An Assessment of Faculty Development Needs at the University of Colorado at Boulder

A Report Prepared for the LEAP Project

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Executive Summary

Evaluation interviews with University of Colorado at Boulder faculty conducted for the LEAP project (Leadership Education for Advancement and Promotion) yield a wealth of data about faculty concerns that inhibit their effectiveness and reduce job satisfaction. These problems are grouped into two categories. "Faculty development needs" are those where institutional solutions may be imagined that enhance the knowledge, skills, and capacities of individuals. We also identify a set of "systemic problems," where a broader range of strategies—including changes to policy, procedures and cultures as well as faculty development initiatives—will likely be required.

This report focuses on the professional development needs of tenure-track faculty and identifies six main categories of needs among over 300 observations made by faculty in the interviews. About 40% of these needs statements are specific to faculty career stage. The needs of pre-tenure faculty emphasize developing skills, making the transition to their new role, and managing stress. Financial concerns were very significant for some individuals. Later in their careers, faculty seek different types of skills, advice on long-term career planning (especially soon after tenure), and opportunities to explore leadership and administrative roles. The remaining needs cut across faculty career stages, and these emphasize: improved departmental leadership and communication; cross-generational and cross-departmental community-building; and support and encouragement for the pursuit of diverse career paths that evolve over time. These concerns are tabulated and described in detail in order to provide guidance to institutional faculty developers.

Observations about the second type of problem, systemic concerns, are even more substantial in number, at over 700, than those about professional development needs. Two threads predominate: concerns about the faculty reward structure, and the problem of work/life balance. These and other systemic concerns are also tabulated and described, in less detail because they will be the subject of other reports.

Taken together, these observations are offered as an indication of where institutional resources—including but not limited to faculty development—may best be directed to improve the effectiveness, advancement, and satisfaction of the university's faculty.

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I. Introduction

A. Scope of this Report

Leadership Education for Advancement and Promotion (LEAP) at the University of Colorado at Boulder (UCB) is an NSF-funded ADVANCE initiative for "institutional transformation" to increase the representation of women in leadership positions in the STEM (science, technology, engineering and mathematics) fields. Faculty development is the central change strategy selected by the LEAP program, and LEAP shares with most faculty development efforts the assumption that the faculty member is "the driving force behind the institution—therefore, assisting that person to be as productive as possible will make the entire institution more productive" (POD 2002). LEAP has exerted its efforts through two major programs, leadership workshops at introductory and advanced levels, and a coaching program, both offered to faculty not just in STEM fields but in all fields at the university, and to men as well as women.

As part of the evaluation for LEAP, we interviewed participants in LEAP's coaching program and leadership workshops from 2003-2005. Drawing on that interview data, we previously described LEAP's change strategy and reported the outcomes of LEAP programs for participants, their suggestions for improvement, and their views of the project's goals and strategies (Laursen et al. 2005, cited hereafter as "Outcomes"). We present here additional findings from those 51 first-round interviews,[1] broadening the perspective to describe findings about the wider career development needs of UCB faculty. Some useful lessons learned from the LEAP programs will be reiterated here where relevant.

In the interviews, in addition to information about specific LEAP programs, we also asked interviewees to suggest other faculty development offerings that LEAP or its campus allies might provide, and to identify their own needs for future career development as they perceived those needs from their current career stage. Thus we have information about a range of faculty development needs reported by faculty, both pre-tenure and tenured, across varied career stages and departments. This report is provided as guidance to the LEAP organizers as they undertake to broaden and institutionalize LEAP's work, as a service to campus faculty development officers and providers as they refine and expand CU faculty development activities, and as advice to others considering faculty development approaches to institutional change.

B. Definition of Faculty Development Needs

In discussing with faculty LEAP's activities and goals, and the broader aims of the NSF ADVANCE program for institutional change, a wide range of faculty concerns came to light that may be broadly gathered as "campus problems we'd like to see solved"—from specific individual needs, such as better library resources, to cross-cutting concerns about diversity, changing faculty roles, and the direction of higher education as a whole. Transient issues were also raised, such as concerns about CU's football scandal and a series of administrative resignations that took place during the interview period. While faculty views of all of these campus problems are informative, clearly these problems are not all of the same type.

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[1] All frequency counts come from first-round interviews. Some quotations are chosen from second-round interviews. Details of the interview study's approach (pp. 12-13), methods (pp. 15-17), and sample (p. 19) are given in the Outcomes report (Laursen et al. 2005).

In defining the content of this report, we categorized "faculty development needs" as those problems that might be solved by generating, publicizing, and applying resources that focus on enhancing the career progress, skills, or capacities of individuals. In this respect, our empirical definition of faculty development largely agrees with the more theoretically grounded definition of the Professional and Organizational Development (POD) Network, the principal professional organization for faculty developers in higher education (POD 2002). The needs reported here include faculty needs as teachers, scholars, and persons. POD also demarcates two other arenas sometimes included with "faculty development": *instructional development*—about which we gathered little data in these interviews, but which is a central area of activity for campus groups such as the Faculty Teaching Excellence Program (FTEP) and the Science Education Initiative—and *organizational development*, which arose in our data as interviewees discussed campus needs for development of department chairs and departmental communication skills. Activities undertaken by faculty developers may include training (e.g. workshops or institutes), other group activities (e.g. reading groups or seminar series), internal grants, stipends, and course releases, special opportunities (e.g. the chance to try on an administrative role), and other models. In sum, the issues described in detail in Section II are needs to which we can envision solutions that are *institutionally* organized but that target career enhancement of *individuals.*

Some of the other problems identified by faculty in our data may also be addressed by institutional initiatives, but of other types—for example, the need for low-cost, campus-based, child care. Some will require much broader cultural and systemic change— for example, increasing the diversity of the faculty will require a broad and coordinated set of linked strategies (Turner 1998). By separating and focusing on faculty development, we run the risk of limiting creative thought about how to solve these systemic, often harder, problems. We thus summarize these other types of problems noted by faculty separately in Section III and invite institutional leaders to consider them as well. Our categorization of some problems as soluble via faculty development does not necessarily imply that solutions are simple, ready, or inexpensive to implement. Nonetheless, in the context of today's changing academy, faculty development is still "essential for the success of both individual faculty members and the institution as a whole" (Sorcinelli et al. 2006, p. xix).

C. Limitations to the Applicability of the Findings

The data was gathered as part of evaluation interviews for the LEAP project, which covered a range of topics, from specific responses to the LEAP activities to broad discussions of institutional change (see Outcomes pp. 16-17 for a list of topics addressed in interviews). The following caveats should be kept in mind when interpreting the findings presented:

- The interview sample represents a broad group of men and women across disciplines and career stages. It is not necessarily representative of all opinions on faculty development, because it is drawn from participants in an existing faculty development program. However, for this very reason, we argue that the sample reflects a helpful faculty perspective, one that is generally supportive of and thoughtful about faculty development.
- Participants in the LEAP workshop, and thus the interviewees, were nearly all drawn from among the tenure-track (including tenured) faculty. The concerns noted here do not reflect the needs—both overlapping and distinct—of non-tenure-track research and teaching faculty, who are both numerous and significant in contributing to the university. Findings from the

Career Pathways Study, a research project also supported by LEAP, will be discussed elsewhere and will address these needs, among other issues.

- The phrase "faculty development" was often assumed by interviewees to mean workshops, perhaps because many participants had participated in the LEAP workshops. Workshops are one of several possible strategies.
- Because the LEAP initiative and its evaluation focused on women's leadership, discussions of diversity and leadership are likely more frequent in this data set compared to what might be expected from interviews conducted with a broader scope. This is by no means to dismiss the keen importance of these issues.

II. Faculty Development Needs

A. Faculty Knowledge of Existing Opportunities

While the bulk of this report describes unmet needs for faculty development, there was some awareness of existing faculty development opportunities on campus. A small number of faculty observations (16, compared with 311 statements about needs, discussed below) addressed faculty use or impressions of these opportunities. A few additional observations mentioned off-campus faculty development programs, such as leadership training offered by disciplinary associations. FTEP was the specific program named most often. While FTEP's activities were viewed positively by those who did participate, low attendance was also reported. Also mentioned were new faculty orientation and a year-long, FTEP-sponsored program for early-career STEM faculty.[2] Even if they were aware of faculty development programs, many respondents were unclear about the origins of particular programs, as the following rambling description exemplifies.

