of three criteria, and alone will not suffice. Through the arc of one's career, the balance among these three areas will vary: Skidmore seeks to develop and retain first-rate teacher-scholars whose professional achievements beyond teaching demonstrate a will and capacity to make significant contributions to their professional fields. Skidmore also expects faculty members to assume responsibility for the common life of the institution in ways that are commensurate with their interests and roles and with the institution's purpose and needs. Skidmore College recognizes that the balance of an individual faculty member's commitments and responsibilities will vary according to individual strengths and interests; the needs of departments, programs, and the college; as well as the development of the individual's career. As the faculty member matures and seeks recognition as a senior member of the professoriate, the expectation for more significant service is balanced with the college's expectations of professional accomplishment and a high quality of pedagogy.

Just as there is no single mold into which all Skidmore faculty must fit, so there is no single way in which all faculty are expected to excel. Nonetheless, it behooves the college to articulate general criteria identifying areas of performance that form the basis of faculty review and advancement. (Skidmore College 2021)

Do the policies communicate the purposes of the evaluation process, the relationship between faculty evaluation and the mission of the institution, and the principles that guide the process?

HOLISTIC ASSESSMENT OF TEACHING

Evaluation of teaching is a core component of faculty evaluation. Although there are multiple ways to collect and analyze data on teaching and learning, many institutions over-rely on standardized student evaluations of teaching (SETs) in the evaluation of teaching performance—and we understand why. Some years a campus-level personnel committee might have to review 40 faculty in one semester and committee members do not feel that they have time to carefully review all of the information that might be in a teaching portfolio, such as peer observations, curriculum development, teaching philosophy, professional development, and classroom assignments. SETs, mandated in some institutions by boards of trustees, have provided a quick way for faculty evaluators to scan for improvement, comparing the candidate's average scores from SETs against a college or university average. However, the exclusive or over-reliance on teaching evaluations to assess teaching performance is problematic (Kreitzer and Sweet-Cushman 2022).

Much research shows the inability of SETs to assess teaching and learning both effectively and reliably and, in actuality, indicates that SETs reflect biases across issues of gender, race, age, and other factors (Arbuckle and Williams 2003; Kreitzer and Sweet-Cushman 2022; MacNell, Driscoll, and Hunt 2015; Mitchell and Martin 2018; Storage et al. 2016). The response rates of students are often low, average scores are influenced by outliers, and the distribution of responses is not clear. Comparisons made often liken apples and oranges in terms of class sizes and types. Feedback regularly focuses on course logistics rather than content. Furthermore, there is not convincing evidence that SETs are linked to student learning, and they may contribute to grade inflation (Lawrence 2018; Boring, Ottoboni, and Stark 2016).

Research has also shown that SETs contain biases against women (Graves, Hoshino-Browne, and Lui 2017; MacNell, Driscoll, and Hunt 2015; Mengel, Sauermann, and Zölitz 2017; Mitchell and Martin 2018; Peterson et al. 2019) and faculty of color (Bavishi, Madera, and Hebl 2010; Storage et al. 2016). Biases also appear based on voice (Chenoweth et al. 2016), appearance (Eidinger 2017; Sohr-Preston et al. 2016), age (Arbuckle and Williams 2003), and perceived sexual orientation (Ewing, Stukas, and Sheehan 2003, Anderson and Kanner 2011).

Given the aforementioned evidence, we recommend that institutions not use SETs at all, or that they not be used as the primary source for evaluation of teaching (Lawrence 2018; Stewart and Valian 2018). During the pandemic, many institutions stopped using or altered their standard student evaluations as courses were moved online (Jordan 2020; Lederman 2020; Mickey, Misra, and Clark 2022; Supiano 2021). Other institutions kept using SETs, but no longer used them for faculty evaluation. If institutions continue to include SETs as part of faculty evaluation, we recommend they do so only as part of a larger teaching portfolio and with clear policies for SETs to be reviewed only as one part of a more holistic approach to teaching. Furthermore, evaluators should be made aware of the problems inherent in SETs and that biases may influence student assessments (Stewart and Valian 2018).

Higher education institutions have made great strides in replacing SETs with more rigorous evidence and a more equity-minded evaluation of teaching. Teaching portfolios often include a teaching philosophy, course history, syllabi, peer observations over multiple years, examples of graded student work, and awards related to teaching (Gillman et al. 2018). Although such teaching portfolios take more time to review, it allows the candidate to show patterns of teaching performance and professional development with relevant backdrops highlighted over time. This approach allows candidates *agency* in how they present evidence of their teaching skills and also how they provide *context* on teaching experiences. If a faculty member teaches a required entry-level course or a seminar on a controversial topic, they can share more information and background than is outlined by SETs. In the most equity-minded policies, candidates are encouraged to document teaching, advising, and mentoring activities carefully to ensure proper *credit* is given, particularly for women and historically marginalized faculty who are known to take on more of this type of work. Policies then guide evaluators for what to examine when they review portfolios. This process is more rigorous and has a higher standard than relying on SETs to assess teaching.

Skidmore College provides a holistic approach to the evaluation of teaching in the following example. First, the policy includes four clear criteria upon which teaching will be considered successful: "motivation and mentoring, expertise, course design and delivery, and fostering student learning." Second, the policy outlines evidence for each of these criteria, both in a conceptual fashion and through clear deliverables that a candidate may include in their evaluation materials. While a list is provided, *flexibility* is possible, as a note is also included to acknowledge that other forms of evidence are welcomed. The faculty evaluation process does not rely solely on student evaluations of teaching (rather, the policy notes that a "careful reading of student course evaluations" may be used), and it provides *clarity* on how Skidmore defines and measures successful teaching.

EXAMPLE

Any evaluation of the teaching of Skidmore faculty should take into account the following four features of successful teaching: motivation and mentoring, expertise, course design and delivery, and fostering student learning. **Evidence of these may include but is not limited to:**

- Motivation and mentoring. Through their commitment to and enthusiasm for their subject matter, successful
 teachers stimulate their students' intellectual curiosity or artistic vision and cultivate intellectual humility.
 They model for their students the high standards of performance and professionalism appropriate to
 their disciplines, provide them guideposts toward attaining those standards, and hold them consistently
 accountable. Successful teaching inspires, guides, and supports students in their courses as well as in their
 self-directed and collaborative research, independent study, and senior projects.
- Expertise. Representing the current state of a discipline or field is crucial to successful teaching.
 Knowledge informs not only the range and depth of course materials, but also pedagogical methods
 and goals. Knowledge nourishes the imagination and deepens the appreciation for the complexity and
 interconnectedness of materials. In short, knowledge makes comprehensiveness and rigor in teaching
 possible, and by acknowledging the limits to their own expertise, faculty members model academic integrity
 and demonstrate the need for lifelong learning.

- Course design and delivery. Courses should be designed with well-structured content that reflects
 disciplinary standards and Skidmore's standards and expectations for learning. The relevant elements of
 course design may include integration of course components, laboratory/studio exercises, assignments and
 examinations. The development of these elements, and the generation of new courses, is itself a feature of
 successful teaching.
- Fostering student learning. Successful teaching brings students to engage course materials in a manner that broadens and deepens their intellectual horizons, and may do so employing a variety of strategies and techniques, such as lectures, discussion, group activities, writing, etc. But all successful teaching creates an environment that leads to the students' successful mastery of the course materials and furthers them as independent learners. Successful teachers continue to develop materials and pedagogical techniques that further this end. Successful presentation of course materials includes responsiveness to student participation, providing timely and helpful feedback on assignments and examinations; being available to students outside of class; offering advice and counsel about students' education paths forward in the near and long term. Ultimately, the litmus test of successful teaching is a faculty member's ability to enable students to develop as self-guided, critically engaged scholars and/or artists. Such success will be marked primarily by students' active engagement with the discipline and the quality of their resulting work. It is true that students must do their part as well, but a faculty member's fundamental job is to encourage and help them do so. No amount of expertise or attention to the individual activities that go into teaching can compensate for an overall lack of success in fostering student learning.

Informed judgments about a colleague's teaching should be based on evidence relating to the preceding features of successful teaching that takes into consideration the arc of a candidate's career and development, and work done at the various levels of the curriculum. Such evidence may be obtained in a variety of ways, including, but not limited, to reviews of syllabi, class visits, informal observations of colleagues outside the classroom, products of student research or creative work, discussions of pedagogy, and careful readings of student course evaluations. This scarcely exhausts the ways effective teaching might manifest itself, of course, and candidates may wish to present other evidence. (Skidmore College 2021)

Is there a holistic assessment of teaching, or is there an overreliance on student evaluations?

Are advising and mentoring recognized and valued?

DEFINITION OF SCHOLARSHIP AND SCHOLARLY PRODUCTS

Scholarship comes in different forms, evolves over time, and is constrained and privileged in faculty evaluation by various factors unrelated to its quality. While the definition of scholarship has broadened in recent decades, faculty evaluation policies—and promotion and tenure policies specifically—still tend to favor discovery-based scholarship over other forms. This preference can disadvantage faculty who are involved in engaged, integrative, teaching, and interdisciplinary scholarship.

The 2016–17 Higher Education Research Institute (HERI) faculty survey indicates that women and historically minoritized faculty are more likely than men and White faculty to teach service-learning courses and participate in engaged scholarship (Stolzenberg et al. 2019). Similarly, a recent report from Worcester Polytechnic Institute (WPI) ADVANCE shows that women and nonbinary faculty members are more likely than men to engage in non-discovery-based work (WPI 2020). When WPI policies changed to more transparently allow and encourage additional types of scholarship, an increase in non-discovery scholarship was reported as well. This increase is important because scholars doing community-engaged research often face structural disadvantages in faculty evaluation. The journals that tend to publish their work are often newer and not as prestigious as the more established journals that tend to publish mainstream works. Likewise, engaged scholars



often create scholarly products that are issued outside of journals and book presses (O'Meara 2011, 2016, 2018). However, it is not clear to candidates whether they can submit these alternative scholarly products and how to communicate the scholarly expertise, quality, and impact of their work for colleagues.

Equity-minded institutions have made several reforms to their faculty evaluation guidelines to be inclusive of the full range of scholarship and scholarly products. First, we have seen institutions define scholarship broadly to be inclusive of multiple forms. This definition is typically consistent with that of Ernest Boyer (1990) or with language that is open enough to be inclusive of newer scholarly methods, forms, and topics, such as digital work in the humanities and the scholarship of teaching. In defining scholarship more broadly, we have seen institutions embrace the value and importance of scholars contributing to knowledge in different ways.

We have also seen institutions clarify the types of scholarly products that might be submitted. Many institutions and disciplinary associations have made explicit recommendations for institutions to add language in faculty evaluation guidelines that documentation of scholarship will often include traditional scholarship such as articles, books, and papers, but may also take other forms to allow for *flexibility* (see AERA 2013; Ad Hoc Committee on the Evaluation of Digital Scholarship by Historians 2015; Task Force on the Institutionalization of Public Sociology 2007). Examples of alternative products include training videos, patent applications, new statewide curriculum, and digital creations if those scholarly products meet certain standards such as use of disciplinary expertise, dissemination, impact, rigor, and significance (Abel and Williams 2019; Blanchard and Furco 2021; O'Meara, Eatman, and Petersen 2015 (also see the appendix). Relatedly, we have seen institutions encourage the candidate to present their scholarship in the forms in which it was intended (e.g., digital, performance), clarify the purposes and audience of the work, and then provide guidance and *context* to evaluators about how to assess the quality of that work.

Acknowledging different forms of scholarship and offering examples of what that can look like in practice are critical components for creating equitable promotion and tenure policies. Faculty who create scholarship from a range of methods, epistemologies, and perspectives cannot truly have academic freedom or thrive until the evaluation process recognizes their work as legitimate scholarship and establishes ways to assess its quality (Janke, Medlin, and Holland 2014; O'Meara 2014, 2016, 2018).

The faculty evaluation policy from WPI includes a detailed and "inclusive" definition of scholarship that is both *transparent* and *flexible*. WPI's policy considers a "continuum of scholarship," outlines five different types of scholarship, and clearly states that "scholarly contributions to any area or areas are valued equally by WPI." Within each area of scholarship, the policy includes both a conceptual definition of the type of scholarly work and clear examples of ways faculty may demonstrate such scholarship, expanding the potential for *credit* beyond traditional measures such as publishing in peer-reviewed journals. While this policy is applied at the institution level, the importance of *context* is also recognized by stating that scholarship "will vary by discipline, department or academic division."

EXAMPLE

D.1.2. Definition of Scholarship

To recognize the full range of scholarly contributions by faculty, WPI endorses an inclusive definition of scholarship. Scholarship exists in a continuum of diverse forms of knowledge and knowledge-making practices. Scholarship may be pursued through original research, making connections between disciplines, building bridges between theory and practice, communicating knowledge effectively to students and peers, or in reciprocal partnerships with broader communities. The common characteristics for any scholarly form to be considered scholarship are: it must be public, amenable to critical appraisal, and in a form that permits exchange and use by other members of the scholarly community. Candidates for promotion may make contributions to the scholarship of discovery, the scholarship of integration, the scholarship of application and practice, the scholarship of teaching and learning, or the scholarship of engagement. Contributions may be in one area or across multiple areas of the continuum of scholarship. Scholarly contributions to any area or areas are valued equally by WPI.

