



Strategies for Effecting Gender Equity and Institutional Change

Strategic Intervention Brief #5 Inclusive Recruitment and Hiring

In this Brief, we focus on interventions that increase diversity in recruiting and hiring new faculty. We address both efforts to diversify the pool of applicants and to ensure fairness in evaluating applicants' credentials, and identify efforts to meet highly ranked candidates' needs and attract them to accept a job offer if made. This Brief does not address efforts to create a positive institutional environment that will be attractive to candidates, however Brief #10 addresses how support for dual-career couples may help to attract strong women candidates and encourage them to accept a position if offered. Other Briefs (1, 2, 3, 6) cover interventions that support new faculty professionally after they arrive on campus, while Briefs 8 and 9 address policies and practices that enhance work/life balance. All of these may enhance candidates' positive impressions of the campus but do not primarily target recruitment and hiring.

Rationale

While women's representation as advanced degree-earners is rising, women are still substantially underrepresented on STEM faculties and especially in high-status research institutions (NSF, 2013). Hiring a new faculty member creates obvious opportunities to increase the representation of women and of faculty of color. Faculty colleagues hired today will shape the department and institution many years into the future through their teaching, research and leadership. Excellence in these domains is enriched when the faculty collectively represent a rich mix of interests, perspectives, talents, and backgrounds that stimulates intellectual discourse, reflects the population, and inspires and mentors students of all backgrounds. Moreover, because human talents are widely distributed, a search for excellence cannot be exhaustive unless it welcomes applicants of all types and fairly evaluates their potential to contribute. This message that diversity is intrinsically coupled to excellence speaks to faculty values and lies at the heart of the academic ideal to responsibly engage and debate ideas for their intrinsic worth.

A focus on hiring may yield fruit, but because faculty careers are long, it is a slow way to increase the representation of women and underrepresented minorities (Marschke et al., 2007). Moreover, it cannot be a revolving door: inclusive hiring must be coupled to effective retention measures that foster the success and happiness of new faculty. This both optimizes the individual's development and protects the university's investment. Indeed, replacing a faculty member is much more expensive than retaining one already hired, as it may take up to ten years to recoup the start-up costs of hiring a new STEM faculty member (NRC, 2007).

An important tool in making recruiting and hiring processes more inclusive is the research on implicit or unconscious bias (or more simply, bias). This body of work from cognitive science shows that even well-intended people make unconscious assumptions that influence their judgments—including assumptions about personal characteristics related to race, gender and ethnicity, and stereotypes of certain fields, institutions, and job descriptions. These patterns of association, or schemas, are psychologically efficient and may hold truth for groups as a whole, but are inaccurate when applied to individuals from the group. Valian (1999) points out that, in the U.S., women in medicine have made greater and faster progress than women in science and engineering, and suggests that this is in part due to our ability to reconcile schemas of physicians as healers with schemas of women as caring and nurturing, while such schemas of women mentally conflict with schemas of engineers as rigorous and analytical—making it harder to see women as good engineers. Such biases are pervasive and robust: both men and women hold similar biases in terms of gender, for instance. Search committees thus benefit from having ways to identify and counter these biases in their own minds and when they encounter them in discussions. Because it is evidence-based, and because it shifts the

focus of conversation from discriminatory behavior to broadly held biases that we all hold but can actively work to neutralize, educating faculty about implicit bias has been a powerful tool for reframing conversations about diversity in the context of recruiting new faculty colleagues.

Purpose

The basic purpose of interventions related to recruitment and hiring is to increase the numbers of women in a department or institution. In STEM fields where women are strongly underrepresented, an initial goal is often conceived in terms of “critical mass” (Etzkowitz et al., 1994). This concept holds that a minority group such as women in science is easily marginalized when the group is very small, but as the group’s size and participation grows, the relationship between minority and majority groups shifts. The minority group becomes self-sustaining and self-organizing, and members may gain power and authority that was “previously beyond their grasp” (p. 51). However, as Etzkowitz and coauthors note, growth in numbers without fundamental change in the structure of the workplace does not alter working conditions for the minority—thus initiatives to hire women in STEM must be coupled with other institutional changes that address these structural biases and enable women to succeed on equal terms.