> You know what? There is something at the college level that does exist, now that I recall. There's a yearly thing that assistant professors are invited to and… Susan Kent does it, so it's not… she's not just Arts and Sciences, I think—she might be. But if she isn't, then she at least has these divisions at college where she presents what goes on and where you should be. She invites members of your primary unit evaluation committee if they want to come, and in fact, you don't even have to go. I've been once and I'll probably go again at some point. But there is something at least, once a year. Yeah, this vice chancellor or whatever she is, this entity in the administration presenting things, and it's not [getting] us all into a group and… talking things out, what's going on and that stuff. It's more like, "This is what you should do," which is fine. That could co-exist with something else. Whether that something else would work or not, I don't know. What she does, I think, is very useful, just in explaining the procedures, and making very clear what's going to happen.

Lack of clarity about the sponsorship of various faculty development activities may not prevent participants from finding value in them, but does suggest that faculty are unlikely to know where to look on campus for faculty development opportunities. Two comments also noted concerns with the common model (assumed by speakers as the primary model) of group-based skill development in workshops: one person preferred a one-on-one approach, and one wanted a chance to practice new skills in her own setting, then come back for a follow-up session.

Overall, comments on existing faculty development activities indicate that, while individual activities are valued, awareness is not high and campus-wide offerings are not extensive,

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[2] The Area Scholars Program was also offered in other disciplines. It has been reconfigured and now focuses solely on teaching, assessment, and integration of research with teaching rather than the full span of junior faculty concerns (M. A. Shea, personal communication 8/2006).

complete, or coherent. Indeed, it can be argued that the LEAP workshops were received very positively (Outcomes p. 8) in part because relatively little else was on offer.

> I try to keep a close ear on things and that was the only other thing. There was [FTEP's Area Scholars program] and up until LEAP there was nothing in between. I mean, the little FTEP workshops here and there, but… [they're] topic-driven, specific. I mean, they're very helpful, but there was no continuous development system.
>
> There's lots of programs for young faculty but I don't think there's been a lot of reflecting back on how those affect young faculty.

Moreover, nearly all the programs mentioned were directed at the concerns of newer faculty. While helping newer faculty to become established is clearly important, the faculty development needs of senior colleagues are also significant, as discussed later.

B. Overview of Faculty Development Needs

A larger body of data—311 observations in all—addressed specific, unmet needs for faculty development. Most of these observations fell into six broad categories—three categories that reflect the varying needs of faculty at differing career stages, comprising 39% of the total:

- Needs of pre-tenure faculty for making the transition to new roles and achieving tenure;
- Needs of earlier-career faculty (assistant and associate ranks) for specific skills;
- Needs of tenured faculty for post-tenure career exploration and growth;

plus three that were raised by faculty across career stages, comprising 58% of the total:

- Needs for strong leadership and effective processes within departments (24%);
- Needs for intellectual community and interaction among faculty across campus (24%);
- Needs for new views to support faculty career development over time (9%).

These observations are enumerated in Table 1 and each category is discussed in detail below.

Table 1: Faculty Development Needs Reported in LEAP Evaluation Interviews

Type of need	Number of observations	Percentage of all observations
Needs specific to faculty career stage	***122***	***39%***
Needs of pre-tenure faculty	**57**	**18%**
Making the transition to the faculty role	14	
Specific skills: Working with graduate students, teaching	20	
Preparing for tenure	6	
Financial issues	17	
Needs of early-career faculty (assistant and associate professors) for skills	**15**	**5%**
Needs of tenured faculty	**50**	**16%**
Post-tenure career exploration and advice	24	
Opportunities to “try on” administrative roles	26	
Needs across faculty career stages	***179***	***58%***
Better life in departments	**75**	**24%**
Training and support for department chairs	49	
Communication skills to support improved collegiality and civility	26	
Collegial interaction and community	**76**	**24%**
Reduced social and intellectual isolation, increased intellectual community	38	
High-quality mentoring	18	
More interaction between pre-tenure and tenured faculty, especially across departments	20	
New approaches to faculty career development: long-term perspective on career growth, more flexible models for faculty careers	**28**	**9%**
Miscellaneous needs	**10**	**3%**
All needs	***311***	***100%***

Table 1 shows six major categories of needs. The narrative is organized according to these categories, but in a different order than shown in the table. In Sections C and D we begin with two of the largest categories, which cut across career stages. These two thus help to frame the career stage-specific needs that are presented next (Section E, 1-3). A small group of miscellaneous needs is discussed in section F. The last category (Section G), new approaches to faculty career development, also serves as an overarching theme and a link to the systemic problems discussed in Section III, and has been placed last for this reason.

C. Development to Improve Department Life

Needs centered on the functioning of departments were among the most often mentioned, at 24% of all observations. These include two main topics: development of the leadership skills and knowledge of department chairs, and development of department members' collective skills in communication, mentoring, and other areas. Bilimoria et al. (2006) note the importance of the department as a mediating link between institutional characteristics—faculty members' experiences of leadership and mentoring—with the job satisfaction of individual faculty. They find that a "collegial, inclusive, and respectful immediate work environment" (p. 357) is a more important factor in job satisfaction for women faculty than for men. Thus strategies to improve departmental life may also address the broader goal of retaining a diverse faculty.

1. Chairs Training

As seen in Table 1, better training for department chairs was the single most-mentioned faculty development need, at 16% of all observations. Nearly a quarter of these observations explained why the chair is an obvious target for faculty development, due to their central role in the department and influence on individuals and the department as a whole.

> Okay, department chairs are a key position. It's a thankless task, let me tell you. (laughs) But we're in really key positions to have an impact on faculty on the ground. And then we need support. So there needs to be some kind of an understanding of, if you're gonna do this, you need some support.

Because of this central role, this speaker suggested that chairs were also a key target for ADVANCE projects seeking change in women's representation within institutional leadership.

Department chairs are important targets because they allocate resources and play influential roles in hiring, advancement and promotion. While this quotation cites women's careers in particular, the same factors apply to the success of any new faculty member.

> So what are the key factors that affect women's careers on this campus? It's access to resources, it's merit increases, it's start-up packages, it's laboratories, it's access to libraries, it's… travel funds…. Those are things that department chairs, and deans also, have an impact on.

In addition to controlling resources, chairs set a tone, both in overt messages and through their behavior. As the following examples show, chairs communicate—consciously or not—departmental expectations and norms for a wide range of issues: work style and departmental presence, balance between work and personal life, and decision-making processes.

> They kind of expect her to be in her office all the time. And I know that our new chair seems like that too… he likes to be in his office and he likes to work in his office, and he thinks other people should work in their office a little bit.

> [My chair] doesn't work on the weekends. You know, he goes home. He has to leave at a certain time 'cause he has to pick up his son for gymnastics.

> And the previous chair, he was very, very much into warm and fuzzy from everyone, let's do this as a group, let's all feel good about the choices we make. And the current chair is a very, very driven, …strong personality and she wants, you know, 'Let's make this decision and then we're gonna tell everybody that's how it is.' So it's a very abrupt change in this leadership style from chair to chair.

Chairs are also an efficient target for university resources, because they are in a position to lead change across the department as a whole.

> I would like to say that this part about making chairs training compulsory, is an exceptionally good idea. And long overdue. 'Cause now that I think about it, that is the way to get to tenured faculty. …Chairs are

> often in a position to make a lot of changes if they want to. And I think something like this might help them, might make them more likely to do it.

Lastly, chairs training was seen as a signal of institutional commitment to improvement, because chairs would be required to participate: "That would be a more broad-based, institutional commitment, right? Because you're going to have to effectively impose that on people."

Chairs are seen as crucial bridges between "top-down" and "bottom-up" change strategies—chairs can lead change at the department level, but if not encouraged by the university, they may not bother to do so. Skills training plus incentives or recognition for leading change were together seen as necessary to enable chairs to lead change.

> Well, why don't chairs do this? [initiate change] And they don't. And it's because it's not rewarded. And you can force… it's possible for the university to force them to do it. …But it'd be even better to reward them for doing it.

Both chairs and faculty non-chairs recognized that new chairs needed new professional skills and knowledge, in areas they could not fully anticipate and had not previously developed.

> It would be, I think, wonderful if people went into it realizing that they had to develop some skills. I don't think there're very many people that I've seen in department chair-kind-of roles who are naturals. Particularly in departments where it's one of those things that's an expectation and it's kind of rotated from person to person.