The following descriptions of the **continuum of scholarship** indicate the scope of each domain, but they **are** not intended to be exclusive or exhaustive. The forms that scholarship take along this continuum will vary by discipline, department or academic division.

Scholarship of Discovery

The creation or discovery of new knowledge involves creative and critical thought, research skills, the rigorous testing of researchable questions suggested by theory and practice, or active experimentation and exploration with the goal of adding to knowledge in a substantive way. The scholarship of discovery is usually demonstrated through publication in peer-reviewed journals and books, presentations at scholarly conferences, inventions and patents, or original creation in writing or multimedia, artistic works, or new technologies.

Scholarship of Integration

The scholarship of integration includes the critical evaluation, synthesis, analysis, integration, or interpretation of research or creative work produced by others. It may be disciplinary, interdisciplinary, or multidisciplinary in nature. When disciplinary and interdisciplinary knowledge is synthesized, interpreted, or connected, this integrative scholarly contribution brings new insight. Integrative or interdisciplinary work might include articles, policy papers, reflective essays and reviews, translations, popular publications, synthesis of the literature on a topic, or textbooks. The scholarship of integration may be shared through any form such as those typical of discovery, application, teaching, or engagement.

Scholarship of Application and Practice

Scholarship of application involves the use of a scholar's disciplinary knowledge to address important individual, institutional, and societal problems. The scholarship of application and practice might apply the knowledge, techniques, or technologies of the arts and sciences, business or engineering to the benefit of individuals and groups. This may include translational research, commercialization, start-ups, technology transfer, assistive

technologies, learning technologies, or applied research supported by industrial or corporate partners or by government agencies. Contributions to the scholarship of application and practice are shared with stakeholders and open to review and critique by stakeholders and by peers.

Scholarship of Teaching and Learning

The scholarship of teaching and learning is the development and improvement of pedagogical practices that are shared with others. Effective teachers engage in scholarly teaching activity when they undertake assessment and evaluation to promote improvement in their own teaching and in student learning. Scholarly teaching activity becomes the scholarship of teaching and learning when faculty members make their teaching public, so that it can be reviewed, critiqued and built on by others, through publications, presentations or other forms of dissemination.

Scholarship of Engagement

The scholarship of engagement involves collaborative partnerships with communities (local, regional, state, national, or global) for the mutually beneficial exchange of knowledge and resources. Examples of the scholarship of engagement might include, but are not limited to: community-based programs that enhance WPI's curriculum, teaching and learning; educational or public outreach programs; other partnerships with communities beyond the campus to address critical societal issues, prepare educated citizens, or contribute to the public good. Contributions in the scholarship of engagement are of benefit to the external community, visible and shared with stakeholders, and open to review and critique by community stakeholders and by peers. (WPI Center for Project-Based Learning 2021)

Is a broader definition of scholarship provided? Is there recognition of alternative products and venues for dissemination of scholarship? Can candidates present their work in the medium for which it was created?

MEASUREMENT OF SCHOLARLY IMPACT

In many faculty evaluation policies, scholarly productivity and impact are measured by publication with peer-reviewed journals and prestigious book presses and through grant funding (Fine and Handelsman 2012; O'Meara et al. 2020). Faculty are asked to submit the impact factor of journals, as well as acceptance rate and number of citations for each scholar's article (Mitchneck and Smith 2021). However, impact factors and citation rates are limited indicators of the quality of a candidate's work for several reasons. Citation rate is shaped by time in rank and subfield size (Mitchneck 2020; Ruscio et al. 2012; Stewart and Valian 2018). For example, West and Rich (2012) examined an Institute for Scientific Information (ISI) Journal Citation Report and found only 7.2 percent of total education journals had an impact factor of 2.0 or higher, whereas 90 percent of journals in developmental biology were listed with an impact factor of 2.0 or higher. Many journals—and thus articles and papers within them—in interdisciplinary STEM fields, in education, communication, medicine, developmental psychology, and social work are not included in the ISI Journal Citation Report or Web of Science. Citation metrics can be manipulated and skewed by journals; are biased against some types of research; and encourage scholars to write short, quick pieces as opposed to longer and longitudinal work (West and Rich 2012; Mitchneck 2020). As a result, evaluation committees could see few citations in a candidate's file and assume the quality of the candidate's work is low, when in fact other factors shaped the outcome.

Recognizing the limitations of impact factors, a group of 150 scientists and 75 science organizations released a joint statement, the San Francisco Declaration on Research Assessment (DORA), in 2013. This statement noted that metrics such as the Journal Impact Factor (JIF) are used as "quick and dirty" assessments of academic performance and should not be used in faculty evaluation or, at minimum, should be understood as only one tool (DORA 2013). In the appendix, we provide links to over 15 disciplinary association statements that comment on this problem and related equity issues. Woolston (2021) reported recently on an effort by DORA to create a dashboard of different ways in which research is and might be evaluated beyond the h-index and citation counts.



In addition, there are equity concerns between faculty members of different social groups in the ways that work is cited and shared within scholarly communities. For example, studies show that racially minoritized and women faculty are cited less frequently (Carnes et al. 2005; Ginther et al. 2011; Lubienski, Miller, and Saclarides 2018; Mendoza-Denton et al. 2017). Research topics focused on historically minoritized communities are less successful in National Institutes of Health grant competitions (Hoppe et al. 2019), and novel contributions made by racially minoritized and women faculty are not taken up by colleagues at the same rate as similar contributions by colleagues who are White and men. (Hofstra et al. 2020). Research suggests men are more likely to cite themselves (Maliniak, Powers, and Walter 2013) and study more "dominant" subjects when compared with women and racially minoritized faculty, who are more likely to be involved in engaged scholarship (Antonio 2002; Hurtado et al. 2011; Rhoten and Pfirman 2007; Settles, Jones, Buchanan, and Dotson 2021) and who face challenges in having their work cited due to epistemic exclusion (Settles, Buchanan, and Dotson 2019). Mitchneck (2020, 2) conducted a meta-analysis of over 100 articles and resources on this topic and concluded:

> Citation practice and thus citation indices are not normative measures of scholarly productivity and impact but are highly influenced by any number of factors in addition to merit and quality and are subject to any number of ways that they are consciously and unconsciously manipulated to the disadvantage of out groups. Thus, the use of citation indices as single measures of quality and impact directly embed biases into our standard measure of merit.

Equity concerns also exist among scholars related to the purposes and audiences of different kinds of research, scholarship, and creative activities. Using citations and impact factor as the main proxies for scholarly impact is troublesome—doing so can obscure an entire world of work that was never intended to impact scholarly discourse, but instead meant to influence policy or practice (Ellison and Eatman 2008; O'Meara 2016, 2018). For example, scholars often create products intended to shape organizations, communities, public policy, clinical practice, law, or K-12 classroom practices, and these outcomes and impact will not be evident in citation counts. In such cases, intended impacts could better be seen through curriculum adopted by a school district, funding for community groups, amicus briefs, web apps or computer programs, number of hits and subscribers, or geographic distribution of readers of scholarly blogs (Ellison and Eatman 2008; Blanchard and Furco 2021; O'Meara, Eatman, and Petersen 2015; Skorinko 2019).

Rather than assuming all scholarship, research, or creative activities can be measured in the same way, faculty evaluation policies should note that the quality of faculty scholarship will be assessed based on the *context* of the scholarship—the form, intended audience, and intended impact. For example, a music performance will be evaluated with criteria, evidence, and standards that are distinct from those used when publishing a book in an English field. Faculty members who conduct participatory action research should be permitted to make the case for how their engaged work impacted its intended audience (O'Meara, Eatman, and Petersen 2015; O'Meara 2018). Finally, recognizing that national and international impact is a frequently encouraged component of faculty work, policies should not exclude or devalue local, regional, or practice-based impact (Butler 2021; O'Meara, Eatman, and Petersen 2015; O'Meara 2018). Such policies offer greater flexibility in recognizing the diverse ways scholarship, research, and creative activities impact the world.

The following example from WPI offers clarity, flexibility, context, and agency. First, the policy clearly states that this component of candidate materials "goes beyond" publications listed on a curriculum vitae (CV). Recognizing that differences in context depend on disciplinary norms, candidates are offered different ways to show external impact of their work. This level of *flexibility* is further acknowledged by stating that "there is not one correct way to present a citation index or external impact report." The policy allows for individual agency to determine how external impact is measured, while still providing guidance and clear expectations for candidates. This guidance is strengthened by the inclusion of a matrix in the policy's appendix. The matrix provides a comprehensive list of examples for documenting scholarship and measuring impact while still accounting for *flexibility* by noting, "the following descriptions and examples are not intended to be exclusive or exhaustive. Things will vary by discipline, department, or academic division. Therefore, this matrix is meant to be a guide and to help people think more about each area of scholarship, rather than be a checklist."

EXAMPLE

Citation Index or Broader External Impact Report

External impact essentially refers to dissemination and, especially, use of your work beyond the WPI community. Your CV already lists all of your publications, presentations, and creative works. This part of your package goes beyond that. To what extent has your work been noticed, utilized, or adapted in your field, your scholarly community, or in the public sphere? Those who focus on discovery scholarship, and many other types, usually submit a citation index and h-index, which quantifies the citations of their publications, presentations or other scholarly contributions. Your report may include other indictors of external impact such as reviews of your work, press and media coverage, downloads of scholarly materials or datasets, awards and recognition, or any other indicators that the candidate's scholarly contributions have had an impact beyond WPI, including social media impact or altmetrics. You may also present data that you have tracked yourself, such as number of institutions or individuals attending your workshops and using your material.

There is not one correct way to present a citation index or external impact report; it really depends on norms in your field, type of scholarship, and the communities and constituencies with whom you interact. Consult the following for a range of ideas and examples:

- Impact report examples and templates: Libguide section from Gordon Library
- Assessing research impact: full Libguide including discussion of altmetrics
- Multiple forms of scholarship matrix (see Appendix)
- Collection of successful promotion dossiers (WPI ADVANCE Canvas site) (WPI Committee on Appointments and Promotions and the Office of the Provost 2021)

Are there multiple ways candidates can document the impact of their scholarly work? Can evaluators consider the intended purpose and audiences of scholarship in assessing scholarly quality and impact? Is international work privileged over local or regional impact?

RECOGNITION AND WEIGHTING OF INSTITUTIONAL SERVICE

The three most common components of most faculty evaluation policies are research, teaching, and service, but service is often viewed as the "shortest leg of the three-legged stool" (Ward 2003). Faculty members engage in many kinds of service, including community/public service and professional service; however, here we want to particularly address the issue of institutional service, including activities such as leading campus programs, administrative work, and participation in shared governance.

Campuses clearly cannot run without faculty labor and leadership in developing programs and participating in shared governance. Yet some faculty evaluation policies make little to no mention of institutional service, rendering this important work invisible and devalued (Griffin and Reddick 2011; Hanasano et al. 2019). It is hard to see how higher education institutions can expect faculty members to commit their talents to service when little recognition is given to defining, assessing, and valuing it.

In addition to this being a general problem, research shows that women faculty take on more service and leadership work (Babcock et al. 2017; Barrett and Barrett 2011; Guarino and Borden 2017; Hanasono et al. 2019; Misra et al. 2011; O'Meara et al. 2017) and racially minoritized faculty members are more likely to assume service work, especially related to diversity, equity, and inclusion (DEI) (Eagan and Garvey 2015; Jimenez et al. 2019; Misra et al. 2021). Research drawing on crosssectional survey data, interviews and focus groups, annual faculty reports, faculty-time diaries, and experimental methods show these trends have not changed much over the last 20 to 30 years (O'Meara et al. 2021). Given the unequal, lesser weight given to institutional service, those who take up more service work may not advance in tenure and promotion processes at the same rate as their research-focused peers (Misra et al. 2011; Poor et al. 2009). Equity advocates and scholars have observed that if service labor was better recognized, we would likely see fewer inequities in time to promotion, turnover and satisfaction (Misra et al., 2021; Stewart and Valian 2018).

We recommend that faculty evaluation policies define institutional service, articulate its value, and lay out what is considered an appropriate amount of service, including what it means to meet or exceed service criteria. Such changes bring visibility and give credit to faculty members who engage in this critical work (Culpepper, Templeton, and O'Meara 2021; O'Meara et al. 2021). Policies should also document how levels and kinds of service might differ by career stage and appointment type, allowing for *flexibility* and recognizing that the amount and kinds of service a faculty member engages in may change over time (O'Meara et al. 2021). By providing concrete examples of service, faculty members gain a better sense of what is required to advance, what types of service counts, and when they have met or exceeded such requirements—thereby increasing transparency and clarity. Articulating the value of service by recognizing and weighting it in faculty evaluation policies also enhances accountability, increasing the likelihood that faculty members who shirk institutional service are also evaluated fairly (Curcio and Lynch 2017; Misra et al. 2021; O'Meara et al. 2021).