Because of their importance to faculty, hiring decisions offer good opportunities to educate faculty about inclusive search and hiring processes and to initiate meaningful conversation about the many dimensions of excellence and how to evaluate it. Engaged leaders can raise the profile of these issues, link excellence and diversity as shared values, and model norms of behavior. Moreover, the excitement of making a new hire from an underrepresented group may have high symbolic value in units where the numbers of women are low, such as computer science—especially for women students, who may be closely watching their faculty as role models and representatives of what it takes to succeed in the field (De Welde & Laursen, 2011).

Audience

Educational efforts were most often targeted to those with authority in hiring: members of departmental hiring committees, chairs or heads, and deans who made and approved hiring decisions. Administrative leaders are key not only in leading and overseeing recruitment and hiring, but in setting a tone for others who are involved. Campus Affirmative Action/Equal Opportunity (AA/EO) officers and Human Resources professionals were also frequently included in training and monitoring efforts. These educational activities were often augmented with measures to address the structural elements of recruiting and hiring, such as procedures for oversight and approval of a recruiting plan or candidate list. Careful deliberation was encouraged through incentives to encourage departments to apply inclusive hiring practices.

Some activities at the later stages of the hiring process targeted prospective faculty candidates, as projects sought to provide equitable, informative campus visits or to attract a preferred candidate to accept a job offer.

Models

Similar to institutional efforts on tenure and promotion (Brief 6), efforts toward inclusive hiring made use of both structural and educational models, but educational efforts were generally emphasized. Institutions nearly always deployed multiple activities to target the process from start to finish.

Education

Many institutions developed education or training for participants in the search process, with dual goals of ensuring procedural equity and reducing bias in evaluating applicants. Key content included search guidelines and operating procedures, best practices for evaluating candidates, and the conduct of interviews and campus visits. Recruitment topics might address search committee composition, the use of inclusive language in job postings, the value of a broad job description in casting a wide net for applicants, and strategies for proactive recruiting of women and minority candidates. Best practices often emphasized the implicit bias literature and recommended ways to catch and curb bias, whether one’s own or others’. Material on campus visits addressed issues such as avoiding illegal, biased, and overly personal interview questions, and providing opportunities for candidates to have their questions answered outside of the formal interview process.

Project leaders commonly noted the success of an evidence-based and interactive presentation style in educational efforts. Variations in the format of such efforts included:

- Whether the training was encouraged or required
- Who the training targeted, e.g. search committee chairs, department chairs, or all search committee members. This choice was related to campus size and the number of searches taking place.
- How the training was offered: via in-person workshops or multi-part series, videos, or an online self-paced module, such as the Faculty Recruitment Best Practices tutorial developed at the *University of Rhode Island* (<http://www.uri.edu/advance/RecruitTutorial/>).
- Who led the training. Often ADVANCE personnel developed and piloted the training, sometimes with the help of external consultants, then engaged other faculty, AA/EO personnel, or HR staff in extending the training more broadly. Visiting scholars (see Brief #12) can also be used to promote the need for more inclusive hiring.

At *Case Western Reserve University*, search committee training was customized to the department based on a one-on-one meeting with the search chair. Case also developed cultural competency training, completion of which was required of all faculty within a year of their hire. This course focused on “faculty life in the lab, classroom, and department and raise[d] awareness about the impact of various kinds of bias on the campus climate, as well as how it impacts the success and retention of women faculty and faculty of color.”

Training was often augmented by brochures, manuals or guidebooks made available online. For example, the *University of Puerto Rico-Humacao* (UPRH) developed and promoted a Guide for Affirmative Action in the Recruitment of Faculty Personnel, which was vetted by university legal counsel and remains in use. At *Kansas State University*, the ADVANCE program assisted departments in reviewing their web site for equitable language and other positive or negative signals that it might inadvertently give, based on Cynthia Burack’s Gender Equity Website Evaluation Rubric (<http://advance.k-state.edu/publications/website-rubric.pdf>).

Incentives

Some institutions deployed incentives to improve attention to diversity at various stages of a search process.