A few specific topics were recommended for inclusion in chairs training. One incoming chair expected to need conflict resolution skills. Another had been surprised by how often personnel crises inhibited his ability to pursue longer-term projects, suggesting that time management, goal-setting, and prior awareness of this aspect of the role would be helpful.

> Learning to separate the critical from the non-critical, learning to figure out ways to deal with stress, whether it's appointing an associate chair, or other kinds of things, I think is important, is helpful.

Chairs were expected to advocate for their department, but then to shift to a broader, college- or university-wide view if they moved on to a senior administrative role. Participants in the advanced LEAP workshops noted the value of sharing experiences with other chairs, both for learning other approaches to problem-solving and in dealing with stress. In short, the multi-faceted role of the chair—and the many skills required—were summed up by this speaker:

> I think being a faculty member is one of the most complicated jobs I can imagine, because you have all these areas of responsibility. There're easily 40 or 50 different things you have to be an expert on. From advising students and doing research and teaching a class—and I think being a chair is like triple that.

Positive qualities of chairs that were mentioned included "fair," "open-minded," "ethical," "takes time to listen to people," and "looks out for young faculty." Listening skills were especially important, as this chair articulated.

> I do like to talk, (laughs) and as chair, a lot of times it's not my job, it's to listen. …I certainly have learned it on the job—a lot of, especially faculty, and staff occasionally, just need to talk. They don't necessarily need anybody to fix anything. They perhaps know intuitively that it's nothing that can be fixed immediately, but they *do* need somebody to listen to them empathetically. And I've realized that that's a lot of my job. And even *more* important in those situations, to keep my mouth closed. Because they may not be coming in for a solution. They just need to talk. And for a lot of people, also—and I do this occasionally too—they need to talk in order to come to their own decision about how to take care of X.

Whether and how traits like these can be developed among prospective chairs is a matter for discussion with experienced chairs. The agenda for a brainstorming session with such a group

might be to identify strategies and topics for increasing chairs' skills and knowledge, and reward structures that would foster effective chairing.

Several speakers also mentioned changes of chair as a challenging time for departments, both a problem and an opportunity for leadership development. Difficulties arose when chair succession was not planned or prepared-for; and when senior faculty did not assume their fair share of chair duties.

> I feel like it's part of the duty once you become a… tenured or full faculty member, that you have a responsibility to take the leadership for a few years. …And there is some resentment against people who have been here for thirty years and have never been chair, and keep coming up with excuses why they can't become chair…. "I live too far away," "Oh, I have a new grandson," or, you know, things like this—"My wife's too busy, I can't."

Several chairs described the steep learning curve of a new chair. The following example offers one department's model for developing leadership talent within a department as well as assisting in an orderly transition to a new chair already partly up to speed.

> I've got, now, two associate chairs, and specifically I'm targeting them at people who I see as future department chairs. So not just, "Oh, you assign the courses and the TAs, and when I can't go to a meeting, you can go," but it's like, "No, these are the responsibilities that you're gonna have and you're gonna meet with the executive committee and.…" Then they're somebody who probably could step into a chair role with even less, less trouble than I had. And I really want to encourage a climate in the department where there's going to be three people who could replace me... and I'd like to get those people identified by the end of my third year. So, then we don't just have to hastily pull things together in February.… We can start talking seriously about those people thinking about being chair, have an election, and have a lot more overlap for the next position, so. You know, those are the things that you never thought that you'd get into thinking about until you take that position.

This model could be readily extended to other departments and shared, along with other successful models of chair succession, as one topic for chairs training. Indeed, we encourage the use of peer education as a strategy for this group. Data about benefits of the LEAP workshops indicated that senior faculty in particular found great value in hearing about peers' experiences (as women; in leadership roles; coping with particular problems; etc.) (Outcomes pp. 45-46), and this is a low-cost and effective use of local human resources.

Several observations described risks to a faculty career of becoming chair. The time demands required faculty to back off or give up their research program. Given the emphasis of university reward structures on research, this could have negative career effects for the individual, yet keeping research going and reducing attention to the chair's work was negative for the department. This risk is not unique to women chairs, but may be greater for them: one interviewee, a senior woman in a STEM field, saw a double-edged sword in ADVANCE program goals to increase the number of women chairs.

> *Interviewer*: …I think you're bringing up an interesting point, which is the stereotype, and maybe there's some truth to it, but women tend to be more group-minded, civic-minded for the good of everybody. But what you're saying there is that…
>
> *Professor*: There's a stigma associated with… you know, if you think about it too, I think there's going to be a tendency for a lot of women to end up being department chairs and when that happens… it will be seen as kind of a step down, because it will be seen that they are doing it out of a service thing, and in order to do it they will be giving up their research, which of course is the highest goal of everything. So if you look around now—I think recently there's been a big increase in the number of women department chairs—it could be a bad thing because of this idea that they're doing service rather than focusing on their research.

> (continues) And the other issue I have, which is kind of hard, is the people that say they're going to maintain their research while they're dean or department chair. I don't think they should. That's not why they're there. I understand why they want to do it from a selfish point of view, because that is the highest goal, of course, of all of us, but it doesn't make them the best administrators. But the down side is, if you have this sort of service/administrator quandary, then they are of course of lesser stature in the university system. It's a tough line. I mean… you have to appear to be this reluctant leader in order to be really valued, right—"Well, I don't really want to do it because my research program is so important."

This concern is not unfounded: it is well-documented that the entrance of women into a field coincides with its reduced status (Reskin & Roos 1990; Reskin & Padavic 2002), though the direction of causality is still argued (England et al. 2004). Gender schemas (Valian 1998) may frame a woman chair's work as service instead of leadership—therefore reducing the status of this role when more women take it on. Other interviewees also raised the problem that focusing on placing senior women in department chair positions may reduce their other leadership roles, such as in scholarly work and mentoring: "What you're doing is taking women who have been successful at scholarship, out of scholarship, and is that what we want to do?" This concern has been noted in other ADVANCE projects (Sheridan et al. 2006).

Women chairs noted that they were treated differently by colleagues than were male chairs. This chair shared a realization made after conversation with two other women chairs.

> *Chair*: It's hilarious sometimes, when you compare notes… there's always one or two guys who are kind of the self-appointed harassers of the woman chair. (laughs) …You know, somebody becomes the arbiter, kind of your informal advisor. (laughs) Which you don't need. And it's a nightmare to deal with that person, 'cause they're coming in with some attitude of authority…. It's always been somebody who's been around forever—"I'm the institutional memory of this department and I'm gonna tell you, you're gonna *fail* if you don't address the following nine things. And what you're talking about doing that's important isn't really important, these are the things that are important." And you *know* they wouldn't do the same thing to a man chair, a male chair.
>
> *Interviewer*: They don't come in to every chair, every new chair, and try that?
>
> *Chair*: No, they'll come in to new chairs and ask for stuff. That happens to every chair. But this a different one, this is, [he becomes] the conscience of the chair. It's sort of like, "Well, you probably don't know how to do it, and therefore I'm gonna help you figure out what it is you need to do." Yeah, so there's an element of the spokesperson for the department rather than, you know, I'm just coming in to get stuff from you.

In sum, the chair role is perceived as a critical one, both by chairs and by other department members of all career stages. Investment in training for chairs is seen as a good place to target resources and to effect change. The literature concurs on the importance of the chair (Bilimoria et al. 2006 and references therein). Literature on chairs' preparation is reviewed by Yen et al. (2004) and some models and resources are suggested in Appendix A.

At the same time, however, some interviewees cautioned that chairs are a challenging audience. It is important to identify, involve, and solicit support of key opinion leaders among the faculty, so that the activity is seen by others to have merit. "A [scientist] doesn't listen to anyone not in the National Academy," suggested one speaker with a chuckle. Speakers also recommended recognizing, drawing on, and rewarding local expertise—"use the Rolodex"—rather than importing outside expertise, although the latter may also bring attention to the issue. It may be important to couch offerings to chairs in terms of leadership development rather than "training."

2. Improving Departmental Relations

While chairs were identified as central to improving departmental life, improved relations among all department members were noted in 8% of observations. As one speaker noted, "A lot of the things that make people's lives difficult in academia go on at the departmental level."