Many institutions still face challenges in achieving equity in this category. As a result, a comprehensive example is difficult to identify. In general, we believe the best practice is to clearly recognize the importance of this service work, give it attention and weight by differentiating kinds of service, and concretely state expectations for different promotions and what constitutes excellent versus average versus below-average service. Without clearly differentiating between amount and quality of service, candidates who excel have no way to be equitably rewarded for their service and those who do not contribute cannot be held accountable. We also want to acknowledge a crosswalk between workload equity and faculty evaluation equity related to recognition of service. Although many tenure track faculty have some portion of their workload assigned to service, there are



professional track faculty who are expected to engage in and provide significant amounts of service with no appropriate effort reflected in their workload assignment. Thus, an important equity issue is making sure that professional track faculty contracts reflect time for faculty service and then recognize those contributions in evaluation. See page 23 for an example of a more formalized service track to promotion.

In the following example from Indiana University-Purdue University Indianapolis (IUPUI), the different kinds and levels of service are made clear. This example, focused on clinical faculty and primarily professional service, provides *transparency* on the different paths a candidate may take and lists specific examples of excellent versus satisfactory levels of service. This approach offers *flexibility* to clinical faculty members, while also providing *clarity* on whether they are meeting or exceeding service expectations and how to document excellence in different categories. Candidates then have an increased sense of *agency* over how they approach and present their work in the evaluation process.

EXAMPLE

Clinical faculty may choose:

- Excellent in service and satisfactory in teaching
- Excellent in teaching and satisfactory in service
- · A balanced case, highly satisfactory in service and teaching

Service-excellent-clinical

Significant contributions that clearly demonstrate the attributes of scholarly work, including peer refereed
presentations and publications and national recognition of the quality of work; awards and recognition that
reflect on the significance and academic nature of the work have been received. Service must be academic
work characterized by the following:

- Command and application of relevant knowledge, skills, and technological expertise;
- Contributions to a body of knowledge;
- Imagination, creativity, and innovation;
- Application of ethical standards;
- Achievement of intentional outcomes; and
- Evidence of impact
- If services involve patients or clients, the candidate must document how their work exceeds normative levels of activity and quality and is, in fact, excellent because it represents exceptional outcomes that result in the faculty member being recognized as an expert in their field and brings prestige to the candidate, the primary/department and the unit/school. Such service based on exceptional care contributes to the knowledge base or demonstrates a level of proficiency that itself illuminates practice for others. In all cases, this work must:
 - Have impact beyond the direct recipient of the service; and
 - Be documented through appropriate publications or dissemination activities
- Faculty involved in clinical practice should describe the variety and extent of patient or client care. Those activities that are truly exceptional should be annotated to differentiate these activities from the level of clinical of service expected as a normal distribution of effort.
- Faculty presenting committee or voluntary service as evidence of achievement in service should demonstrate that it is a direct reflection of professional expertise and has been evaluated by peers as substantive professional and intellectual work.
- Professional service that is the basis of advancement in rank or tenure must be clearly established as academic work.
- Also: acceptable university service
- Clinical faculty are required to be excellent in either teaching or service and satisfactory in the other area. They have no formal research requirements for promotion although scholarship is required in their area of excellence.
- For associate rank: record of publicly disseminated and peer reviewed scholarship in service
- For full rank: record of sustained, nationally and/or internationally disseminated and peer reviewed scholarship in service
- NOTE: Particularly for the clinical ranks, publication may not be the most effective or feasible means of disseminating the results of effective teaching practices or pedagogical research. When other forms of disseminating results are more appropriate, this fact should be explained and those evaluating the candidate's work at the primary, unit, and campus levels should consider this alternative form of dissemination.

Service-satisfactory-clinical

- University citizenship: Routine department expectations; chair's determination that service is more than mere participation.
- Discipline and community: Routine, required, or expected. (IUPUI Office of Academic Affairs 2022)

Do faculty evaluation policies define campus service, articulate its value, and lay out what is considered an appropriate amount of service? Do policies include what it means to meet or exceed service criteria relevant to different appointment types and ranks?

RECOGNITION AND WEIGHTING OF DIVERSITY, EQUITY, AND INCLUSION WORK

In response to COVID-19 pandemic health disparities (Laster Pirtle 2020) and broader recognition of systemic racism in and outside academe, colleges and universities are urgently investing in anti-racism DEI efforts. Much of this labor has been taken up by Black, Latino, and Indigenous faculty who were already overrepresented among those engaged. Yet in national surveys, interviews, exit studies, and tenure denials, faculty consistently report that when it comes to faculty evaluation, they are not sure whether and how DEI work counted in decision-making (Griffin, Bennett, and Harris 2013; Jimenez et al. 2019; Turner, González, and Wood 2008).

Those institutions working to recognize and reward DEI work are, among other efforts, providing equity charges to personnel committees to understand the diversity and equity missions of the campus and faculty role in that work, adding policy language valuing DEI work, encouraging candidates to document DEI work in CVs and personal statements, and providing guidance to personnel committees on recognizing this work in evaluations (see Flaherty 2021; Stewart and Valian 2018). Some institutions are requiring diversity statements for promotion and tenure, while others are creating spaces in annual faculty reports for faculty to note contributions to diversity (e.g., mentoring Black, Latino, and Indigenous students; outreach to local communities; chairing a DEI task force; serving on search committees; see Flaherty 2022).

This area is evolving, but without clarity that DEI is part of the university mission and explicit invitation and expectation to document this work, it will be overlooked or weighted inconsistently, further disadvantaging those who are taking on mission-critical labor (Griffin and Reddick 2011; Jimenez et al. 2019; Misra et al. 2011; Turner, González, and Wood 2008). Beyond documentation, it is critical that faculty evaluation committees show candidates that this work is seen and valued to ensure DEI is truly and *consistently* weighted in faculty evaluations (O'Meara, Wessel, and White-Lewis 2021).

One example comes from the University of California, Los Angeles's (UCLA) Mentor Professor Program (UCLA Life Sciences 2022). This initiative aims to increase faculty diversity in hiring processes by prominently evaluating DEI-related mentoring and service alongside scientific achievement and increasing the disciplinary scope of the search. This effort results in a broad candidate pool of scholars who have demonstrated excellence in mentoring and scientific achievement. Once hired, faculty are supported by institutional leadership to focus on service that aligns with their mentoring expertise and their service is counted in review. Commitment to documenting DEI is *transparent* and offers *clarity* about what will be valued before being hired; after faculty has been hired, that commitment is threaded through different workload and evaluation practices.

Another example of valuing DEI work in faculty evaluation meaningfully is from IUPUI. This policy includes both a conceptual framing of why DEI work is critical to the mission of the institution—and thus, to the process of faculty evaluation—as well as a tangible, *transparent* list of metrics to document work related to DEI. The policy creates the balanced-integrative DEI case type, which is an additional faculty promotion and advancement pathway at IUPUI (O'Meara 2022). This policy works toward embedding *flexibility* into the institution's advancement policies by allowing faculty to demonstrate excellence in integrating DEI efforts into research, teaching, and service. It also advances *clarity* in promotion pathways, as shown, and is further supported by guidance from the IUPUI Faculty Council on specific metrics for measuring DEI work.³

³ Additional information on the IUPUI Faculty Council's guidance on DEI work metrics can be found at https://faculty-council.iupui.edu/Committees/Subcommittee-on-DEI-Work-Metrics.html.



EXAMPLE

Top-level expectation: The candidate demonstrates excellence across an array of integrated scholarly activities aligned with diversity, equity and inclusion, consistent with IU policy on balanced cases: "In exceptional cases, a candidate may present evidence of balanced strengths that promise excellent overall performance of comparable benefit to the university." (ACA-38 Faculty and Librarian Promotions).

Integrative Excellence in Diversity, Equity and Inclusion

The following should be evident, using multiple sources of information:

- Diversity, equity, and inclusion: the candidate articulates a philosophy of diversity, equity, and inclusion, including if appropriate any specifically targeted aspect.
- Integrated activity: The candidate has interrelated activities and accomplishments as an IUPUI faculty member in teaching, research and service which demonstrably support and advance diversity, equity and inclusion.
- Independence, innovation and initiative: The candidate articulates their personal role as an essential and generative actor within diversity initiatives. Interdependence and teamwork are valued as well as contributions to group achievements; the candidate needs to describe their own roles and responsibilities.
- Scholarly impact: often but not exclusively facilitated by peer-reviewed dissemination; a variety of venues for dissemination are accepted.

- Local impact: effective evaluation of diversity, equity and inclusion initiatives should demonstrate distinct
 outcomes. Tying to unit (program, department, school, campus or university) missions strengthens the
 importance of the impact (e.g., contributing to local communities using professional expertise, recruiting
 diverse students to undergraduate or graduate programs, diversifying curricula, etc.).
- Increasing development over time. A candidate's statement should describe plans for the future. (IUPUI
 Office of Academic Affairs 2022)

Are candidates able to note and can committees take into consideration work done by faculty that contributes to DEI goals? Is it clear how DEI contributions should be assessed and weighted in decisions?

SCHOLARLY COLLABORATION AND CREDIT FOR JOINT WORK

Though disciplinary and institutional differences exist, a norm in faculty evaluation processes is to value single-authored or first-authored work. Valuing of single or lead author work seems to stem from a desire for the candidate to distance themselves from their doctoral adviser and show intellectual leadership. Relying heavily on individual scholarship to establish a scholar's legitimacy and intellectual leadership is fraught because of the multiple career benefits to collaboration. Additionally, collaboration is more likely in, or endemic to, certain kinds of scholarship (Bozeman, Fay, and Slade 2013; Settles, Buchanan, and Dotson 2019). For example, engaged scholarship by its nature typically involves collaborations between scholars of different disciplines and those engaged in practice (O'Meara, Eatman, and Petersen 2015). Not valuing collaboration disenfranchises much interdisciplinary and engaged work, and it forces early career scholars who do this work to pull away from teams and toward solo work in order to advance (AERA 2013; Sarsons 2017). Also, some faculty operate in very small fields with a very small number of scholars doing theoretical or methodological work in that area. Requiring pre-tenure faculty not to collaborate with their former adviser can be disadvantageous for them, as those collaborations may continue to advance their scholarly agenda.

A second issue to consider regarding scholarly collaboration is *crediting* the work. Research on joint work indicates that "men are given the benefit of the doubt and women are not" (Stewart and Valian 2018, 331). For example, Sarsons (2017) examined this issue in the field of economics and found that women were less likely to be promoted when they had co-authored work, especially when collaborating with men. Sarsons suggests that this bias is strongest when contributions to work are not made clear, suggesting that ambiguity or noise in authorship and credit tends to favor men over women.

An equity-minded approach takes on these issues by explicitly valuing collaboration in faculty evaluation policy language and increasing clarity regarding intellectual contributions by inviting faculty to identify their contribution to co-authored scholar-ship and co-written grants and projects. Because disciplinary norms vary around the order of names in collaborative work, the candidate should be encouraged to note their contributions in ways that are most appropriate to their field and the context of their project (Misra 2020).

The following example from the University of Massachusetts Amherst ADVANCE program provides guidance on how to ensure *clarity* and *credit* in documenting and evaluating work that involves collaboration, acknowledging at the outset that "there is no clear formula." Noting that many stakeholders should be consulted and placing responsibility on faculty, authors, and collaborators to "make their role in collaborations clear" puts *accountability* at the forefront. The examples provided from different fields and the note about collaboration metrics and processes highlight a strength in *context* as well.

The University of Massachusetts Amherst ADVANCE program provides guidance for clearly incorporating collaboration in the promotion and tenure process (Misra 2020).

EXAMPLE

How collaborations are counted in personnel processes differs not only by college, but also by department and subfield. There is no clear formula. Thus, it is important to consult multiple trusted colleagues, including Chairs/ Heads and members of Personnel Committees, to determine how collaborative work is counted, and how to structure collaborative work to support career goals.

Departments should also discuss how collaborations are evaluated; these discussions can be incorporated into bylaws or "cultural standards" statements. Mentors should proactively discuss how collaborations are counted with mentees.

Faculty should strive to make their role in collaborations clear. This may be through identifying their particular expertise on the project team, or the through-line across their research agenda. Authors or collaborators should identify their specific contributions as a member of the research team in papers or personal statements as part of a personnel case.

- PNAS requires authors to identify author contributions to designing research, performing research, contributing new reagents or analytic tools, analyzing data, or writing papers.
- The CRediT (Contributor Roles Taxonomy) lists fourteen different contributions that can be adopted in writing research narratives, or in research products themselves. (Misra 2020)

Do the guidelines encourage committees to value collaboration, or are they silent on the issue? Do the guidelines provide a way for candidates to acknowledge their contributions to co-authored work?

