Many ADVANCE IT projects in Rounds 1 and 2 offered professional development in the form of workshops or trainings to improve faculty members’ ability to effectively and efficiently perform their jobs and to manage the multiple demands on them. In this Brief, we distinguish these performance-focused offerings from other interventions that may also share the goal of supporting faculty growth as professionals: coaching and mentoring programs that offer individualized guidance or advice, networking events, lectures and presentations, and individualized funding to faculty members to support their scholarly and creative work (see Briefs 2 and 3).

Rationale

Professional development activities addressed specific aspects of faculty’s research, teaching and service duties, or general skills helpful in conducting these. While the need for these skills and capacities is not specific to women nor to STEM disciplines, effectiveness in these domains is a necessary prerequisite for women’s advancement in the academy. Faculty development also helps the institution by building an effective faculty and developing future leaders. Some projects have targeted STEM and non-STEM women and men alike, with the rationale that “a rising tide raises all ships.” That is, addressing the skills and attitudes of all colleagues can promote a better workplace climate and establish an atmosphere of support in which all can succeed, without singling women out as if in need of remediation.

Other projects take the perspective that STEM women will benefit particularly from developing skills that are often absent from formal preparation for faculty careers and thus are commonly gained through informal socialization in networks from which women are more likely to be excluded. Finally, some faculty development needs are gendered because of the multiple responsibilities that women often hold as professionals and caregivers (Laursen & Rocque, 2009).

Purpose

To identify needs that can be addressed through faculty development, ADVANCE projects often conducted a needs assessment using focus groups or campus climate surveys. An extensive literature addresses the needs of new faculty (e.g., Boice 1992), while knowledge of the needs of mid-career and senior faculty is less well developed (Baldwin, DeZure, Shaw & Moretto, 2008; Laursen & Rocque, 2009).

Common topics included the following:

- Meeting tenure and promotion expectations; balancing research, teaching, and service
- Writing and public speaking: grant proposals, papers and books, responding to reviews; technical and public talks
- Managing time and stress: prioritizing writing, saying “no,” time management tactics
- Managing people: supervising students, managing a research group, dealing with conflict; gender, incivility, and bias
• Managing money: budgeting a grant, managing a grant post-award, university processes for managing money and hiring research personnel
• Communicating effectively: negotiating, dealing with conflict, difficult conversations, personality differences that affect mentoring preferences, running effective meetings
• Promoting and presenting yourself: crafting a CV, preparing a tenure/promotion packet, promoting your work to colleagues
• Career planning: long-term strategic planning, strategies for work/life balance, using your summer wisely, developing a research agenda

Teaching is an element of faculty work where professional development may also be needed, but teaching skills were not generally a topic of ADVANCE-sponsored workshops, perhaps because other units already offered teaching support at many campuses. However, aspects of teaching were incorporated in many of the topics above—for example, public speaking, problem-solving about gender and incivility, career planning, and time management.

Audience

Many workshops targeted early-career faculty whose job skills were developing. Others addressed needs of mid-career or senior faculty for new skills needed to advance professionally. Workshops were framed to appeal to different audiences, for example
• new faculty orientations;
• “research life” workshops for tenure-stream and research faculty who manage labs;
• writing retreats for mixed or disciplinary groups;
• a grant-writing assistance program that includes training, released time to write a grant proposal, and the obligation to submit a proposal; and
• planning for promotion to full professor.

Models

**In-depth programs** included both intensive, multi-day offerings in a short course or retreat format, and extended offerings with multiple sessions spaced over a term, a year, or even longer. These formats typically enrolled a cohort of participants who continued for the entire program.

**Shorter, “one-off” offerings** were often part of a series, each session lasting typically one hour to half a day, with open enrollment or optional participation. Individuals might participate in several of these over a year, but did not regularly convene with a steady cohort.

Both models were equally common at ADVANCE campuses; a few campuses provided offerings in both forms.

Across projects, planners emphasized the importance of engaging faculty in active learning with methods such as role playing, analysis of problem-based scenarios, panel discussion, small group tasks, small-group breakouts, and whole-group discussion. Offerings often included food and beverages to attract participants and foster informal conversation. Other design considerations revealed in examining faculty developing offerings within ADVANCE programs include the following:
• Time and timing: summer or academic year, intensive or extended, one-time or with follow-up, stand-alone or series
• Audience: general or targeted to a specific career stage; for women or open to all; targeted to a specific discipline, college, or all
• Building an audience: the philosophical message or framing; practical incentives such as food or a monetary stipend
• Facilitation: internal or external facilitators; use of existing skills and knowledge on campus; preparing a menu of workshops that can easily be repeated
• Complementary programs: whether and what other faculty development programs are available on campus already, and how new programs will address unmet faculty needs

Choices made in these areas influence not only how the workshop accomplishes its professional development objectives, but also shape the social or collegial side effects: for example, a secondary objective may be to build a cohort of support for individuals, to connect faculty across stages or disciplines, or to network faculty broadly.

Examples

Institutions created a variety of professional development offerings that answered these questions in different combinations. Below we describe a few examples.

At the University of Colorado Boulder, faculty professional development was a central and sustained activity for the LEAP project, Leadership for Advancement and Promotion (Round 1 IT). Three-day “introductory leadership” workshops offered twice a year during winter and summer breaks drew groups of 12-15 assistant professors to address topics such as managing time and stress, working with research and thesis students, strategies for prioritizing writing, and balancing research, teaching, and service.