Problem areas mentioned by respondents included "turf" battles involving groups of faculty, "hazing" of newer faculty by senior colleagues, faculty who monopolize meetings, and posturing that takes place to obtain resources, such as at annual review time. Mentoring of pre-tenure faculty was highly variable, effective in some departments and nearly absent in others (Outcomes pp. 58-59). Most suggestions for improving these interactions centered on communication. Skills that were seen to be important in departments and other small-group settings include:

- Listening and responding to expressed concerns;
- Working with colleagues long-term, including learning from experience how to work with individuals while not holding grudges: "You are working with the same people on a series of different committees. If… you can't get along with them, then you're not going to get anywhere on the committee."
- Knowing how and when to work through "back channels" vs. in public meetings;
- Leading meetings effectively, including setting agendas, managing time and group dynamics, separating work best done by committee vs. by individuals outside of meeting time, and not calling a meeting when there is no group task;
- Participating effectively in meetings, including being actively involved, concise, and getting one's point across effectively.

> People look at how you work in that meeting setting, right. If you can't make your point. If you back off immediately when someone pushes against you. If you don't even... come to the table and make a point of agreeing or disagreeing, possibly because you find the whole thing so distasteful. (laughs) Then you *are* going to be disenfranchised because you won't be asked to be back on it next year, you won't be recommended for another committee, and what you have to offer won't be brought to the campus community.

- Managing or limiting poor behavior by others in meetings, including deciding whether and how to challenge this behavior:

> Are you willing to spend your time and energy against a butthead? And that butthead could, at any point in time, be a dean, a provost, you know, somebody [in administration], a full professor who's got a Nobel prize, or a MacArthur prize or whatever—but from your perspective they are dominating the meeting, they're keeping other people's opinions from being heard. An opinion that they don't agree with comes up and they shut 'em down—and you have to decide whether you're going to engage in that.

Other observations noted the benefits of improved communication in departments, including the inclusion of a larger number of perspectives on important problems, development of broader, shared views of leadership, greater appreciation of different ways to be a leader, and improved department morale.

On the whole, communication was seen as an important but undervalued skill in academe. When communication skills were offered to individuals in the LEAP leadership workshops, they were well received and valued (Outcomes pp. 36-38). LEAP also sponsored a few experiments with a departmental workshop on communication, for example, a session held by Geological Sciences when it embarked upon its five-year review process. We did not evaluate this workshop, but

spoke with a few participants whose accounts were more positive than not. When discussed in subsequent interviews with other respondents who raised issues about departmental communication concerns, however, this workshop met with only moderate interest as a possible model for tackling departmental communication skills. While the goals and spirit of this approach were seen as laudable, practical concerns were raised about whether faculty would attend and take it seriously. Some felt that a lower-resistance path was to offer communication training to individuals, so that a "critical mass" of individual participants with leadership skills would eventually prevail in departmental settings.

D. Intellectual and Collegial Interaction

A second category of strongly felt need across faculty career stages was the desire for greater collegial interaction, comprising 24% of all observations and falling into three sub-categories.

1. Reduced isolation and greater intellectual community

Isolation—both social and intellectual—comprised half of this category, with a total of 38 comments (12% of total). Untenured faculty in particular referred to a "sink or swim" mentality: "Here's your office, we'll see you in seven years—maybe (laughs)—and have a nice trip." Isolation was seen as a natural consequence of the inherently solitary nature of academic work, and built into the tenure system, where it was assumed to be necessary to separate oneself from others to establish one's scholarly contributions.

> You're supposed to be an independent, established researcher and you've had to have gone out there and made a name for yourself—so it's really geared into the system. …You are supposed to have shown that… you have evolved… from your graduate peer group and you've gone off into your own world and you have in fact broken ties that you made in the past. So I guess my answer is that it's really entrenched in the whole academic world….

Indeed, as one interviewee noted, new faculty are explicitly hired to be specialists in fields different from their colleagues—thus limiting *a priori* the possibilities of specialized intellectual interaction within their department. While broad coverage of their discipline may be useful for the department, such isolation was seen to be counter-productive for the university as a whole.

> The way people talk about what makes a scholar, a tenured scholar, is very individual. You have to point to a person's unique contribution. Now this, I think, is a very unusual thing to think about, and it runs counter to the model of the way labs work. And it also runs counter to... (sigh) ...best business practices, where so much of it is team-oriented. You don't want a university that's built of people who work alone. You want a university where people are colleagues and where they can be part of a collective and make a contribution that way.

Although isolation was seen as rooted in academic culture, interviewees often expressed their own experience of it as a social and emotional need—for friends, social life, or moral support.

> We didn't really have any friends in the area and… we didn't really know anybody and it was a little bit isolating. And nobody in my department was very friendly, but I guess I didn't really expect them to be, because they were all quite a bit older than me, and well. The other people my age had kids or were busy with other things….

Yet the connection between personal isolation and career success was direct: support "is very, very important for our mental health, which is going to increase our productivity," said one speaker. Several others described how social networks had been helpful to them: their networks helped solve problems (often through exchange of ideas or sharing solutions), boosted morale, and reassured faculty that their troubles were not unique.

> You need some kind of support group, and I think it is absolutely required. I go through these phases where I get this boost of energy, and then things wear me down and then I run into somebody who has the same problem. We talk about it, we share ideas and that sort of gives me hope, and then I go back and try that. And without that, that kind of support, I wouldn't be here.

This is not to suggest that the role of a faculty development office is to help faculty make friends. However, faculty development activities can help people build networks and identify like-minded colleagues, and these improved intellectual and personal connections can increase faculty retention and productivity. Topical activities can be structured to support collegiality and networking at the same time as they provide information, and drawing people together initially over a common interest may enable them to build longer-lasting connections. Several examples of connections thus forged emerged from the data—lasting relationships, both personal and professional, developed in the LEAP workshops themselves (Outcomes pp. 38-41); a grant-writing workshop initiated by one assistant professor; a cross-disciplinary reading group that led to a conference presentation; instances of help given and received from colleagues outside one's own department. The benefit of these interactions was seen to extend well beyond the initial contact: "Once they're networked in, something comes up, and they know to call somebody."

In addition to comments about "isolation," roughly one-third of comments in this subgroup specifically mentioned a need for greater intellectual community, distinguishing this from their more general support needs. "While socially I get along really well with everybody here, there aren't a lot of people to have meaningful, intellectual interactions with."

These faculty wanted to meet others with similar scholarly and teaching interests—perhaps outside their discipline, but overlapping in other ways. This problem was seen as particularly serious on this campus and compared unfavorably with other institutions speakers had experienced: "CU is just like way low on intellectual community as an institution." Many statements about intellectual community came from faculty with interdisciplinary scholarly interests and in small departments. One newer faculty member pointed out that she was the only person in her specialty in her small department, so had no colleagues there with shared interests.

> I found… intellectual companionship, but I found it in other departments with people who are drawing on some of the ideas and the same text, but using them in very different ways. And that's been really exciting, but long-term I would also prefer to have more, more intellectual community on campus.

Scarce resources were suggested as one local reason for this problem—inhibiting, for example, the number of outside speakers and interdisciplinary centers that could be supported—as was the absence of a faculty club as a place for faculty to gather informally.

> I do think that can be a positive way [to encourage interaction], if you have a faculty center—if that's where *everybody* went that you are actually seeing, instead of all the e-mailing. Seeing people that you happen to run into, in different departments, so you start talking with them, or [about] something that you're working on. It's more of a norm that that's where you are going where colleagues are interacting.

Others highlighted the importance of colleagues who set a tone of intellectual generosity and take leadership in fostering connections among faculty and students: "I think you've got to care about community first and not just care about yourself and your own research career." One assistant professor gave the example of sharing successful grant proposals with newer colleagues. She was surprised to find that such sharing was not common practice.

> What's been surprising to me has been learning that people aren't sharing that sort of resource with one another. I had assumed, coming in, that it was standard practice to share. And I mean, I would ask senior people to share their material with me and remember some sort of awkward silences afterwards….

She went on to describe why this openness did not threaten her intellectually.

> I really don't think people can just steal each others' ideas. I mean, the ideas are out there, and you're either gonna put them together in a way that makes sense and makes your project look interesting or you're not. (laughs) It's not like there's somebody has some secret recipe, you know. (laughs) And I guess I think sometimes that's what people are worried about, and that has just been a surprise. I guess another important part of this story is that I had a fantastic woman mentor who was really committed to the idea of sharing resources and never seemed to approach intellectual exchange from the perception of shortage. There was always enough to go around, and that is contagious in a positive way, you know.