WORK-LIFE INTEGRATION

Higher education operates with many "ideal worker assumptions," which predispose us to expect that a star scholar moves swiftly through their degrees; has no career interruptions; and, depending on field, pursues a predictable and prestigious set of postdocs (Williams 1999). However, not all scholars who do excellent work follow this pattern (Cech and Blair-Loy 2014; Damaske et al. 2014; Sallee 2012; Stewart and Valian 2018; Valian 1999; Williams 1999). A significant length of time often exists between the first promotion and retirement. Thus, evaluation policies that require candidates to go up for promotion within a certain period can prevent faculty members who experience health, family, or other events from ever being promoted. This may be particularly true in the context of the COVID-19 pandemic, during which the research productivity of faculty members in caregiving roles (more likely to be women and racially minoritized faculty) has been significantly disrupted (Krukowki, Jagsi, and Cardel 2021; NASEM 2021; Staniscuaski et al. 2021).

Over the last 20 to 30 years, many institutions have put in place stop-the-clock policies for tenure review, modified duties (e.g., half-time tenure-track), and parental leave policies to provide some flexibility and support for work-life integration (AAUP 2014; ACE 2005; Hollenshead et al. 2005; Manchester, Leslie, and Kramer 2013; WorkLife Law 2013). However, such policies can also exacerbate existing biases and structural disadvantages. Faculty members may worry that evaluation committee members and external reviewers will negatively perceive those who use work-life policies (Drago et al. 2006; Lundquist, Misra, and O'Meara 2012; Sallee 2012). The presence of work-life policies without clear guidance of how to consistently and fairly implement them can perpetuate inequity in places where it is meant to lessen it (Antecol, Bedard, and Stearns 2016; Feeney, Bernal, and Bowman 2014; Lisnic, Zaijcek, and Kerr 2019; Manchester, Leslie, and Kramer 2013; Mickey, Misra, and Clark 2022).

There are several strategies to mitigate bias and enhance recognition for work-life balance. First, many institutions have made stop-the-clock policies opt-out rather than opt-in, which means that eligible faculty members automatically receive an extension on their tenure clock for qualifying life events. This enhances consistency in policy uptake and reduces inequities that may arise in who feels comfortable with requesting a tenure delay (Clark, Mickey, and Misra 2020; WorkLife Law 2013). Second, faculty policies should include language that reflects the realities that candidate dossiers will differ based on life circumstances—and the context of each candidate's individual career. Evaluation criteria that focus on the quality rather than quantity of scholarship are more likely to meet institutional goals for excellent scholarship, while at the same time allow for flexibility in recognizing different career trajectories (Stewart and Valian 2018). Third, evaluation members and external reviewers should be informed of the university's work-life policies (e.g., stop-the-clock, modified duties, parental leave) and be instructed that faculty members cannot be disadvantaged for using them. This measure enhances the agency of faculty members to take advantage of work-life policies with less fear of backlash. Finally, committee members and external reviews should be explicitly instructed to evaluate the candidate's dossier as if it were completed within the "normal" review period (UM STRIDE 2021) and reminded that it is the quality of the work rather than the time period in which it was completed that matters, thereby providing clarity to evaluators about fair assessments. Moreover, as more faculty are hired into contractbased, full-time faculty positions, it is especially important that parental leave, modified-duty, and other work-life policies are accessible and can be used off the tenure track.

Two policy examples illuminate how different institutions have addressed these issues. The first is from Stony Brook University. These guidelines provide *transparency* that the campus has an approved stop-the-clock process for personal and professional reasons, and the process to apply for the delay is clearly outlined. The policy provides *clarity* on the potential reasons faculty may apply and also recognizes multiple *contexts* in which a delay may be required, including family and personal care; professional setbacks beyond a faculty member's control; and professional opportunities, such as awards or fellowships.

EXAMPLE

Assistant Professors (and non-tenured Associate Professors) are normally expected to be evaluated for promotion to tenured rank by the end of the 6th year of their tenure-track appointment (or 2nd year if non-tenured Associate Professors). It is recognized, however, that external circumstances sometimes preclude continuous progress towards tenure. The University permits tenure track faculty to petition for a change in status in order to extend the time during which they may prepare for promotion review. This extension may be accomplished either through a reduction in work hours that would be reflected in a reduction of the faculty member's effort (with a comparable reduction in salary), or through a transfer of the faculty member's appointment to a position of qualified academic rank (e.g., as a Visiting Assistant Professor).

Requests for interruption of tenure track service may be made for periods of up to one calendar year on each occasion, and may be divided into no more than two segments (i.e., one full academic year, one full calendar year, or two sequential fall or spring semesters).

Extensions of the tenure clock may be requested by the faculty member with a letter to the appropriate department chair or area coordinator, who will communicate the request to the Dean with his/her endorsement. Once approved by the Dean, the request is forwarded to the Provost's office for final review and approval. Requests may not be retroactive nor may they be initiated once a tenure review process has commenced.

Extensions of the tenure clock may be requested for the following reasons:

Family and personal care: obligations for the care of a significant elder or immediate family member;
 personal medical circumstances that significantly impede progress toward tenure and are beyond the control of the faculty member.

- Professional readiness: unexpected special and extenuating circumstances that deprive the faculty member of reasonable opportunity to demonstrate their ability and potential as a faculty member and justify an extension of the tenure clock for a maximum of one academic year. Examples of extenuating circumstances would include research setbacks due to circumstances beyond the faculty member's control, physical-plant problems that retard the ability of the faculty to perform their work, unexpected delays in the provision of start-up funds, delayed lab renovations or in the provision of critical equipment, moves within campus, equipment or data destruction, animal/model system problems, or effects of natural disasters.
- Professional opportunities: Tenure-track faculty may request to take a leave without pay (LWOP) during years 1-6, prior to the start of the tenure evaluation process. Granting of LWOP is at the discretion of the Provost. LWOP may be taken to pursue full-time scholarly or creative work opportunities at national labs, government, or private sector facilities, to receive prestigious awards or fellowships, and/or to engage in special assignment opportunities.
- Child birth, adoption or foster placement: An employee may make a written request to stop the "tenure" clock following child birth, adoption or foster placement. Approval of written requests for clock stops for this purpose are mandatory as long as they fall within these parameters*:
 - Academic employees with an academic year obligation shall be entitled to a tenure clock stop for either one or two semesters;
 - Academic employees with a calendar-year obligation shall be entitled to a tenure clock stop for either six months or 12 months;
 - Professional employees shall be entitled to a "tenure" clock stop for up to the length of the employee's family leave associated with child birth, adoption or foster placement. (SBU Office of the Provost 2022)

In addition to providing clarity and context for faculty members, evaluation policies that recognize work and life also need to signal to reviewers how to evaluate faculty with such context in mind. The University of California, Davis (UC Davis) provides guidance for the solicitation of external letters. This statement provides transparency by informing reviewers that the university offers tenure delay for multiple reasons. It also enhances *clarity* by emphasizing that time should not be a factor in the review.

EXAMPLE

UC Davis encourages its faculty members to consider extensions of the (pre-tenure/review) period under circumstances that could interfere significantly with development of the qualifications necessary for (tenure/ advancement). Examples of such circumstances may include birth or adoption of a child, extended illness, care of an ill family member, significant alterations in appointment, and impacts of COVID-19. Please note that under UC Davis policies and quidelines the overall record of productivity and scholarly attainment forms the basis of your evaluation. Time since appointment is not a factor in this review. (UC Davis Academic Affairs 2021)

Is there language supporting the use of university work-life policies? Is there recognition that career trajectories and contributions will differ based on life circumstances and professional contexts? Is the emphasis on the quantity of work in a particular time period or the quality of the work more holistically?

EXTERNAL LETTERS

It is common for tenure cases, especially in research universities, to seek external review of a candidate's scholarship. The rationale is to ensure that the faculty tenured and promoted at the institution are those who are doing cutting edge, conceptually grounded, and methodologically rigorous work in their discipline or field. Since faculty are hired to specialize in particular areas, the disciplinary expertise to make such judgments often does not exist within the college or university and adjacent scholars in that given topic are at other institutions. External letters can contextualize what is significant, timely, impactful, or rigorous about a scholar's work in more precise detail than someone who does not study that area could provide. A second, often unstated assumption is that external review letters from outside the university, especially in the case where those external reviewers are not chosen by the candidate, provide a more objective, arms-length analysis of the candidate's work—an analysis that cannot be provided by those closest to the candidate in their department. Institutions of higher education vary on how many external letters need to be included in a portfolio and often go through a process of inviting external reviewers until the required number has been reached (e.g., three to six).

Yet, the current process of requesting and reviewing external letters can invite cognitive and social biases into the evaluation. For example, there have been many studies of letters of recommendation that have shown gender bias (Dutt et al. 2016; Madera et al. 2019; Schmader, Whitehead, and Wysocki 2007; Trix and Psenka 2003; Steinpreis, Anders, and Ritzke 1999; Stipes 2021). In one study, even in cases where the ultimate recommendation was positive for those candidates perceived to be men and perceived to be women (with identical credentials), women's recommendations were four times more likely to include reservations and doubt raisers (Steinpreis, Anders, and Ritzke 1999). More external letters are positive than negative, which leaves committee members reading between the lines such that minor comments could have an impact (Chance 2012; Stewart and Valian 2018). Given that external letter writers have likely not gone through an anti-bias training program (Stewart and Valian 2018), there is a decent chance that such implicit biases could be present in external review letters.

There are also problems in how letters are sought and what external reviewers are asked to evaluate. For example, many institutions keep track of all invitations to external reviewers, which is fine except when declines by potential external reviewers cast a bad light on the candidate. It could be that a number of faculty were on sabbatical that year, or an individual received more requests than they could handle (O'Meara 2018). Best practice is to ask external reviewers for their availability first, and then send the materials and criteria if the reviewer agrees.

External reviewers are often sent a selection of the candidate's scholarship to review, but they are asked to note whether they think the candidate should be tenured and promoted based on their teaching, research, and service—essentially guessing about the teaching and service record from limited information in the CV and personal statement. Personnel committees are often impressed by external letter writers from prestigious institutions, but there are smaller fields and emerging areas of scholarship within which there are no full professors to write letters. Last but not least, external reviewers are often asked to compare the candidate to other people in their field, or asked whether the person would be promoted at the reviewers' institution. This line of questioning is problematic because even if reviewers are chosen with some intentionality with regard to institutional type (e.g., liberal arts college reviewer chosen for a liberal arts college candidate), the institutions in question will no doubt be different in some very important contexts. No two academic careers are exactly alike. For example, if two people were each asked to compare a candidate to others who study the same field, it is unlikely they would come up with the same list of colleagues. We have tried this in our own field, and the list we each come up with includes scholars at institutions with different workloads, criteria for tenure, and pre-tenure resources. Such language of comparison in external letter requests is "an invitation to reviewers to let their subjective preferences run wild, with little or no accountability" (Stewart and Valian 2018, 359) and should be avoided.

It is possible to improve the process of requesting external reviews so as not to disadvantage faculty whose fields are smaller or newer and to increase clarity that will mitigate potential for ambiguity, guessing, and implicit biases. Specifically, external review requests should be carefully scripted so that reviewers are asked to apply the criteria from the candidate's department or college to the evidence presented to them and not venture further in their evaluation (O'Meara 2018). The assessment would ideally focus on the quality and impact of scholarship without concern for time in rank (Stewart and Valian 2018). Here is a quick review of what we, and other scholars and guidance (Butler 2021; O'Meara 2018; Stewart and Valian 2018; UM STRIDE 2021), have suggested be part of the external review process.

External review SHOULD	External review SHOULD NOT
Ask reviewers to apply the criteria used at the candidate's institution to the case	Ask reviewers to apply criteria from the reviewer's institution to the case
Engage reviewers based on their potential knowledge of the candidate's work	Engage reviewers based on the perceived prestige of the external reviewer's institution
Ask reviewers for availability first, and then send CV and materials if the reviewer is available	Send candidate materials before confirming reviewer availability or assume when requests are declined it is a negative reflection on the candidate
Keep the review instructions simple and focused; send the reviewer material related to the question at hand	Ask reviewers to comment on areas of faculty work without anything to review
Be explicit in affirming the use of work-life policies; affirm that the candidate be reviewed for the standard number of years	Be silent on use of work-life policies; it invites guessing

The following example from The Ohio State University highlights some of these guidelines for the external letter process. For example, the policy provides clarity on the process for soliciting reviewers, noting that invitations should be sent to gauge availability before any materials are shared. Consistency is highlighted by emphasizing the importance of sending all reviewers the same materials—or including clear rationale and justification if not—and by asking reviewers to evaluate only the scholarly work based on the criteria provided.