Evidence from focus groups, immediate post-surveys, and follow-up interviews (Laursen, 2009, and reports cited therein) showed substantial benefits to early-career faculty—not only the targeted skills and knowledge, but new professional and personal connections that proved supportive over the longer term. At the end of the project, the workshops were institutionalized within the Faculty Affairs office, and new faculty hires were granted the opportunity to attend this workshop as part of their job offer.

At the University of Texas at El Paso, the IMPACT program was a cohort-based program in which faculty worked together over the course of a year to construct an integrated plan for their own career success. Cohorts of about a dozen faculty—half early-career, half senior—met for a week in the first summer, monthly during the following academic year, and again for a final summer meeting. The goals were to build community; identify creative ways to integrate research, teaching, and service; develop leadership skills; and develop a habit of reflection.

Evaluation data gathered from participants’ annual reports indicate that participants developed practical skills such as managing their work load and learning effectively, and they reported strong affective outcomes that supported their work as faculty, including greater self-awareness, positive attitude, and empowerment. The institution was perceived to benefit through development of future leaders, growth of collaboration and collegiality, and improved integration of new faculty as whole individuals into the fabric of the institution. The program was not sustained after the end of the grant, but elements were incorporated into leadership training for new chairs and into the mentoring program offered through the campus teaching and learning center.

The University of Rhode Island offered a year-long series of four or five Career Workshops targeting early-career faculty. Faculty were encouraged to attend the series but could sign up for single workshops. Topics were those relevant to building successful careers, such as teaching, grant-writing, lab and project management, negotiation, and communication skills.

The University of Washington offered quarterly, half-day workshops to department chairs and deans. Chairs were invited to bring an emerging leader with potential for leadership. These workshops have been
sustained through the university’s ADVANCE Center. Recent topics include running effective faculty retreats, recruiting and hiring for inclusive excellence, navigating generational differences, and models for faculty workload and merit review (see http://advance.washington.edu/camps/leadershipworkshops.html for topics and sample agendas), and UW’s ADVANCE Resource Library contains an extensive set of materials used in these workshops (http://advance.washington.edu/apps/resources/).

Evaluation

Approaches for evaluating professional development may include short pre/post or post-only surveys or focus groups to assess participants’ satisfaction with the workshop, advice for improving it, and immediate, self-reported gains. These are most useful as formative feedback to improve the workshop and monitor that participant responses are aligned with the workshop’s intended objectives. For one-off events, an “exit ticket” on a sticky note or index card may suffice to record one idea that the participant is taking away. For longer-term events, follow-up surveys, written reports, or interviews can probe how participants used the workshop material and what challenges they may have in applying it (Guskey, 2000). Summative evaluation data may be used to help in making arguments to sustain the program.

Affordances and Limitations

The affordances and limitations noted here are those observed in the context of ADVANCE IT projects in our sample. For more general issues, an extensive literature offers advice in designing, implementing, and evaluating faculty development activities, and most campuses will have faculty and administrators with expertise in this area.

In the context of ADVANCE projects, cohort-based, in-depth models have some advantages:

- They build a supportive network for faculty as they receive professional development.
- They mix participants across departments and schools, which can address isolation and provide safe outlets for faculty to share concerns. This may be particularly helpful to women and other “solo status” faculty (Roberson, Deitch, Brief & Block, 2003).

These models also had some disadvantages:

- They reach a limited set of faculty—thus, they have less net impact on large campuses.
- They may fail to engage faculty who most need such support, but who are reluctant to make what appears to be a greater time commitment.

Advantages of one-off workshops include the following:

- They are relatively easy to get started. Most campuses have people who already have expertise on many appropriate topics.
- They can draw new participants into the ADVANCE community, thus raising the project’s visibility on campus.
- They support faculty directly and thus build political support on campus. For this reason, it is useful to inform department leaders and deans of how the project is supporting specific faculty in their units.

Limitations of the one-off workshop model include the following:

- It may be difficult to detect whether they are effective. While faculty development can be argued to build the effectiveness of the faculty over the long haul, this is a long-term investment and harder to measure when the intervention is delivered in small doses.
- Faculty development models have been critiqued as not directly addressing the systemic and structural issues that constrain women’s advancement.

The use of outside facilitators can be a good way to get a faculty development program started, but is likely to be expensive in the long run. Professional development models become most sustainable when expertise on certain topics is developed in-house and distributed among multiple facilitators. Projects have been successful in sustaining faculty development activities through “train the trainer” approaches such as inviting past participants to become future leaders, involving faculty with relevant scholarly expertise, and building a portfolio of workshop activities and materials that can be used by various facilitators. Following the grant, some projects have housed these activities within the faculty affairs office or faculty development center.

References Cited


For Further Reading


Professional and Organizational Development (POD) Network in Higher Education. [http://podnetwork.org/](http://podnetwork.org/)


To cite this document


This research study and development of the StratEGIC Toolkit and other products has been supported by the National Science Foundation through ADVANCE PAID grant #HRD-0930097. Any opinions, findings, conclusions, or recommendations are those of the researchers and do not necessarily represent the official views, opinions, or policy of the National Science Foundation.