Others too saw a need to develop a culture of collegiality, defined by one speaker as:

> …support for doing the things that are low priority but matter. Reading a lot, having coffee with your colleagues, having faculty reading groups. I'd like to see us pushing less. I'd like to see a lot more positive social pressure on doing that kind of work.

In sum, greater intellectual community, and the social networks that this fostered, were seen as an important need by faculty across career stages. They suggested mechanisms to develop it, but even more importantly, wanted it to be recognized and taken seriously.

2. Mentoring

Mentoring was a particular type of collegial interaction discussed in 18 comments (6% of total). Many interviewees had informal mentors whom they had found themselves here or with whom they maintained a relationship at another institution. Formal mentoring arrangements in departments were quite variable in both structure and utility, ranging from highly organized to informal to nonexistent, assigned to chosen, and positive to unhelpful. These observations concur with the findings of the recent tenure review committee (Schafer 2006; ACTRP 2006). One interviewee noted the risk of choosing a mentor in a department that was divided along ideological or methodological lines.

> When I came into the department, the junior people refused to pick mentors because that was putting you on one side or the other. (laughs) So, you know, the university requirement that you're supposed to have a mentor in the department, that was like fraught with danger. Some of those things that are supposed to help us can also be difficult, and that was certainly one.

Despite these shortcomings of the system, mentors were seen as helpful: They could help teach survival skills; give advice about publishing; help faculty select appropriate service activities and decide when to say no; discuss practical and philosophical matters. Several speakers relied on different mentors for different activities, e.g. teaching and research. Qualities of a good mentor included: good listening skills; experience with the university, including navigating its systems; standing in one's field; and most importantly, genuine interest in the mentee. Mentors should not just support but also actively encourage: "Wouldn't you want to do this? You'd be good at it."

> *Professor*: It takes commitment, it takes follow-up. …It takes a certain level of honesty, it takes integrity, because you want to be around somebody who wants to be around you, first and foremost. You also want to be around somebody that you can respect, and that you really do want to learn from, but you also want to be around somebody who doesn't know everything, who wants to have an exchange to help you. 'Cause you're not trying to be like that person, you're trying to be yourself—but you want the other person to help to figure out what that is.
>
> *Interviewer*: Right, not just somebody to just simply tell you answers, but to help you work through it.
>
> *Professor*: Yeah, I mean, so for me the best coaches that I've ever had were people that never tried to tell me that I had to be exactly like them. But they are more or less interested in what it is that I'm facing, and

> then can offer me suggestions or strategies as to how to go about or to go through it, but at the same time may have already gone through it themselves. So there's a story behind it, there's a feeling behind it.

The mentor should be responsive to the individual's goals, not forcing them into a one-size-fits-all mold, and should see the task as helping a person rather than improving retention statistics.

> If somebody is going to be a mentor or a coach, it's not about achieving the institution's goals. That's not what this is about. …The ultimate goal is to become the best possible person that you can *be*. …I understand that the goal is to produce [successful] tenure-track faculty members, but at the same time I think that the ultimate goal for a coach should be to try to develop that person's characteristics and personality [traits] to make them better people—and they'll carve their own goals out.

Several interviewees noted the distinction between a mentor and a coach, a point discussed in the LEAP coaches' training program (Outcomes p. 58, see also pp. 62-63). A mentor was seen as someone to emulate, a role model as well as advisor, while "a coach recognizes somebody's ability and recognizes somebody's skill capacity, and then will try and help to develop that skill capacity or that ability to achieve the ultimate outcome." By this definition, pre-tenure faculty can coach, but not mentor, each other: "We're peers. Our personalities are totally different; but as a coach I can try and pull out her best qualities and show her how to use them." One speaker suggested that coaching was an easier role for faculty to take on—a "guide on the side" who did not incur the same obligations as did a mentor.

> When they stop calling it mentoring, people might be better at it. Because a coach and a mentor are… different, because coaches do things that are different for their players, when you think about it. A coach is not only there to help guide or to teach or to instruct, but the coach is also there to instill enthusiasm, instill a sense of 'you can do it' kind of, to help instill attitude, and that's very different…. A coach also knows that his players sooner or later will learn how to play the game and will need to move on.

Perhaps wider use of the term "coach" would broaden responsibility among faculty to coach each other. However, the term "coach" was felt by a few to be paternalistic, possibly stigmatizing, thus contributing to assistant professors' reluctance to sign up for the LEAP coaching program (Outcomes pp. 63-64). This stigma might be diminished if coaching is also recognized as something pre-tenure faculty can do for each other.

3. Interaction between pre-tenure and tenured faculty

Distinct from their observations about mentoring, 20 observations (6% of total) called specifically for greater interaction between pre-tenure and tenured faculty. One professor felt it was important to understand the cultural differences between his generation and newer faculty, arguing that such understanding was needed to adjust university practices and procedures to meet the changing needs of its faculty. He compared his lack of knowledge of his newer colleagues with his lack of knowledge of students, but highlighted the greater importance of understanding his colleagues—permanent members of the campus community—over transient students.

> Over recent years, it's become clearer that I know nothing about the lives of my students. They are in... clearly different worlds than I live in. There is no doubt whatsoever that the same is true for beginning faculty with respect to faculty who have been… in the professoriate for twenty years, or even fifteen. Yet, we behave as if there *is* no difference. …And you argue that, oh well that's because everybody got a Ph.D., you know, in the right areas; they've done post-docs; and so in that world we can interact and we're all the same. Well, in point of fact, we're not.

Other speakers noted the value of hearing from faculty at different career stages, whether to get advice from speakers further along the career track, or to understand differences and provide perspectives on career stages they had already successfully negotiated.

Cross-generational interaction was seen as beneficial both in and outside departments. Within departments, relationships could extend beyond a formal mentor. This department chair urged his new colleagues to talk with senior colleagues whose advice he found helpful himself:

> I don't want them to view any one person as their mentor. I also think that's a flawed model. I think you—they and myself—should seek multiple counsel. …A lot of senior faculty... how they got promoted won't work any more. And they may be giving absolutely incredible advice, but not for the current university model. And the only way to mitigate that is to get multiple viewpoints. …So that's what I've been trying to counsel the junior faculty is, you know, talk to me, but don't *just* talk to me. You've *got* to talk to these others folks. And do it now, don't wait 'til comprehensive review.

Connections outside one's own department were valuable in different ways. As noted in our discussion of the LEAP coaching program (Outcomes pp. 58-60), for pre-tenure faculty, extra-departmental contacts with senior colleagues provided a reality check on their situation, often helping them realize that problems were less serious than originally understood. Senior coaches also shared ideas about how other departments address issues, and lent a fresh, problem-solving perspective that was independent of evaluative roles, personality conflicts, or historic difficulties.

> Building relationships with people who've gone through something similar, and getting them to tell me what they tried when they were in the situation I'm in, and giving me advice on which resources are available... has been really useful.

Faculty gave examples of getting useful information and advice. Occasionally, a senior colleague could step in to intervene in a problem situation.

> It made a big difference for me, personally. Not only was it good to have people to get advice from and to have people to sort of talk to, I think they also spoke to the dean as well for me and … you know, it shifted the dynamic a little, so at least the chair of the department was less inclined to just do something that would be [irregular].

Another speaker outlined in detail how cross-department junior-senior relationships could both augment departmental mentoring and counter-balance certain risks:

> If you're being mentored by someone in your department, you know from Day 1 that not only are they mentoring you, they're judging you. They are going to have to vote on your reappointment, they'll vote on your tenure. They may be on the executive committee of the department who's evaluating your yearly performance that will make up raises. They're going to make comments in various settings within the department and potentially within the college, because they could be on for a review committee or something like that, about you. If the relationship is good, if you're doing well, then that can only help. If there is a tension, if you falter in their eyes as opposed to your own, then that's a risky situation.
>
> (continues) If you've got a coach from outside the department and, as possible, outside of a division or outside of a college, you've got nothing to lose from dealing with them. …And so you've got someone who fundamentally acts, basically, as a reality check…. So you get a conversation that helps both people understand the diversity of the campus and doesn't necessarily say that what's going on in their department is right or wrong or their situation is right or wrong—but understanding the range of what's possible allows somebody to know whether they might want to say something to their chair or head of their division. And I think also if there are issues, personal issues, family issues, …whatever it might be, there is a degree of anonymity and safety and at the same time potential empathy, from somebody on campus outside of your department in that coaching environment that doesn't exist with a mentoring department.