EXAMPLE

- Approximately three months before completed evaluations are due, the person designated by the TIU to solicit external evaluations should send out letters of invitation to the prospective evaluators. The letter of invitation should state expectations, due date for receipt of the completed evaluation, and that evaluations are public records and subject to release upon request. See Letter 201 (https://oaa.osu.edu/assets/files/ documents/Letter201.pdf) in the OAA Policies and Procedures Handbook for a sample letter to external evaluators.
- All evaluators are to be sent the same appropriate materials unless there is a substantive reason for differentiating among evaluators. In a case in which evaluators are sent different materials, the TIU head or chair of the P&T committee or committee of eligible faculty must provide an explanation to be included in the dossier. When evaluators are sent different materials (different research papers), TIUs must take care to assure that sufficient letters are obtained regarding the different sets of papers to provide a meaningful body of evaluative information about each set.

The likelihood of obtaining a useful letter is greatly increased when the evaluator is not only given adequate time in which to review the materials, but when the nature of the requested letter is carefully explained. Evaluators should generally be asked to provide only a critical analysis of the candidate's primary area of focus (at least partly on the basis of provided materials). Evaluators should specifically be asked not to comment on whether the candidate should be promoted and tenured at Ohio State or would be promoted and tenured at their own institution. (OSU Office of Academic Affairs 2021)

Is the personnel committee informed about potential biases that could emerge in external letters? If external letters are part of the review, are they chosen for knowledge of candidate research? Are they provided with clear guidance on the focus of the review? Are external letter writers informed about how to evaluate faculty who have taken advantage of work-life policies?

ALTERNATIVE TRACKS TO TENURE, PROMOTION, AND LONGER CONTRACTS

There is a story by Felix et al. (2015) about a chair of a math department in a community college who examined the hiring practices of his department. He asked why few Black candidates were in the applicant pool or hired. He realized that the department had relied on an all-White network for recruiting potential candidates, and the hiring process was laden with typical job talk and interview questions that did not invite candidates to show how they would relate to students. One of the changes he made was to ask all candidates to demonstrate how they would explain the syllabus on the first day of class. This simple exercise made it possible to "differentiate among candidates that explained the syllabus as a contractual document and those that would use the syllabus to connect with students and reduce their fears about math" (as told in McNair, Bensimon, and Malcom-Piqueux 2020, 41). The aim of this effort, along with other equity-minded reforms, was to diversify who was hired.

Why are we raising this issue as it relates to faculty evaluation processes and new and emerging faculty tracks? First, in this example, we see an institutional agent realizing the importance of hiring faculty who had relational skills, cultural competence, and deep commitments to both math as a field and to the diversification of it (Felix et al. 2015). This change had the additional benefit of making it more likely that diverse applicants were successful (McNair, Bensimon, and Malcom-Piqueux 2020). Likewise, the University of California system and other institutions have overhauled faculty hiring to include and meaningfully weight criteria related to candidates' potential to contribute to diversity (EEFR 2019; O'Meara et al. 2020). What happens, however, when that new faculty member goes up for tenure or contract renewal six years later? Does the faculty evaluation process recognize that this faculty member was hired to engage in DEI activities and has been emphasizing this expertise for the past six years? Similar questions can be asked for faculty members who have been appointed to administrative positions and subsequently focused on service and/or academic leadership as well as those who excelled in teaching and participated in curriculum reform. We need faculty evaluation processes that value faculty member's unique skills and interests across rank and appointment types, particularly when those efforts contribute to enhanced student learning and the ability of departments to function well.

Because of the desperate need that higher education institutions have for faculty engaged in newer forms of scholarship, as well as curricular, DEI, and administrative leadership (and recognizing the disproportionate numbers of women and racially minoritized faculty who have stepped forward to do such work), many institutions are experimenting with alternative routes to tenure, promotion, and long-term contracts. These alternative routes can be inclusive of scholarship, but other areas take the lead. For example, West Virginia University (WVU) has an administrative-leadership track from associate professor to full professor, and WPI now has a track to tenure through teaching excellence (O'Meara 2022). In some ways, these experiments are the natural follow through to the creation of differentiated workloads (O'Meara and Rice 2005; O'Meara 2015), wherein

faculty are encouraged to create shared, mutual agreements about changing the percent of effort they spend on teaching, research, and service. However, it takes equity a step further by providing *credit*: an affirmation that administrative leadership, DEI work, and curricular leadership are critical aspects of faculty work and that we need talented individuals in these areas to join our institutions, be promoted, and stay. The standards are rigorous, with benchmarks created for these appointments such that they are not an easier path but rather different paths to long-term job security. Such policies have not been in place long enough to have data on any unintended consequences in implementation—but we are excited to watch this space, as we believe we will see more differentiation in how faculty might be able to contract with their institutions long term to both meet institutional needs and take advantage of their talents (O'Meara 2022).

In the following example, WVU offers alternative paths to tenure, including a service-track wherein faculty's workloads are at least 60 percent service. This path allows for *flexibility* and provides *credit* to individuals who contribute significantly to service at the institution. The policy is transparent about the purpose of this track and includes clarity on the appointment and promotion process for service-track faculty members.

West Virginia University offers two alternate pathways to promotion to full professor—one via administrative service and the other via "outstanding contributions" (WVU 2014).

EXAMPLE

Renewable term appointments of up to three years, in which the principal assignment is service, are designated with the prefix "service," accompanying a traditional rank. Service-track faculty members are hired to respond to program, unit or department needs.

Normally, a service-track faculty assignment will be at least 60% service; the balance might address needs of the unit and/or interests of the faculty member, as they relate to the institutional mission.

Service-track appointments may be continued indefinitely, contingent upon need, performance, and funding. No number of appointments at any term faculty rank/title shall create presumption of any contractual rights, nor the right of continued appointment or transition to another type of position.

Promotion to senior ranks is not a requirement for institutional commitment and career stability in a service-track faculty appointment. However, subject to reappointment, a service-track faculty member and her/his Chairperson may choose to initiate consideration for the first promotion during the sixth year (with promotion effective beginning year seven), or later. For service-track faculty who wish to stand for promotion, in addition to a sustained record of service excellence, the evaluation file is expected to show evidence of ongoing contribution to adding value to the unit and addressing unit-defined needs, priorities, and initiatives. (WVU 2014)

Has the institution considered whether alternative tracks to tenure and promotion would improve equity for those heavily engaged in curricular, administrative, and DEI leadership? Are there opportunities to earn longer-term contracts over time? Are different pathways to advancement recognized?

FROM POLICY TO PRACTICE: STEWARDSHIP OF A STRONG FACULTY **EVALUATION PROCESS**

Although this report focuses on changes to faculty evaluation policies, we recognize that significant work has been done by faculty and academic leaders, DEI leadership, National Science Foundation-funded ADVANCE programs, the National Academy of Science, and others to reform how personnel committees evaluate candidate materials and make faculty evaluation judgments. This list is not exhaustive, but many of these best practices can be found in the aforementioned works as well as that of Canning and Reddick 2019; Correll 2017; Gonzales and Griffin 2020; Laursen and Austin 2020; Mickey, Misra, and Clark 2022; Mitchneck and Smith 2021; and Stewart and Valian 2018—these works are important to note as complementary to faculty evaluation policy reform. This work extends beyond faculty evaluation policy and strengthens the onboarding and mentoring of candidates in the system. Broadly, this work focuses on sharing strategies related to mentoring (e.g., creating stronger mentoring pods for new faculty so they have routine support), reducing implicit bias (e.g., hosting anti-bias training for personnel committee members and issuing equity charges before a committee begins their work), and adding accountability measures to policies and review processes (e.g., adding contributions to diversity, equity, and inclusion into annual faculty reporting requirements and diversity statements for faculty evaluation). In particular, campuses are implementing innovative training for faculty evaluation committees on many of the issues, using case studies to prepare personnel committees with an equity-minded lens.

Conclusion

Will higher education institutions and their leaders keep the promises they have made?

Reflecting on decades of work trying to improve equity in organizations, Correll (2017, 726–727) advocates celebrating small wins when approaching change, writing, "understanding a problem is necessary but not sufficient for affecting positive change ... the changes we can realistically make in any one instance are often small and imperfect. I have decided I can live with that. We have to start somewhere." She notes that even small, concrete, measurable actions that produce visible results can be important in creating change because they "make new allies and makes visible the next target of change" (Correll 2017, 735). Ideally, equity-minded faculty and administrators will engage their fellow faculty in the creation of stronger faculty evaluation policies to increase buy-in and create policies that work in practice (Correll 2017; Gonzales and Griffin 2020; Laursen and Austin 2020; Stewart and Valian 2018).

We have outlined multiple pathways for noticing inequities in policies and practices and making concrete change. The kinds of concrete reform discussed in the report can propel faculty involved in community engaged scholarship, student-centered teaching, digital work in the humanities, entrepreneurial work, and DEI to be recognized and thrive.

We created these two reports and audit with the intention of providing very concrete resources for action. We hope that institutions consider applying equity-minded principles described in the first report and audit to their own faculty evaluation policies; reflect on the language used by other institutions; and develop new, innovative ways to address the issues we raise here. Overall, our audit tries to move us from narrow to expansive definitions of scholarship, excellence in faculty contributions, and documentation of impact. The audit makes visible the structural and implicit challenges faced by minoritized faculty, and those involved in newer forms of scholarship and labor focused on maintaining a diverse, inclusive community. Our goal was to provide something useful to institutions as they work to iteratively address equity in faculty evaluation policies, achieve small wins, and align their policies and practices with their desire to scaffold an equity-minded institution and society. Institutions that take up equity-minded reform of faculty evaluation will find new ways to live their promises.

Appendix

EXAMPLES OF DISCIPLINARY ASSOCIATION REPORTS AND STATEMENTS CALLING FOR REFORM

Anthropology	Center for a Public Anthropology www.publicanthropology.org
Chemistry	"Statement on Scholarship" (American Chemical Society, 2010–13) https://www.acs.org/content/dam/acsorg/about/governance/committees/education/statement-on-scholarship.pdf
Education	Rethinking Faculty Evaluation: AERA Report and Recommendations on Evaluating Education Research, Scholarship, and Teaching in Postsecondary Education (American Educational Research Association, 2014) http://www.aera.net/Portals/38/docs/Education_Research_and_Research_Policy/ RethinkingFacultyEval_R4.pdf
English and Languages	Report of the MLA Task Force on Evaluating Scholarship for Tenure and Promotion (Modern Language Association of America, 2006) http://www.mla.org/tenure_promotion
General Science	Aligning Practices to Policies: Changing the Culture to Recognize and Reward Teaching at Research Universities (Research Corporation for Science Advancement and Association of American Universities, 2017) https://rescorp.org/gdresources/publications/Aligning-Practice-To-Policies-Digital.pdf AWIS Advocacy in Action (Association of Women in Science) http://www.awis.org/?Awards_Recognition
History	Guidelines for the Professional Evaluation of Digital Scholarship by Historians (American Historica Association, 2015) https://www.historians.org/teaching-and-learning/digital-history-resources/evaluation-of-digital-scholarship-in-history/guidelines-for-the-professional-evaluation-of-digital-scholarship-by-historians.
	National Council on Public History http://ncph.org/cms/publications-resources/
	Public History, Public Historians, and the American Historical Association (American Historical Association, 2004) www.historians.org/governance/tfph/TFPHreport.htm
	Tenure, Promotion, and the Publicly Engaged Academic Historian (American Historical Association, 2010; updated 2017) https://www.historians.org/jobs-and-professional-development/statements-standards-and-guidelines-of-the-discipline/tenure-promotion-and-the-publicly-engaged-academic-historian

Math	Guidelines for Programs and Departments in Undergraduate Mathematical Sciences (Mathematical Association of America, 2000; revised 2003) http://www.maa.org/programs/faculty-and-departments/curriculum-department-guidelines-recommendations/guidelines-for-the-profession
Nursing	Defining Scholarship for Academic Nursing (American Association of Colleges of Nursing, 2018) https://www.aacnnursing.org/News-Information/Position-Statements-White-Papers/Defining-Scholarship-Nursing
Performing Arts, Media, and Humanities	Scholarship in Public: Knowledge Creation and Tenure Policy in the Engaged University (Imagining America, 2008) https://imaginingamerica.org/wp-content/uploads/TTI_FINAL.pdf Walking the Talk: Toward a Values-Aligned Academy (Humane Metrics Initiative, 2022) https://hcommons.org/deposits/item/hc:44631/
Philosophy	"Statement on Research" (American Philosophical Association, 1996) http://www.apaonline.org/?research
Physics	American Physical Society Forum on Education Prizes and Awards https://engage.aps.org/fed/honors/prizes-awards Gender Equity: Strengthening the Physics Enterprise in Universities and National Laboratories
	(American Physical Society, 2007) http://www.aps.org/programs/women/workshops/gender-equity/upload/genderequity.pdf "Research in Physics Education" (American Physics Society,1999; revised 2019)
Sociology	http://www.aps.org/policy/statements/99_2.cfm "What Counts?": Evaluating Public Communication in Tenure and Promotion (American Sociological Association, 2006) https://www.asanet.org/sites/default/files/tf_report_what_counts_evaluating_public_communication_in_tenure_and_promotion_final_august_2016.pdf
Women's Studies	Women's Studies Scholarship: A Statement of the National Women's Studies Association (National Women's Studies Association, 2013)