- Extra funding for early recruiting can be used to target graduate students and postdocs from underrepresented groups and garner their interest in the institution even before they are actively job-hunting. For example, an initiative in the engineering school at *Kansas State*, Recruiting to Expand Applicant Pools (REAP), supported senior faculty to take recruiting trips to sites or meetings likely to have large numbers of potential women candidates. Recruiters identified specific candidates in advance and set up short meetings to engage the candidate’s interest in Kansas State.
- The *University of Texas at El Paso* provided funding to bring an extra interviewee to campus if that candidate would add to faculty diversity. They were able to document that this practice resulted in hiring women in proportions above their representation on the interview list.
- The *University of Montana-Missoula* developed a ‘2-for-1’ hiring practice whereby a committee could request to hire two candidates rather than one if both candidates would enhance the department’s diversity.
- To improve data collection on diversity in hiring, the *University of Michigan* required departments to collect and submit demographic information about their search process (interviews, offers and hires) if they wished to be eligible for special funding opportunities from the provost’s office.
- The *University of Rhode Island* targeted hiring through its Faculty Fellows program, which provided 2-3-year fellowships for women who began as Fellows and transitioned into tenure-track faculty lines. ADVANCE worked with the provost’s office to provide up to \$20,000 in startup funds and to offer matching funds for new proposals that included the Fellow as a co-investigator. This approach attracted departments’ interest, drew attention to the ADVANCE project, and led to the

hiring of ten women who were very successful. Departments who received a Fellow were required to provide a mentoring plan for the Fellow and were asked to participate in specific programs such as the departmental climate workshop (see Brief 11). Project leaders observed that these very strong hires had positive effects on views of women scientists' capabilities and dispelled myths that there are too few good women from which to hire.

Accountability

Some institutions added or revised search procedures to ensure that applicants received equal treatment and that search committees had been diligent in their efforts.

- At the *University of Maryland-Baltimore County* (UMBC), the provost required all departments to submit a written plan detailing how each search process will create a diverse and inclusive pool of candidates for a new faculty search. Chairs of departments and search committees attended a workshop on conducting an inclusive search.
- At *Case Western Reserve University*, deans could send a list back to the department if it did not reflect the diversity of the national pool; in turn, deans and department heads were held accountable for progress on diversity as an element of their annual reviews.
- At the *University of Montana*, deans reviewed demographic data provided by the Human Resources office and signed a statement: "I have reviewed the composition of this candidate pool and found it to reflect national availability of diverse faculty by race and gender in this field. In cases where the pool is not fully reflective, an exhaustive effort to obtain a diverse candidate pool has been made."
- At the *University of California Irvine*, Equity Advisors based in each college (see Brief 7) held signature authority at several stages of the search process. Initially, the Search Activity Statement provided information about the composition of the search committee, the language for the posting, and venues and duration for advertisement. The Equity Advisor (EA) could thus ascertain that the Search Committee was implementing best practices as shared in educational sessions. Later the EA reviewed the short list of candidates before they were invited for campus visits, along with information about the recruitment pool and national availability. Based on this information, the EA might ask questions of the search committee or consult the Dean, then signed off on the form before the search proceeded. This process asked search committees to proactively identify steps to generate a diverse applicant pool, and to retrospectively reflect upon how effective these steps had been.

Some institutions found it highly productive to work with their Human Resources offices and/or AA/EO officers. ADVANCE projects provided these colleagues with data on national faculty composition, unconscious bias, and strategies to improve searches, seeking to develop allies and ensure that all involved were on the same page. HR staff could also transfer this knowledge to use in hiring staff. The *University of Montana's* PACE project noted that many of the recruiting practices it had espoused were now part of general university hiring standards. At *Utah State University*, involvement of AA/EO and HR personnel was key in sustaining hiring-related initiatives after the grant ended.

Landing the Candidate

A number of activities addressed the final stage of the search process, hosting campus visits and convincing the preferred candidate to accept a job offer.

- Equity in negotiation and startup: *Hunter College* reviewed startup packages offered to faculty and prepared a template for offer letters. *Kansas State* included startup packages in its training for department heads and provided a template with categories for items that might be included in a start-up package. Such approaches seek to minimize differences in startup based on gendered differences in negotiation tactics, improve the transparency of the negotiation process, and ensure that all new faculty had what they needed to succeed from the outset.