While this speaker referred to a formal coaching relationship, informal connections across departments were also valuable. Some faculty saw campus-wide committees as a place to develop outside connections.

> [Membership on a campus committee] was one of the best early experiences I ever had here, because what it did was show me the degree of excellence that existed anywhere on campus. And it's so easy in your

> own little hole to think that you're the center of the universe, you know—'Everybody here is great, but the rest of these people, what are they sucking up our resources for?' etc., etc., etc. So, meeting [people], not only outside the department, but if possible, outside the college, brings a much greater sense of the campus to the conversation than being in the same department.

Others suggested that teaching was a shared activity that helped faculty connect with each other and with the university as a whole.

> You become engaged in your teaching... and you become engaged in these committee activities. I won't put the research on there because …that's something that will take place wherever you are. You develop those research connections, it doesn't matter what campus, what university you're at. So that's not making you part of the campus culture. Teaching is, because you're dealing with the students here, you're dealing with the gestalt of campus.

Collectively, the several types of relationships described here—within and across departments, within and across faculty career cohorts, formal and informal—are important to faculty. Indeed, observations about the need for a more diverse range of collegial relationships comprise nearly a quarter of the data set (nearly a third if department-based observations are included). Similarly, González (2006) discusses the importance of both "horizontal" and "vertical" mentoring for faculty, especially for women and people of color. Fostering such relationships can be a collateral target of many faculty development activities. Interaction can be designed into faculty development offerings through their structure (e.g. how groups are set up in discussions) or topic (e.g. pairing pre- and post-tenure faculty in a "vita review" session; see Outcomes pp. 71-72).

E. Needs that Differ by Faculty Career Stage

In the previous two sections, we examined two large categories, totaling 48%, of faculty development needs that were raised by faculty at all career stages. We now turn to the 39% (122) of faculty needs observations that addressed issues for faculty in particular career stages—needs for help to win tenure, to plan a career after tenure, to gain promotion to full professor or pursue an administrative role. Collectively, these needs argue for certain faculty development efforts that are targeted at certain groups but draw upon other groups as resources.

1. Needs of pre-tenure faculty

We identified 57 observations (19% of total) as concerns specific to pre-tenure faculty. These included needs for help in mastering their new jobs, coping with associated stresses, and achieving tenure. Financial concerns impeded a good professional start for a small but significant number of assistant professors.

a) Becoming a faculty member

New faculty must make the transition from graduate school or post-doc to faculty member. Over half the observations in the pre-tenure needs category address the demands of their new positions and the difficulties they were having in making the transition.

> It is a hard transition to make, to go from being a post-doc, to your first faculty job where suddenly your time is divided 27 different ways and you're teaching, and you have so many new things to do that you haven't done before. And there's a lot of stress and a lot of adjustment to make. And I think a workshop that deals with those issues *at* that stage in your career would be a really good thing.

Many concerns arose as new professors came to terms with the broad job definition of a faculty member. Interviewees expressed surprise at the wide range of duties encountered, uncertainty over how to do some of them, and difficulty with prioritizing them.

> Why doesn't anyone give us any training in these things? You know, we're just put into these positions with... well, yeah, we've been academics, we've come through a department, but that's all we ever have.

> It's very easy as a graduate student to kind of be a binge worker, to do nothing for three days and then *completely spend 24 hours a day* writing for other days. And it's much more difficult to do that as a faculty member because you have *meetings* and *teaching commitments* and service requirements. So it's much more difficult if you were a binger in graduate school and that worked for you, to change those habits in becoming a faculty member. (emphasis in original)

> You almost need like an intern-type of a program where an assistant professor just shadows a professor for a year. And the tenure clock isn't running and you're just saying—for a semester even—saying, "This is what it's going to be like," and then you go off from there. You almost need, I guess, like, a super-mentor.

Although most faculty felt intellectually well-prepared to pursue their scholarship, there were surprises in this domain too, especially around writing. "I found that writing takes a lot more effort and is a longer process than I thought," said one. Another sought guidance on writing a book. "Nobody teaches you how to do this. It's just expected. You wrote a dissertation, you can write a book. But really, they're two different things." This speaker had found useful a workshop, sponsored by the campus humanities center, featuring faculty who had recently written successful book proposals or had a book soon to appear. Another was surprised by her reaction to the common experience of having an article rejected. "You get a letter back and they didn't like your article, and that, you know, is kind of difficult. And I wasn't quite expecting to feel it as keenly as I did."

Changes in social status were also a part of this transition, as new faculty had to adjust their identities and learn to interact with new peer groups. Some encountered less emotional support for their work than they had had in graduate school.

> You [had] a lot of social contacts and all of a sudden you don't, and you're here in this, like, la-la land between the grad students and the professors who are all old and boring and the grad students who are students, so it takes a little while to figure out your place…

> When you're in grad school you work on your dissertation and maybe one or two other things, and you have all the support and attention in the world of other people. And [when] you're a new professor, you have to produce much more research with much less nurturing from others….

> No one is going to come to you and ask you if things are going okay. But if you're progressive in seeking [help], you'll often find it—but it won't come to you.

The importance of the first three years as a faculty member, and the "intense socialization" to their new professional roles, has been reviewed by Olsen (1993).

In addition to the general desire for help in mastering the range of duties for their new jobs, other observations in this subcategory noted needs to improve two specific skills: teaching (4 observations, 1%) and mentoring graduate students (16 observations, 5%). Specific teaching issues mentioned were handling large classes and dealing with controversial or political topics, including handling (or avoiding) accusations of "liberal bias." The small number of comments about teaching likely reflects speakers' sense that help was available from FTEP.

The number of observations about mentoring grad students is noteworthy. These observations covered varied types of interaction with graduate students typical of different disciplines, such as serving on graduate committees or as dissertation advisor, managing a lab group, responding to students' failures, and dismissing an unproductive graduate research assistant.

> Dealing with graduate students is something I've just stumbled through the dark… trial and error, trying to negotiate that myself. …I could've hit the ground running faster, so to speak, if I had had some front-end training.

> I think it could be very helpful to learn more about mentoring, or just to have some of those navel-gazing conversations about, what is it that we're trying to achieve when we're advising graduate students? What are some of the stages that we need to be looking out for? In part because I think… I advise my graduate students with my own experiences in mind… and that's not the only graduate experience, right. And so there might be issues that I should be looking out for, that I don't even know to look out for. And I think so much of that is just left up to us to figure out, that that's why students will fall through the cracks.

> No one taught me how to be a manager of ten independent personalities, you know. No one said anything about that. And this was like such a shock…. You almost have to be an amateur psychologist…. I've had students come in near tears because they didn't do well on prelims—these are male students, you know. And then I have to sort of guide them, and get them through this rough spot. …They all come in with different strengths and weaknesses and they all have their own personalities. And some students you want to be very hands-on, and work all the time with them and, you know, a lot of guidance. And then other students, that's the wrong approach completely, it'll totally turn them off. …They're independent-minded, and they'll present you with their results about two weeks after, you know, and it's like, "Oh, okay, all right." (laughs)

This topic would be well-suited to discussion and problem-solving—perhaps based on scenarios and role-playing, strategies that have been positively received in LEAP workshops (Outcomes p. 23)—as well as to deeper conversations, clustered by like disciplines, about the aims of graduate education and the role of graduate mentors. Readings such as Lovitts' (2001) *Leaving the Ivory Tower* and resources suggested in Appendix A may be useful as a basis for these conversations.

b) Preparation for tenure

Perhaps surprisingly, only a small number of observations (6, 2% of total) addressed preparation for tenure specifically. Similarly, understanding the tenure process was a benefit of the LEAP workshops reported by only a small number of participants (Outcomes pp. 48-49). The observations here centered on understanding the tenure review process, especially at levels beyond the department, and the desire for specific individual guidance in presenting one's case: "So if you're asking if I think there should be an organization to tell us how to work the system, I don't think that's a bad idea." Two women suggested that women in particular would benefit from learning better "self-promotion" skills.

> We as women don't get the help that we need, the mentoring that we need, or the advising that we need to present ourselves. And oftentimes we object to the fact: "I know the quality of what I do, my publications.…" It doesn't cut it. That's not the way the system works. The system works on your ability to communicate very clearly how wonderful you are. …And it's a game that most of us shudder at playing.