References

- Abel, Steve, and Rod Williams. 2019. The Guide: Documenting, Evaluating and Recognizing Engaged Scholarship. West Lafayette, IN: Purdue University Office of Engagement.
- AAUP (American Association of University Professors). 2014. Statement of Principles on Family Responsibilities and Academic Work. Washington, DC: AAUP. https://www.aaup.org/file/Family_and_Academic_Work.pdf.
- ACE (American Council on Education). 2005. An Agenda for Excellence: Creating Flexibility in Tenure-Track Faculty Careers. Washington, DC: ACE. https://www.acenet.edu/Documents/Agenda-for-Excellence.pdf.
- Ad Hoc Committee on the Evaluation of Digital Scholarship by Historians. 2015. Guidelines for the Professional Evaluation of Digital Scholarship by Historians. Washington, DC: American Historical Association. https://www.historians.org/ teaching-and-learning/digital-history-resources/evaluation-of-digital-scholarship-in-history/guidelines-for-the-professionalevaluation-of-digital-scholarship-by-historians.
- AERA (American Educational Research Association). 2013. "AERA Issues Recommendations for Rethinking Faculty Evaluation for the 21st Century." News release. November 1, 2013. https://www.aera.net/Newsroom/News-Releases-and-Statements/AERA-Issues-Recommendations-for-Rethinking-Faculty-Evaluation-for-the-21st-Century.
- Anderson, Kristin J., and Melinda Kanner. 2011. "Inventing a Gay Agenda: Students' Perceptions of Lesbian and Gay Professors." Journal of Applied Social Psychology 41, no. 6 (June): 1538–1564. https://doi.org/10.1111/j.1559-1816.2011.00757.x.
- Antecol, Heather, Kelly Bedard, and Jenna Stearns. 2016. "Equal but Inequitable. Who Benefits from Gender-Neutral Tenure Clock Stopping Policies?" IZA Discussion Paper No. 9904. Bonn, Germany: IZA Institute of Labor Economics. http:// ftp.iza.org/dp9904.pdf.
- Antonio, Anthony Lising. 2002. "Faculty of Color Reconsidered: Reassessing Contributions to Scholarship." The Journal of Higher Education 73 (5): 582–602. https://doi.org/10.1080/00221546.2002.11777169.
- Arbuckle, Julianne, and Benne D. Williams. 2003. "Students' Perceptions of Expressiveness: Age and Gender Effects on Teacher Evaluations." Sex Roles 49, no. 9-10 (November): 507-516. https://doi.org/10.1023/A:1025832707002.
- Babcock, Linda, Maria P. Recalde, Lise Vesterlund, and Laurie Weingart. 2017. "Gender Differences in Accepting and Receiving Requests for Tasks with Low Promotability." The American Economic Review 107, no. 3 (March): 714–747. https://doi.org/10.1257/aer.20141734.
- Barrett, Lucinda, and Peter Barrett. 2011. "Women and Academic Workloads: Career Slow Lane or Cul-de-Sac?" Higher Education 61, no. 2 (February): 141-155. https://doi.org/10.1007/s10734-010-9329-3.
- Bavishi, Anish, Juan M. Madera, and Michelle R. Hebl. 2010. "The Effect of Professor Ethnicity and Gender on Student Evaluations: Judged Before Met." Journal of Diversity in Higher Education 3, no. 4 (December): 245–256. https://doi. org/10.1037/a0020763.
- Bensimon, Estela Mara. 2006. "Learning Equity-Mindedness: Equality in Educational Outcomes." The Academic Workplace 17, no. 1 (Spring): 2-5, 18-21.
- Bensimon, Estela Mara, Alicia C. Dowd, and Keith Witham. 2016. "Five Principles for Enacting Equity by Design." AACU Diversity and Democracy 19, no. 1 (Winter).

- Blanchard, Lynn, and Andrew Furco. 2021. *Faculty Engaged Scholarship: Setting Standards and Building Conceptual Clarity*. University Park, PA and East Lansing, MI: The Academy of Community Engagement Scholarship. https://doi.org/10.17615/0xj1-c495.
- Boring, Anne, Kellie Ottoboni, and Philip B. Stark. 2016. "Student Evaluations of Teaching (Mostly) Do Not Measure Teaching Effectiveness." *ScienceOpen Research*, January 7, 2016. DOI: 10.14293/S2199-1006.1.SOR-EDU.AETBZC.v1.
- Boyer, Ernest L. 1990. Scholarship Reconsidered: Priorities of the Professoriate. Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.
- Bozeman, Barry, Daniel Fay, and Catherine P. Slade. 2013. "Research Collaboration in Universities and Academic Entrepreneurship: The-State-of-the-Art." *The Journal of Technology Transfer* 38, no. 1 (February): 1–67. https://doi.org/10.1007/s10961-012-9281-8.
- Butler, Todd. 2021. "Beyond Tenure Clock Management." *Inside Higher Ed*, January 19, 2021. https://www.insidehighered.com/advice/2021/01/19/tenure-clock-extensions-arent-enough-help-support-researchers-and-their-work.
- Canning, Charlotte M., and Richard J. Reddick. 2019. "In Defense of Diversity Statements." *The Chronicle of Higher Education*, January 11, 2019. https://www.chronicle.com/article/in-defense-of-diversity-statements/.
- Carnes, Molly, Stacie Geller, Eve Fine, Jennifer Sheridan, and Jo Handelsman. 2005. "NIH Director's Pioneer Awards: Could the Selection Process Be Biased Against Women?" *Journal of Women's Healt*h 14, no. 8 (October): 684–691. https://doi.org/10.1089/jwh.2005.14.684.
- Cech, Erin A., and Mary Blair-Loy. 2014. "Consequences of Flexibility Stigma among Academic Scientists and Engineers." Work and Occupations 41, no. 1 (February): 86–110. https://doi.org/10.1177%2F0730888413515497.
- Chance, Don M. 2012. "The Idiocy of Promotion-and-Tenure Letters." *The Chronicle of Higher Education*, November 14, 2012. https://www.chronicle.com/article/the-idiocy-of-promotion-and-tenure-letters/.
- Chenoweth, Erica, Page Fortna, Sara Mitchell, Burcu Savun, Jessica Weeks, and Kathleen Cunningham. 2016. "How to Get Tenure (If You're a Woman)." *Foreign Policy Magazine*, April 19, 2016. http://foreignpolicy.com/2016/04/19/how-to-get-tenure-if-youre-a-woman-academia-stephen-walt/.
- Clark, Dessie, Ethel L. Mickey, and Joya Misra. 2020. "Reflections on Institutional Equity for Faculty in Response to COVID-19." Purdue University Susan Bulkeley Butler Center for Leadership Excellence and ADVANCE Working Paper Series 3 (Special Issue 2): 92–114.
- Correll, Shelley J. 2017. "SWS 2016 Feminist Lecture: Reducing Gender Biases in Modern Workplaces: A Small Wins Approach to Organizational Change." *Gender & Society* 31, no. 6 (December): 725–750.
- Culpepper, Dawn, Lindsey Templeton, and KerryAnn O'Meara. 2021. "Making Faculty Work Visible: An Equity-Minded Approach." *New Directions for Higher Education* 2021, no. 193–194 (Spring-Summer): 11–19. https://doi.org/10.1002/he.20395.
- Curcio, Andrea A., and Mary A. Lynch. 2017. "Addressing Social Loafing on Faculty Committees." *Journal of Legal Education* 67, no. 1 (Autumn): 242–262.
- Damaske, Sarah, Elaine Howard Ecklund, Anne E. Lincoln, and Virginia J. White. 2014. "Male Scientists' Competing Devotions to Work and Family: Changing Norms in a Male-Dominated Profession." *Work and Occupations* 41, no. 4 (November): 477–507. https://doi.org/10.1177%2F0730888414539171.
- DORA (Declaration on Research Assessment). 2013. "San Francisco Declaration on Research Assessment." Accessed March 17, 2022. https://sfdora.org/read/.

- Drago, Robert, Carol L. Colbeck, Kai Dawn Stauffer, Amy Pirretti, Kurt Burkum, Jennifer Fazioli, Gabriela Lazzaro, and Tara Habasevich. 2006. "The Avoidance of Bias Against Caregiving: The Case of Academic Faculty." American Behavioral Scientist 49, no. 9 (May): 1222-1247. https://doi.org/10.1177%2F0002764206286387.
- Dutt, Kuheli, Danielle L. Pfaff, Ariel F. Bernstein, Joseph S. Dillard, and Caryn J. Block. 2016. "Gender Differences in Recommendation Letters for Postdoctoral Fellowships in Geoscience." Nature Geoscience 9, no. 11 (November): 805–808. https://doi.org/10.1038/ngeo2819.
- Eagan, M. Kevin, Jr., and Jason C. Garvey. 2015. "Stressing Out: Connecting Race, Gender, and Stress with Faculty Productivity." The Journal of Higher Education 86 (6): 923-954. https://doi.org/10.1080/00221546.2015.11777389.
- EEFR (Evaluating Equity in Faculty Recruitment Project). 2019. Achieving Equity and Diversity in Faculty Recruitment: Research & Practice, Conference Report. Davis, CA: University of California, Davis. https://ofew.berkeley.edu/sites/default/ files/eefr_conferencereport_final.pdf.
- Eidinger, Andrea. 2017. "She's Hot: Female Sessional Instructors, Gender Bias, and Student Evaluations." Active History (blog). March 30, 2017. http://activehistory.ca/2017/03/shes-hot-female-sessional-instructors-gender-bias-and-studentevaluations/.
- Ellison, Julie, and Timothy K. Eatman. 2008. Scholarship in Public: Knowledge Creation and Tenure Policy in the Engaged University. Syracuse, NY: Imagining America.
- Ewing, Vanessa Lynn, Arthur A. Stukas Jr., and Eugene P. Sheehan. 2003. "Student Prejudice Against Gay Male and Lesbian Lecturers." The Journal of Social Psychology 143 (5): 569-579. https://doi.org/10.1080/00224540309598464.
- Feeney, Mary K., Margarita Bernal, and Lauren Bowman. 2014. "Enabling Work? Family-Friendly Policies and Academic Productivity for Men and Women Scientists." Science and Public Policy 41, no. 6 (December) 750–764. https://doi. org/10.1093/scipol/scu006.
- Felix, Eric R., Estela Mara Bensimon, Debbie Hanson, James Gray, and Libby Klingsmith. 2015. "Developing Agency for Equity-Minded Change." New Directions for Community Colleges 2015, no. 172 (Winter): 25-42. https://doi. org/10.1002/cc.20161.
- Fine, Eve, and Jo Handelsman. 2012. Searching for Excellence & Diversity: A Guide for Search Committees at the University of Wisconsin-Madison. Madison, WI: Women in Science & Engineering Leadership Institute.
- Flaherty, Colleen. 2021. "The DEI Pathway to Promotion." Inside Higher Ed, May 5, 2021. https://www.insidehighered.com/ news/2021/05/14/iupui-creates-path-promotion-and-tenure-based-dei-work.
- Flaherty, Colleen. 2022. "Where DEI Work Is Faculty Work." Inside Higher Ed, April 1, 2022. https://www.insidehighered. com/news/2022/04/01/u-illinois-require-diversity-statements-tenure.
- Gillman, Richard Alan, Nancy H. Hensel, David A. Salomon, and Stephen C. Wilhite. 2018. Refining the Paradigm: Holistic Evaluation of Faculty to Support Faculty and Student Learning. Dayton, OH: The New American Colleges and Universities.
- Ginther, Donna K., Walter T. Schaffer, Joshua Schnell, Beth Masimore, Faye Liu, Laurel L. Haak, and Raynard Kington. 2011. "Race, Ethnicity, and NIH Research Awards." Science 333, no. 6045 (August 19): 1015-1019. https://doi. org/10.1126/science.1196783.
- Gonzales, Leslie D., and Kimberly A. Griffin. 2020. Supporting Faculty During and After COVID-19: Don't Let Go of Equity. Washington, DC: Aspire Alliance. https://drive.google.com/file/d/1WQrIG6LsR04jGASfF6Z8WVxl4RIRpsMj/view.
- Graves, Amy L., Etsuko Hoshino-Browne, and Kristine P. H. Lui. 2017. "Swimming Against the Tide: Gender Bias in the Physics Classroom." Journal of Women and Minorities in Science and Engineering 23 (1): 15-36. https://www.doi. org/10.1615/JWomenMinorScienEng.2017013584.