- Opportunities for growth: Some universities made a point to alert candidates to faculty development opportunities such as grants, mentoring programs, etc. The *University of Colorado Boulder* incorporated its early-career leadership workshop into new faculty offer letters, highlighting this professional development opportunity and noting the stipend provided for successful completion.
- Dual-career policies: Such policies are attractive to dual-career couples (see Brief 8). Providing information on work/life policies was widely thought to signal institutional commitment to the support of women scholars. Approaches included publicizing such information on institutional web sites and proactively highlighting such policies to candidates.
- Confidential inquiries: Many ADVANCE projects created opportunities during campus visits for candidates to meet with individuals who were outside the search committee to ask confidential questions (e.g. about child care, elder care, dual-career options, domestic partner benefits, or the local community and culture). These might include ADVANCE leaders or other women or faculty of color. At *Montana* this group was formalized as the Council of Recruitment Advisors.
- Welcome packet: Some campuses prepared welcome packets that explained resources such as the ADVANCE program, lactation centers, partner hiring networks, and relocation services. Additional information might include area maps, brochures of local attractions, visitor guides, minority and special interest newspapers or cultural centers.
- Research support: At *UMBC*, departments could apply for funds to support a graduate research assistant for the new hire to use when she arrived on campus. The department in turn committed to working with the new hire to develop a faculty development plan and to find a mentor. This award sought to help new faculty start a successful research career at a teaching-intensive institution.

Building the Pipeline

In the early years of the ADVANCE program, some ADVANCE IT projects sought to strengthen the “pipeline” of women and minority scholars who were currently in school or in postdoctoral positions but who can become future faculty.

- One common model was workshops, brown-bags or panels on academic (and other) career paths. These sessions typically targeted graduate students and postdocs, both women and men. Other topics included networking, entrepreneurship, and “speed mentoring” with a CV review. Often these efforts could be spun off from early-career faculty development activities already underway.
- *UMBC* offered a two-day workshop on “what it takes to be successful” for 60 graduate students and postdocs each year, targeting women and those from underrepresented minority groups. The Faculty Horizons program drew 800 applicants in four years. While *UMBC* did not recruit a workshop participant to its own faculty, leaders noted a positive effect on faculty attitudes and beliefs about the presence and qualifications of minority candidates, and participants have been hired at other schools.
- Some institutions reviewed and/or instituted work/life policies for postdocs and graduate students. For example, *Virginia Tech* offered financial assistance to departments for supporting graduate students during pregnancy and childbirth. *Columbia* reviewed its family leave policies for postdocs, an important group in the research institute setting where this IT project was headquartered.
- Pipeline-building at the undergraduate level most often took the form of support for undergraduate research students in the STEM fields. *New Mexico State University* and *UPRH* supported undergraduate research assistants as a form of research support for their women STEM faculty. *Case Western Reserve* supported summer ACES Fellows from minority-serving institutions.
- The *University of Montana* directed ADVANCE support toward Native American students on its campus and toward building statewide connections among Native American women scientists.
- *New Mexico State* scheduled its visiting scholars to visit local K-12 classrooms.

Examples

- The *University of Michigan*'s STRIDE committee—Strategies and Tactics for Recruiting to Improve Diversity and Excellence—has served as a prototype for many other institutions. Committee members were senior faculty who educated themselves about implicit bias by reading and discussing the literature, and who then carried this information to departments. They offered an interactive, data-based presentation to departments and worked with search committees to maximize the chances that well-qualified women and minority candidates would be identified and, if selected for job offers, recruited, retained and promoted. Crucially, STRIDE involves distinguished scholars who act as campus thought leaders and “organizational catalysts” (Sturm, 2007).
- The WISELI project at the *University of Wisconsin-Madison* developed a workshop on “Searching for Excellence and Diversity” and offered it widely across departments and schools. This workshop is available to other institutions as are WISELI’s handbooks and brochures. WISELI materials identified the essential elements of this workshop as:
 - Peer teaching: The workshop involved faculty from the unit to deliver short presentations and serve as discussion facilitators.
 - Active learning: Most time was spent in discussion and a sharing of practices from different departments, while lecture-style presentation was kept to a minimum.
 - Unconscious biases and assumptions: Participants were introduced to the social psychological literature on unconscious biases and assumptions, and learned how these tendencies might affect the hiring process.
 - Accountability: Participants reported on their success in recruiting diverse applicants to their pools.

Evaluation reports show that the workshops were useful to the participants, and that departments who sent at least one faculty member to a hiring workshop made more offers to and hired more women applicants. People who attended the workshops were much more likely than others to disagree that “The climate for faculty of color in my department is good,” a finding felt by WISELI leaders to indicate greater awareness of the actual climate experienced by faculty of color.