As we shall discuss below, the desire for a longer-term perspective—beyond the short-term goal of tenure—was communicated more strongly than the need for specific tenure preparation. While clarity on the tenure process is important, young faculty felt it should not be over-emphasized in faculty development offerings to assistant professors.

c) Financial needs

Difficulties with money were mentioned in 17 observations (5%). These issues resurfaced in the second-round interviews, with an additional 20 observations. Most of these concerns were shared by relatively few individuals, but for these people, money was a substantial problem. While financial needs may not typically be considered a faculty development issue, they do meet the definition established in the introduction: They are problems that can be solved by

institutional resources directed at individuals, and the interview data make it clear that these concerns constrained the scholarly productivity and mental health of some young faculty. Financial concerns were intimately tied to professional success when they created stress, wasted time, and inhibited scholarly work.

> [There are a] couple major stumbling blocks… oh my gosh, one is money. I just don't have enough money and that's hard when you work so hard. (laughs) I really could use more money.

> It's been a much tougher struggle financially than I expected, and that's created a lot of stress.

Reports of financial stress were concentrated among single women in lower-paying fields in the humanities and social sciences. While starting salaries in these fields are low, what exacerbated the problem for these individuals was their accumulated student loan debt.

> I have student loans, I've maxed credit cards when I was in grad school, everything that I could do, because I was an older student, with certain things that I had to pay for. And so my finances are pretty much a mess right now. …At the end of day the take-home is… just not enough to cover all the expenses that I accumulated in order to get here. …And in some ways I'd be better off as a graduate student, you know—I had actually more disposable income then than I do now. Now, that's just not right.

> I live in Longmont. I bought a condo, not a house. …I do not live extravagantly, by any means. But it's the debt I came here with from graduate school. And everyone I know... that's in this situation, it's that pattern. It was their first job out of graduate school and they're living on one income.

Once we began hearing about financial issues, we asked about them in later interviews, and found that they figured into assistant professors' professional success in several ways. Faculty not supported by grants drew on personal resources to pay for their research needs.

> I'm subsidized by someone who makes a lot more money than I do, and so I have a standard of living that's… probably better than what a lot of junior faculty have. …What I don't feel like I have here is enough money to spend on research expenses the way that I want to spend. Yeah, so paying for research expenses out-of-pocket is what gets really tricky. …Books, research assistants… travel for conferences. I'm scheduled to go to three conferences in the fall, one of which is actually paid for by the conference organizers, but then there's these other two, one of which is the biggest conference in my field and so I have to go, there's no way not to go. And that's just the fall… and then, you know, there's the other really big conference in the spring. And it adds up pretty quickly.

Boulder's high housing costs were noted by several speakers.

> There is nothing under $200,000 if you're not willing to live somewhere with undergrads on every side of you, partying until 4:00 in the morning.

> When I came here to Boulder, I was $3000 away from qualifying for subsidized housing and seriously considered going to the dean and asking for a pay cut. …I mean, I'm not on welfare, but I'll tell you that I'm just over the line from qualifying for many county services, because my income is below the median wage in this county—and I have a Ph.D.

> It'd be nice if there were university-subsidized, affordable housing within Boulder somewhere rather than making us move out to the suburbs or live in a shack. Because on the salary you get here, which is quite good actually,[3] it's still impossible to live in Boulder unless you're willing to live in a pretty small, dingy house. At least, that was what we found when we searched for homes. So now I have to commute from Superior, which—I'd rather live in Boulder. Most of the people here live in Boulder. So, yeah, a lot of things could be better... making it easier for new people to come.

The university's low-cost loan program for faculty was mentioned by some speakers. It was praised as a concrete and appropriately targeted solution to the housing problem.

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[3]This interviewee was in the College of Engineering.

> Boulder doesn't have a faculty ghetto anywhere. You cannot break into that market without the kind of housing assistance and things from the university. So that was very important in my decision to stay a few years ago. That's one of the issues that I think the university made some improvements in—looking at the situation, realizing now that they have done the program for a couple of years, single women [are the main clients of the program]. And they have a very transparent criteria of how you apply for these loans and how the decisions are made, and most of the people qualifying as being the neediest. It does have that dimension to it.

However, one faculty member did warn about the structure of these loans, given the volatility of the local housing market.

> *Professor*: I had just gone through a year ago of refinancing my house so I didn't lose it (laugh) since I was one of the first faculty to borrow under that mortgage assistance program, where they set us up to have negative amortization,[4] when the market collapsed. (laughs)
>
> *Interviewer*: So …the timing was really lousy for you.
>
> *Professor*: Timing was, could not have been worse, for several of the people in my cohort… because when we came in, it was this *boom* and it was so stressful—"I'll never be able to buy into this market." And it was just such a source of financial stress and then you finally bought in and the prices collapse. And, you know, if you only put 5% down, then your house has lost 5 or 10% value, you don't have any equity in it left.

Moreover, living far from campus added time pressure to financial strains. One interviewee clarified this connection: To afford to purchase a home, she lived in another town. With a stop to drop off her child at day care, her commute ran an hour each way, in good weather. Thus she incurred a time penalty that she estimated at ten to fifteen hours per week, compared with senior faculty who had long ago purchased homes in Boulder. Yet unlike them she was in a career stage when she should be focusing on her scholarly work. Another kind of time penalty, raised by a different speaker, occurred in the summer, when summer teaching offered an opportunity for extra income but also took up precious research time.

> So I've been teaching a lot of summer school classes to make ends meet. I want *desperately* to envision a way, in the next few years, that I can stop teaching summer school so that I can concentrate more on doing field research, which is an intricate part of the kind of work that I do. And having to teach summer school means that that is less time that I can be doing research—and when you're talking places like [undeveloped countries], you waste your first month getting up on the ground and getting things running. So trying to do field work in six-week blocks …was crazy. And so I feel my ability to do work abroad has been compromised. And I actually have a ton of research money—I've been well supported in that respect—but I can't use my research money to pay my mortgage, and so I'm stuck teaching summer school. And summer school income is pretty substantial.

A third interviewee gave the example of a department retreat held on a weekend, which she did not attend because she did not have money ($70, by her estimate) to cover child care for the day.

Several speakers noted that the only way to get a substantial salary raise was to court outside job offers. This was seen as both distracting and unfair.

> It's pretty much, outside offer is the only way you make that kind of a jump. And I don't think that is a departmental issue *per se*, of the department's not willing to promote me or try to take those issues into account, but that's the situation of the university and that's been the clear [message]: We need your salary to get grossly out of proportion with the market and then you can go and get an outside offer and then you can get a $20,000 raise; but we won't give you incremental raises to get you to that point, we need you first to get grossly out of date with the market. You know, we're bringing in now ABDs who're making more

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[4]It was unclear whether negative amortization is a common feature of these loans or specific to the situation.

> money than a huge number of the professors, and that's just the way it works here. You've got to get the outside offer, that's the only way that you can get over that hurdle….

In sum, financial issues were raised by a small but significant number of young faculty. These issues interfered with scholarly progress and added stress to already-busy lives. In at least three cases, these issues were already playing a substantial role in individuals' thinking about leaving the university. "If you're not making ends meet—you know, your health insurance is going up by more than your raise—it's demoralizing." Moreover, financial concerns do not fall equally across all faculty; they are concentrated among single women, single parents, and certain disciplines that are also predominantly women. They can thus reduce retention of young faculty disproportionately, decreasing diversity. Indeed, Marschke et al. (2006) have documented that, at UCB, the rate of loss of women faculty prior to tenure is nearly double that of men.

While faculty development may not be able to address salaries directly, it can assist with startup packages and research costs; access to travel funds for conferences and field research (including information about opportunities from other funding sources); and child care for university events that take place outside normal work hours. The importance of stipends to some LEAP workshop participants (Outcomes pp. 55-57) is consistent with these concerns, and recently discussed plans to offer a stipend to pre-tenure faculty for forms of training seen as important for all faculty offer one model for addressing financial concerns.

2. Needs for particular skills: Early-career growth

Fifteen observations (5% of total) discussed specific skills that faculty foresaw they would need as their careers progressed. Most comments in this category were made by faculty relatively early in their careers, assistant and recent associate professors (however, skills needed by chairs were categorized elsewhere). Some skills closely matched those covered in the LEAP workshops (Outcomes pp. 34-38)—perhaps because other parts of the interview addressed the LEAP workshops; because the LEAP facilitators matched their agendas well to the audience's needs; or both. Communication skills mentioned included conflict management and dealing with difficult people in situations such as meetings. Time management skills included prioritization of multiple responsibilities, such as how much time to spend on teaching.