- Griffin, Kimberly A., Jessica C. Bennett, and Jessica Harris. 2013. "Marginalizing Merit? Gender Differences in Black Faculty D/discourses on Tenure, Advancement, and Professional Success." *The Review of Higher Education* 36, no. 4 (Summer): 489–512. https://doi.org/10.1353/rhe.2013.0040.
- Griffin, Kimberly A., and Richard J. Reddick. 2011. "Surveillance and Sacrifice: Gender Differences in the Mentoring Patterns of Black Professors at Predominantly White Research Universities." *American Educational Research Journal* 48, no. 5 (October): 1032–1057. https://doi.org/10.3102%2F0002831211405025.
- Guarino, Cassandra M., and Victor M. H. Borden. 2017. "Faculty Service Loads and Gender: Are Women Taking Care of the Academic Family?" *Research in Higher Education* 58, no. 6 (September): 672–694. https://doi.org/10.1007/s11162-017-9454-2.
- Hanasono, Lisa K., Ellen M. Broido, Margaret M. Yacobucci, Karen V. Root, Susana Peña, and Deborah A. O'Neil. 2019. "Secret Service: Revealing Gender Biases in the Visibility and Value of Faculty Service." *Journal of Diversity in Higher Education* 12, no. 1 (March): 85–98. https://doi.org/10.1037/dhe0000081.
- Hofstra, Bas, Vivek V. Kulkarni, Sebastian Munoz-Najar Galvez, Bryan He, Dan Jurafsky, and Daniel A. McFarland. 2020. "The Diversity-Innovation Paradox in Science." *Proceedings of the National Academy of Sciences* 117, no. 17 (April 28): 9284–9291. https://doi.org/10.1073/pnas.1915378117.
- Hollenshead, Carol S., Beth Sullivan, Gilia C. Smith, Louise August, and Susan Hamilton. 2005. "Work/Family Policies in Higher Education: Survey Data and Case Studies of Policy Implementation." *New Directions for Higher Education* 2005, no. 130 (Summer): 41–65. https://doi.org/10.1002/he.178.
- Hoppe, Travis A., Aviva Litovitz, Kristine A. Willis, Rebecca A. Meseroll, Matthew J. Perkins, B. Ian Hutchins, Alison F. Davis, Michael S. Lauer, Hannah A. Valantine, James M. Anderson, and George M. Santangelo. 2019. "Topic Choice Contributes to the Lower Rate of NIH Awards to African-American/Black Scientists." Science Advances 5, no. 10 (October). https://doi.org/10.1126/sciadv.aaw7238.
- Hurtado, Sylvia, M., Kevin Eagan, Minh C. Tran, Christopher B. Newman, Mitchell J. Chang, and Paolo Velasco. 2011. "We Do Science Here': Underrepresented Students' Interactions with Faculty in Different College Contexts." *Journal of Social Issues* 67, no. 3 (September): 553–579. https://doi.org/10.1111/j.1540-4560.2011.01714.x.
- IUPUI (Indiana University–Purdue University Indianapolis) Office of Academic Affairs. 2022. *Guidelines for Preparing and Reviewing Promotion and Tenure Dossiers 2022–2023*. Indianapolis, IN: IUPUI. https://academicaffairs.iupui.edu/AAContent/Html/Media/AAContent/02-PromotionTenure/PromotionAndTenure/ptguidelines-current-year-final.pdf.
- Janke, Emily M., Kristin Medlin, and Barbara Holland. 2014. Honoring the Mosaic of Talents and Stewarding the Standards of High Quality Community-Engaged Scholarship. Excellence in Community Engagement & Community-Engaged Scholarship, Vol. 2. Greensboro, NC: University of North Carolina Greensboro Institute for Community and Economic Engagement. https://communityengagement.uncg.edu/wp-content/uploads/2014/07/Honoring-the-Mosaic-of-Talentsand-Stewarding-the-Standards-of-High-Quality-Community-Engaged-Scholarship.pdf.
- Jimenez, Miguel F., Theresa M. Laverty, Sara P. Bombaci, Kate Wilkins, Drew E. Bennett, and Liba Pejchar. 2019. "Underrepresented Faculty Play a Disproportionate Role in Advancing Diversity and Inclusion." *Nature Ecology & Evolution* 3, no. 7 (July): 1030–1033. https://doi.org/10.1038/s41559-019-0911-5.
- Jordan, Don. 2020. "Questions Added to Course Evaluations amid Ongoing Pandemic." The University Record (University of Michigan), November 19, 2020. https://record.umich.edu/articles/questions-added-to-course-evaluations-amid-ongoing-pandemic/.
- Kreitzer, Rebecca J., and Jennie Sweet-Cushman. 2022. "Evaluating Student Evaluations of Teaching: A Review of Measurement and Equity Bias in SETs and Recommendations for Ethical Reform." *Journal of Academic Ethics* 20, no. 1 (March): 73–84. https://doi.org/10.1007/s10805-021-09400-w.

- Krukowski, Rebecca A., Reshma Jagsi, and Michelle I. Cardel. 2021. "Academic Productivity Differences by Gender and Child Age in Science, Technology, Engineering, Mathematics, and Medicine Faculty During the COVID-19 Pandemic." Journal of Women's Health 30, no. 3 (March): 341-347. https://doi.org/10.1089/jwh.2020.8710.
- Laster Pirtle, Whitney N. 2020. "Racial Capitalism: A Fundamental Cause of Novel Coronavirus (COVID-19) Pandemic Inequities in the United States." Health Education & Behavior 47, no. 4 (August): 504-508. https://doi. org/10.1177%2F1090198120922942.
- Laursen, Sandra, and Ann E. Austin. 2020. Building Gender Equity in the Academy: Institutional Strategies for Change. Baltimore, MD: Johns Hopkins University Press.
- Lawrence, John W. 2018. "Student Evaluations of Teaching Are Not Valid." Academe (May-June). https://www.aaup.org/ article/student-evaluations-teaching-are-not-valid#.YV9HudrMI2w.
- Lederman, Doug. 2020. "Evaluating Teaching During the Pandemic." Inside Higher Ed, April 8, 2020. https://www. insidehighered.com/digital-learning/article/2020/04/08/many-colleges-are-abandoning-or-downgrading-studentevaluations.
- Lisnic, Rodica, Anna Zajicek, and Brinck Kerr. 2019. "Work-Family Balance and Tenure Reasonableness: Gender Differences in Faculty Assessment." Sociological Spectrum 39 (5): 340-358. https://doi.org/10.1080/02732173.2019.1691097.
- Lubienski, Sarah Theule, Emily K. Miller, and Evthokia Stephanie Saclarides. 2018. "Sex Differences in Doctoral Student Publication Rates." Educational Researcher 47, no. 1 (January/February): 76-81.
- Lundquist, Jennifer H., Joya Misra, and KerryAnn O'Meara. 2012. "Parental Leave Usage by Fathers and Mothers at an American University." Fathering: A Journal of Theory, Research, and Practice about Men as Fathers 10 (3): 337–363. https:// psycnet.apa.org/doi/10.3149/fth.1003.337.
- MacNell, Lillian, Adam Driscoll, and Andrea N. Hunt. 2015. "What's in a Name: Exposing Gender Bias in Student Ratings of Teaching." Innovative Higher Education 40, no. 4 (August): 291-303. https://doi.org/10.1007/s10755-014-9313-4.
- Madera, Juan M., Michelle R. Hebl, Heather Dial, Randi Martin, and Virginia Valian. 2019. "Raising Doubt in Letters of Recommendation for Academia: Gender Differences and Their Impact." Journal of Business and Psychology 34, no. 3 (June): 287–303. https://doi.org/10.1007/s10869-018-9541-1.
- Maliniak, Daniel, Ryan Powers, and Barbara F. Walter. 2013. "The Gender Citation Gap in International Relations." International Organization 67, no. 4 (October): 889-922. https://doi.org/10.1017/S0020818313000209.
- Manchester, Colleen Flaherty, Lisa M. Leslie, and Amit Kramer. 2013. "Is the Clock Still Ticking? An Evaluation of the Consequences of Stopping the Tenure Clock." ILR Review 66, no. 1 (January): 3–31. https://doi.org/10.1177 %2F001979391306600101.
- McNair, Tia Brown, Estela Mara Bensimon, and Lindsey Malcom-Piqueux. 2020. From Equity Talk to Equity Walk: Expanding Practitioner Knowledge for Racial Justice in Higher Education. Hoboken, NJ: Jossey-Bass.
- Mendoza-Denton, Rodolfo, Colette Patt, Aaron Fisher, Andrew Eppig, Ira Young, Andrew Smith, and Mark A. Richards. 2017. "Differences in STEM Doctoral Publication by Ethnicity, Gender and Academic Field at a Large Public Research University." PloS ONE 12 (4). https://doi.org/10.1371/journal.pone.0174296.
- Mengel, Friederike, Jan Sauermann, and Ulf Zölitz. 2017. "Gender Bias in Teaching Evaluations." SOFI Working Paper No. 6/2017. Stockholm: Swedish Institute for Social Research.
- Mickey, Ethel L., Joya Misra, and Dessie Clark. 2022. "The Persistence of Neoliberal Logics in Faculty Evaluations Amidst Covid-19: Recalibrating Toward Equity." Gender, Work & Organization. Published ahead of print, February 10, 2022. https://doi.org/10.1111/gwao.12817.

- Misra, Joya. 2020. Research Collaboration Best Practices. Amherst, MA: University of Massachusetts Amherst ADVANCE Program. https://www.umass.edu/advance/sites/default/files/inline-files/UMass%20ADVANCE%20Research%20 Collaboration%20Best%20Practices%20Final%201-7-2021.pdf.
- Misra, Joya, Alexandra Kuvaeva, KerryAnn O'Meara, Dawn Kiyoe Culpepper, and Audrey Jaeger. 2021. "Gendered and Racialized Perceptions of Faculty Workload." Gender & Society 35, no. 3 (June): 358–394. https://doi.org/10.1177 %2F08912432211001387.
- Misra, Joya, Jennifer Hickes Lundquist, Elissa Holmes, and Stephanie Agiomavritis. 2011. "The Ivory Ceiling of Service Work." Academe (January-February). https://www.aaup.org/article/ivory-ceiling-service-work#.YWBt39rMI2w.
- Mitchell, Kristina M. W., and Jonathan Martin. 2018. "Gender Bias in Student Evaluations." PS: Political Science & Politics 51, no. 3 (July): 648–652. https://doi.org/10.1017/S104909651800001X.
- Mitchneck, Beth. 2020. Synthesizing Research on Gender Biases and Intersectionality in Citation Analysis and Practices. Washington, DC: ARC Network. https://equityinstem.org/wp-content/uploads/Mitchneck-VVS.pdf.
- Mitchneck, Beth, and Jessi L. Smith. 2021. "We Must Name Systemic Changes in Support of DEI." Inside Higher Ed, August 24, 2021. https://www.insidehighered.com/views/2021/08/24/academe-should-determine-what-specific-systemic-changesare-needed-dei-opinion.
- NASEM (National Academies of Sciences, Engineering, and Medicine). 2021. The Impact of COVID-19 on the Careers of Women in Academic Sciences, Engineering, and Medicine. The National Academies Press: Washington, DC. https://doi. org/10.17226/26061.
- O'Meara, KerryAnn. 2011. "Faculty Civic Engagement: New Training, Assumptions, and Markets Needed for the Engaged American Scholar." In "To Serve a Larger Purpose": Engagement for Democracy and the Transformation of Higher Education, edited by John Saltmarsh and Matthew Hartley, 177-198. Philadelphia, PA: Temple University Press.
- O'Meara, KerryAnn. 2014. "Change the Tenure System." Inside Higher Education, January 13, 2014. https://www. insidehighered.com/advice/2014/01/13/essay-calls-reform-tenure-and-promotion-system.
- O'Meara, KerryAnn. 2015. Flexible Workplace Agreements: Enabling Higher Education's Strategic Advantage. New York: TIAA-CREF Institute. https://www.tiaa-crefinstitute.org/public/pdf/flexible_workplace_agreements.pdf.
- O'Meara, KerryAnn. 2016. "Legitimacy, Agency, and Inequality: Organizational Practices for Full Participation of Community-Engaged Faculty." In Publicly Engaged Scholars: Next-Generation Engagement and the Future of Higher Education, edited by Margaret A. Post, Elaine Ward, Nicholas V. Longo, and John Saltmarsh, 96–109. Sterling, VA: Stylus Publishing.
- O'Meara, KerryAnn. 2018. "Accurately Assessing Engaged Scholarship." Inside Higher Education, August 22, 2018. https:// www.insidehighered.com/advice/2018/08/22/academe-needs-better-evaluate-engaged-scholarship-opinion.
- O'Meara, KerryAnn, Elizabeth Beise, Dawn Culpepper, Joya Misra, and Audrey Jaeger. 2020. "Faculty Work Activity Dashboards: A Strategy to Increase Transparency." Change: The Magazine of Higher Learning 52 (3): 34–42. https://doi.org /10.1080/00091383.2020.1745579.
- O'Meara, KerryAnn, Dawn Culpepper, Joya Misra, and Audrey Jaeger. 2021. Equity-Minded Faculty Workloads: What We Can and Should Do Now. Washington, DC: American Council on Education.
- O'Meara, KerryAnn, Timothy Eatman, and Saul Petersen. 2015. "Advancing Engaged Scholarship in Promotion and Tenure: A Roadmap and Call for Reform." Liberal Education 101, no. 3 (Summer).
- O'Meara, KerryAnn, Alexandra Kuvaeva, Gudrun Nyunt, Chelsea Waugaman, and Rose Jackson. 2017. "Asked More Often: Gender Differences in Faculty Workload in Research Universities and the Work Interactions That Shape Them." American Educational Research Journal 54, no. 6 (December): 1154-1186. https://doi.org/10.3102%2F0002831217716767.