Evaluation

Many institutions used data on current faculty composition versus national averages and national hiring pools as a tool to identify successes and opportunities and to raise awareness in individual departments and colleges. Such data can also be used to monitor the net impact of hiring initiatives, by tracking the demographics of applicants and of candidates named to the short list, brought to campus, receiving offers, and ultimately hired. Because women’s representation varies notably by STEM field, it is generally useful to compare local data with national statistics on the demographics of faculty in the discipline and, as a proxy for the diversity of the national hiring pool, on Ph.D.s awarded. Sources of comparative data include NSF’s National Center for Science and Engineering Statistics (NCSES) (www.nsf.gov/statistics), the American Association of University Professors (www.aaup.org/our-work/research), and some disciplinary societies. Several campuses strengthened their data-gathering on applicant demographics, generally working with the AA/EO officer or Human Resources so that data could be gathered but not inappropriately used in decision-making. Some also tracked search committee composition and its relation to these quantitative indicators. The flux charts made popular by *Hunter College* are a visual way to document combined progress in hiring and promoting women. Ideally, such tracking is put in place in such a way that it can be sustained after the grant. Many ADVANCE leaders have found it important to build a constituency for these data among institutional leaders.

Whether or not such data show change in the net percentage of women faculty will depend on both faculty size and opportunities to hire during the monitoring period. In our sample, the greatest growth was observed for smaller institutions and when hiring was not hampered by economic downturns. For example, *New*

Mexico State was able to double its hiring of female tenure-track faculty in STEM from 17% to 35% over seven years, creating a net increase in STEM female faculty of over 40%.

It is harder to tie quantitative changes directly to practices. At *UC Irvine*, evaluators reported that the percentage of women among new hires was greatest in those schools in which the Equity Advisors reported the most involvement in searches—with deans, search committees, and department chairs—suggesting that the EA model can be effective. Chairs and faculty felt that interaction with the EA had raised search committees’ awareness and changed faculty thinking by “putting the subject of equity on the table.”

ADVANCE projects’ evaluation of their educational programs often involved the use of self-reported measures of satisfaction and learning. As a measure of the reach of such efforts, it is also useful to track who attends from which departments and what positions of influence they hold (chairs, search committee members): Over time, what percentage of all faculty or of a given target group has participated?

The *University of Alabama-Birmingham* used climate survey data to make arguments about the impact of its training. Items useful for this purpose focused, for example, on changes over time in respondents’ awareness of initiatives to increase the number of women faculty, perceptions that their department made a concerted effort to invite qualified women to apply or interview and that qualified women did apply, and perceptions of fairness in the hiring process.

A study at *Case Western Reserve* examined the relationship of candidate pools for nearly 200 STEM searches in a 6-year period. It found that the proportion of females on the short list was significantly related to the likelihood of hiring a female, and the proportion of underrepresented minority candidates on the short list was significantly related to the likelihood of selecting a minority candidate (www.case.edu/admin/aces/documents/Candidate_Pool_Study.pdf).

Affordances and Limitations

Affordances of a focus on hiring include:

- Hiring is an obvious means to increase diversity, especially if institutions have opportunities to grow a program or a school or to make cluster hires.
- The institution already invests substantial faculty time in any search; adding a diversity focus does not add much cost. Some strategies, such as extra travel or interview funds, are not expensive.
- Education on implicit bias is usefully applied in multiple domains beyond hiring, including tenure and promotion decisions, recommendation letters, and graduate admissions. Some institutions reported “trickle-over” of these ideas into other domains.
- One institution found that customized search training helped to avoid a “one-size-fits-all” mentality that risked generating resistance to implementing proposed changes. They also found this approach helped to clarify department chairs’ perceptions of departmental relationships and climate.

Limitations include:

- The opportunity to hire is limited in smaller departments or in times of economic cutbacks—as was the case for many institutions of higher education during our study. Departments can’t make progress on diversity through hiring if they can’t hire; they must focus on success and retention, which tend to show less rapid impact on quantitative indicators.
- Resistance may arise if faculty perceive that their autonomy to make hiring decisions is compromised or if they feel they are asked to “lower the bar” for excellence.
- Hiring colleagues from underrepresented groups does not change the context and climate for their work and success. Hiring initiatives must be coupled with efforts to ensure that the new hires survive and thrive.
- For education, interactive training models appeared to be more successful than readings alone. However, sustaining these workshops over time, especially at a large institution with many searches,

and keeping them fresh, requires substantial effort and personnel who can commit the needed time after the grant is over.

- Pipeline-building activities address the general issue of women's representation but may not provide a direct payoff in terms of faculty hiring at the institution itself. Moreover, the role of pipeline-building and outreach in ADVANCE projects has evolved over time as grant specifications have changed, so be sure to review the current RFP if you are preparing a proposal.

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