- O'Meara, KerryAnn, and R. Eugene Rice. 2005. Faculty Priorities Reconsidered: Rewarding Multiple Forms of Scholarship. San Francisco: Jossey-Bass.
- O'Meara, KerryAnn, and Lindsey Templeton. 2022. Equity-Minded Reform of Faculty Evaluation: A Call to Action. Washington, DC: American Council on Education.
- O'Meara, KerryAnn. 2022. Enabling Possibility: Reform of Faculty Appointments and Evaluation. New York: TIAA Institute. https://www.tiaainstitute.org/sites/default/files/presentations/2022-03/TIAA%20Institute_Reform%20of%20faculty%20 appointments%20and%20evaluation_O%27Meara%20_TI_March%202022.pdf.
- O'Meara, KerryAnn, Jennifer Wessel, and Damani White-Lewis. 2021. "Understanding When Diversity, Equity, and Inclusion Work "Counts" in Faculty Evaluation." Grant awarded by the National Science Foundation Education and Human Resources Core Research Program. College Park, MD: University of Maryland, College Park.
- OSU (The Ohio State University) Office of Academic Affairs. 2021. Policies and Procedures Handbook, Volume 3: Promotion and Tenure Review. Columbus, OH: OSU. https://oaa.osu.edu/sites/default/files/links_files/oaa-handbook-vol-3-p-and-trev-08-2021.pdf.
- Peterson, David A. M., Lori A. Biederman, David Andersen, Tessa M. Ditonto, and Kevin Roe. 2019. "Mitigating Gender Bias in Student Evaluations of Teaching." PloS ONE 14 (5). https://doi.org/10.1371/journal.pone.0216241.
- Poor, Sara S., Rosemarie Scullion, Kathleen Woodward, David Laurence, Kirsten M. Christensen, J. Elizabeth Clark, Katharine Conley, Rebecca Haidt, Katie Hogan, Sharon Patricia Holland, Jean E. Howard, Linh U. Hua, Joyce A. Joyce, Nancy Kaiser, Cassandra Laity, Karen Lawrence, Yi-Chun Tricia Lin, Magdalena Maiz-Peña, Michelle A. Massé, Cecilia Rodríguez Milanés, Joycelyn Moody, Paula Rabinowitz, Ellen Rees, Kathryn W. Shanley, Cynthia Tompkins, and Elizabeth Marie Zanichowsky. 2009. "Standing Still: The Associate Professor Survey: MLA Committee on the Status of Women in the Profession." Profession 2009: 313-350. https://www.jstor.org/stable/25595935.
- Posselt, Julie, Theresa E. Hernandez, Cynthia D. Villarreal, Aireale J. Rodgers, and Lauren N. Irwin. 2020. "Evaluation and Decision Making in Higher Education: Toward Equitable Repertoires of Faculty Practice." In Higher Education: Handbook of Theory and Research, Volume 35, edited by Laura W. Perna, 453-515. New York: Springer.
- Rhoten, Diana, and Stephanie Pfirman. 2007. "Women in Interdisciplinary Science: Exploring Preferences and Consequences." Research Policy 36, no. 1 (February): 56-75. https://doi.org/10.1016/j.respol.2006.08.001.
- Ruscio, John, Florence Seaman, Carianne D'Oriano, Elena Stremlo, and Krista Mahalchik. 2012. "Measuring Scholarly Impact Using Modern Citation-Based Indices." Measurement: Interdisciplinary Research and Perspectives 10 (3): 123-146. https://doi.org/10.1080/15366367.2012.711147.
- Sallee, Margaret W. 2012. "The Ideal Worker or the Ideal Father: Organizational Structures and Culture in the Gendered University." Research in Higher Education 53, no. 7 (November): 782-802. https://doi.org/10.1007/s11162-012-9256-5.
- Sarsons, Heather. 2017. "Recognition for Group Work: Gender Differences in Academia." American Economic Review 107, no. 5 (May): 141-45. https://doi.org/10.1257/aer.p20171126.
- SBU (Stony Brook University) Office of the Provost. 2022. "Faculty Pathways: Guidelines Regarding Extension of Timeto-Tenure." https://www.stonybrook.edu/commcms/provost/faculty/handbook/employment/guidelines_regarding_ extension_of_time_to_tenure.php.
- Schmader, Toni, Jessica Whitehead, and Vicki H. Wysocki. 2007. "A Linguistic Comparison of Letters of Recommendation for Male and Female Chemistry and Biochemistry Job Applicants." Sex Roles 57, no. 7-8 (October): 509-514. https://doi. org/10.1007/s11199-007-9291-4.

- Settles, Iris H., NiCole T. Buchanan, and Kristie Dotson. 2019. "Scrutinized But Not Recognized: (In)visibility and Hypervisibility Experiences of Faculty of Color." Journal of Vocational Behavior 113 (August): 62-74. https://doi. org/10.1016/j.jvb.2018.06.003.
- Settles, Iris H., Martinque K. Jones, NiCole T. Buchanan, and Kristie Dotson. 2021. "Epistemic Exclusion: Scholar(ly) Devaluation That Marginalizes Faculty of Color." Journal of Diversity in Higher Education 14, no. 4 (December): 493-507. https://psycnet.apa.org/doi/10.1037/dhe0000174.
- Skidmore College. 2021. Faculty Handbook 2021–2022. Saratoga Springs, NY: Skidmore College. https://www.skidmore.edu/ dof-vpaa/handbooks/faculty_handbooks/2021-22-Faculty-Handbook.pdf.
- Skorinko, Jeanine L. M. 2019. "Scholarship of Discovery and Beyond: Thinking About Multiple Forms of Scholarship and Elements of Project-Based Learning to Engage Undergraduates in Publishable Research." Frontiers in Psychology 10 (April). https://doi.org/10.3389/fpsyg.2019.00917.
- Sohr-Preston, Sara L., Stefanie S. Boswell, Kayla McCaleb, and Deanna Robertson. 2016. "Professor Gender, Age, and 'Hotness' in Influencing College Students' Generation and Interpretation of Professor Ratings." Higher Learning Research Communications 6 (3). https://doi.org/10.18870/hlrc.v6i3.328.
- Staniscuaski, Fernanda, Livia Kmetzsch, Rossana C. Soletti, Fernanda Reichert, Eugenia Zandonà, Zelia M. C. Ludwig, Eliade F. Lima, Adriana Neumann, Ida V. D. Schwartz, Pameal B. Mello-Carpes, Alessandra S. K. Tamajusuku, Fernanda P. Werneck, Felipe K. Ricachenevsky, Camila Infanger, Adriana Seixas, Charley C. Staats, and Leticia de Oliveira. 2021. "Gender, Race, and Parenthood Impact Academic Productivity During the COVID-19 Pandemic: From Survey to Action." Frontiers in Psychology 12 (May). https://doi.org/10.3389/fpsyg.2021.663252.
- Steinpreis, Rhea E., Katie A. Anders, and Dawn Ritzke. 1999. "The Impact of Gender on the Review of the Curricula Vitae of Job Applicants and Tenure Candidates: A National Empirical Study." Sex Roles 41, no. 7-8 (October): 509-528. https://doi.org/10.1023/A:1018839203698.
- Stewart, Abigail J., and Virginia Valian. 2018. An Inclusive Academy: Achieving Diversity and Excellence. Cambridge, MA: The MIT Press.
- Stipes, Chris. 2021. "Are External Review Letters and Promotion Outcomes Fair Indicators of Researcher Performance?" University of Houston News & Events, May 13, 2021. https://uh.edu/news-events/stories/2021/may-2021/05122021-sloangrant.php.
- Stolzenberg, Ellen Bara, Kevin Eagan, Hilary B. Zimmerman, Jennifer Berdan Lozano, Natacha M. Cesar-Davis, Melissa C. Aragon, and Cecilia Rios-Aguilar. 2019. Undergraduate Teaching Faculty: The HERI Faculty Survey 2016–2017. Los Angeles: Higher Education Research Institute, UCLA. https://www.heri.ucla.edu/monographs/HERI-FAC2017monograph-expanded.pdf.
- Storage, Daniel, Zachary Horne, Andrei Cimpian, and Sarah-Jane Leslie. 2016. "The Frequency of 'Brilliant' and 'Genius' in Teaching Evaluations Predicts the Representation of Women and African Americans Across Fields." PloS ONE 11 (3). https://doi.org/10.1371/journal.pone.0150194.
- Supiano, Beckie. 2021. "Teaching: How Should Colleges Use Course Evaluations in a Pandemic?" Teaching (newsletter), The Chronicle of Higher Education. February 11, 2021. https://www.chronicle.com/newsletter/teaching/2021-02-11.
- Task Force on the Institutionalization of Public Sociology. 2007. Standards of Public Sociology: Guidelines for Use by Academic Departments in Personnel Reviews. Washington, DC: American Sociological Association.
- Trix, Frances, and Carolyn Psenka. 2003. "Exploring the Color of Glass: Letters of Recommendation for Female and Male Medical Faculty." Discourse & Society 14, no. 2 (March): 191-220. https://doi.org/10.1177%2F0957926503014002277.

- Turner, Caroline Sotello Viernes, Juan Carlos González, and J. Luke Wood. 2008. "Faculty of Color in Academe: What 20 Years of Literature Tells Us." Journal of Diversity in Higher Education 1, no. 3 (September): 139–168. https://doi. org/10.1037/a0012837.
- UC Davis (University of California, Davis). Academic Affairs. 2021. "Work Life: Integrating Work and Life." Updated May 2021. https://academicaffairs.ucdavis.edu/work-life.
- UCLA (University of California, Los Angeles) Life Sciences. 2022. "Stellar Scientists & Mentor Professors." Accessed April 13, 2022. https://lifesciences.ucla.edu/inclusion/the-mentor-professor-initiative/.
- UM STRIDE (University of Michigan ADVANCE Program STRIDE Committee). 2021. Subfield Bias in Faculty Hiring Decisions. Ann Arbor, MI: University of Michigan ADVANCE Program. https://advance.umich.edu/wp-content/ uploads/2021/06/ADVANCE-subfield-bias-in-hiring-060321.pdf.
- Valian, Virginia. 1999. Why So Slow? The Advancement of Women. Cambridge, MA: The MIT Press.
- Ward, Kelly. 2003. "Faculty Service Roles and the Scholarship of Engagement." ASHE-ERIC Higher Education Report 29, no. 5 (Special Issue).
- West, Richard E., and Peter J. Rich. 2012 "Rigor, Impact, and Prestige: A Proposed Framework for Evaluating Scholarly Publications." Innovative Higher Education 37, no. 5 (November): 359-371. https://doi.org/10.1007/s10755-012-9214-
- Williams, Joan. 1999. Unbending Gender: Why Family and Work Conflict and What to Do About It. New York: Oxford University Press.
- Woolston, Chris. 2021. "Dashboard Will Track Hiring and Promotion Criteria." Nature, August 4, 2021. https://doi. org/10.1038/d41586-021-02145-x.
- WorkLife Law. 2013. Effective Policies and Programs for Retention and Advancement of Women in Academia. San Francisco: University of California, Hastings College of the Law. https://worklifelaw.org/publications/Effective-Policies-and-Programs-for-Retention-and-Advancement-of-Women-in-Academia.pdf.
- WPI (Worcester Polytechnic Institute). 2020. "ADVACE Gender Equity Data Collection: A Work in Progress." Presentation slides. December 2, 2020. https://www.wpi.edu/sites/default/files/2021/01/07/Gender-Equity-Data-Collection.pdf.
- WPI (Worcester Polytechnic Institute). 2021. Faculty Handbook. Worcester, MA: WPI. https://www.wpi.edu/sites/default/ files/faculty-governance/Faculty_Handbook.pdf.
- WPI (Worcester Polytechnic Institute) Committee on Appointments and Promotions and the Office of the Provost. 2021. Guide to Promotion at WPI: Information for Tenured Associate Professors, their Mentoring Teams, Nominators and Advocates, and External Reviewers. Worcester, MA: WPI. https://www.wpi.edu/sites/default/files/GuideforFullProfPromotion-TTT. pdf.
- WVU (West Virginia University). 2014. Procedures for Faculty Appointment, Annual Evaluation, Promotion, and Tenure 2014-15. Morgantown, WV: WVU. https://faculty.wvu.edu/files/d/0368a1d5-2344-46f0-81b1-09327b90562c/final-2014-2015-p-t-document-guidelines-5-22-20.pdf.