> I keep telling people, especially my graduate students, that what it takes to be a successful professor is the ability to multi-task. You have to be able to put down one job and take up the next thing, you know, two seconds later and just get into it, and not have that down time where you get to sort of adjust and move on to the next task.

Several faculty also mentioned management skills needed to work effectively with colleagues and staff. One distinguished between the skills needed to manage the students in his research group, and the "executive skills" needed to work effectively with peers:

> I'm certainly at a comfort level with my students now, because they're a bunch younger than I am and so there's this clear senior relationship. But with your peers, I think that becomes sort of an executive style… sort of like the CEO leading a board, you know. And so how does that work?

In sum, faculty seek several specific skills that may continue to be usefully offered by LEAP or its successors. Additional topics in "executive skills" would be welcome. These skills were not the needs most emphasized by faculty, perhaps because at the time of interviews, they were being partially met. Our prior report provides additional information about faculty interest in skill development (Outcomes p. 20) and their gains in skills from LEAP workshops (pp. 34-38).

3. Needs of tenured faculty

Professional development needs of faculty with tenure comprised 50 observations or 16% of the total. This is even more substantial given that tenured faculty represented a minority of interviewees (less than one third). Their observations fell into two major categories of comparable size, discussed below: exploring career choices after tenure, and trying out university administration as a career move.

a) Exploring career choices after tenure

This subcategory comprises 24 observations (8% of total), most surrounding the desire to reflect on (and perhaps take) new decisions about one's career trajectory and priorities. This desire is highlighted at two transition periods: immediately post-tenure, when faculty feel free to make changes in their career paths or take greater risks, and promotion from associate to full professor, when these career choices are then formally judged by one's peers. While observations about the immediate post-tenure transition were not generally framed in terms of preparing for promotion to full professor, decisions made at this time clearly influence the case for promotion that can be made later. Thus faculty development offerings can be envisioned that address both.

Receiving tenure was an exhilarating time, enabling faculty to feel that they could now choose their work for themselves rather than to meet the goal of tenure, but also a somewhat scary time, because the path ahead was now more open and less obvious.

> It has really shifted my perspective about what… what's the big picture? What should we be doing? What should I be doing? What do I want to be doing? You know, and what kind of education are we providing for these students? And yeah, it's just, it's been really nice, 'cause it just kind of opens up. It's like you can look up and look at the sky and say, "Oh, yeah, there's a world out there besides what's right in front of me."

> Associate professors tend to just sort of… fall through the cracks in some ways. That was a stage at which people either kind of made it or didn't. …That was kind of vulnerable stage, even though it doesn't seem like it should be vulnerable, but it [was], because of this sort of, "Okay, I did it," you know—"Now what?"

Shapiro (2001) aptly compares this period in the faculty life cycle to post-partum depression, "a metaphor for the letdown that may follow a long-anticipated event, the anticlimax of achieving a long-hoped-for goal."

For newly tenured professors, altering their career priorities—such as changing research fields, trying a new administrative role, or investing more substantially in teaching and pedagogical innovation—was risky professionally and emotionally. A change would mean letting go of familiar work that they knew how to do and that had just been validated by their colleagues.

> It is a little frightening and, and at this stage, at least I feel like, "Okay, I've, the only thing to do is just to keep doing what I've been doing," really. Because it's secure. And it's almost like you paint yourself into a corner, you know—it's secure and I know what it is, and I may not love it, but I know what it is— and doing something else is scary.

Faculty at this stage wished to hear from others who had made such changes, and to talk with peers about their options for shifting their workload distribution of research, teaching and service; balancing personal career ambitions with the needs and expectations for leadership in their department; managing greater service expectations (e.g. as committee chair instead of member); mentoring younger colleagues while still needing career advice themselves.

> Right now I have this pretty big grant that I'm dealing with for the next two and a half years. And, you know, I'm not sure… if I'm going to continue on and try to do more of that kind of research or—I just don't

> know, I feel like I am kind of in a bit of flux right now. And I have my sabbatical next year and I'm just so glad because I'm just exhausted and burned out. Just ready for time to reflect and think about what I want to do.

They felt conscious of the need to make deliberate choices about their work, and to plan strategically for their career as a whole.

> I think that's something that I've also realized—I always knew I had a limited amount of time, but now I really feel like, okay, I've got however many more years in this career—what do I really want to do over the next ten or fifteen years, twenty years? What do I want to do? And so… that's helped me think about choices to make regarding various activities, you know. Do I want to do more community work with nonprofit groups, for example? Or, you know, do I want to be a university administrator? Do I want to sort of take steps that take me in that direction? and that sort of thing. I feel like after tenure you really see that more clearly, at least I did. You know, that you have a limited amount of time and every decision really moves you in one way or the other, and if you want to do something then you gotta make the right choices, basically, to do it.

Others mentioned the sabbatical as an important opportunity that they wished to discuss with others: "I haven't actually gone on sabbatical even though I've been eligible, just 'cause I don't feel like I want to waste it doing whatever. I want to have a real plan."

One senior faculty member also suggested that post-tenure is a critical time for the institution, not just the individual: "I think it's when people tend to wander, tend to look for jobs." One university has estimated that it can take ten years for a new STEM faculty member to develop a positive revenue stream from grants that recoup start-up costs (Hopkins 2004; cited in Callister 2006). Thus the institution loses its substantial economic and human investment if someone who has been brought through tenure decides to leave prior to this point.

The second critical career transition, promotion to full professor, is seen by faculty as a much less well-defined and inherently more variable evaluation process than receiving tenure (Fox and Colatrella 2006). Our interviewees cite it as a critical transition for women in particular.

> And I would probably be agitating for full promotion except that… I don't play the game quite the same way as my male colleagues do, I think. And maybe it's not… um, it's not necessarily fair to make that a gender basis, but… I don't publish as many papers as I think they think everyone should. I'm… interested in having a balanced life and not… making myself a slave to science. So, as a result I don't bring in as many dollars as they do, I don't publish as many papers as they do.

Indeed, several women associate professors questioned whether their department valued their work, and wondered whether they would ever make full professor. One noted the general rarity of receiving positive reinforcement for her work.

> Maybe it's not specific to academia but as you get older, you're telling other people "good job" all the time. You know, you're telling your graduate students, you're telling your undergraduates. They don't tell *you*, you know, 'cause they're in a different position than you are. And so very few people tell you, 'You did a good job.' And it does start to wear on you, 'cause you usually get critical comments back from papers and grant proposals, and very rarely does somebody just come out and say, "You're doing a great job!"

Taking this concern further, one senior male professor suggested that keeping people at the associate rank for a long time was not only detrimental to individual morale but divisive to the campus community, because lack of promotion communicates to people that their contributions are not valued and sets up a two-tier system.

> Promotion to full says, "We were right, you are a superstar." Not being promoted to full says, "We were wrong, you're not the superstar we thought you were." It's an implicit statement of that, you know, if you're

> here for a long time. And I think it sets up a differentiation that prevents you from ever knitting the campus together in a cohesive way.

In his view, promotion to full professor should reflect "a consistent contribution as opposed to an extraordinary contribution, or a contribution of continued excellence." Therefore it should be automatic within a given time period (e.g. 10 years), as long as someone's work continued to "get a C," i.e. meet basic standards, while outstanding or "high-trajectory" people could apply for early promotion or be recognized by awards.

> Because if you say, "I'm going to stay here and I'm going to contribute, I've done enough to get tenure and I can do this kind of stuff, but I want to be broader or different…," we say, "Great, we still welcome you," rather than, "You can stay, we won't fire you." … "We welcome you and we reward your contribution to the campus and after ten years you'll be Full," or what have you, I don't know, or care what the time is. I think it would take a lot of the people who feel... under-appreciated, who feel at tenure time…. This one says, "I'm still recognized as contributing, et cetera… and I'll be Full. It'll take me a little bit longer, but the campus will allow me to be different in this way, and still give me that recognition of promotion to Full."

In sum, faculty at the associate professor rank—perhaps particularly women—would benefit from continuing professional development but are seldom offered opportunities that address their needs. Marschke et al. (2006) show that, statistically, the losses of women faculty are three times greater than those of men in the 50-59 age group at UCB. It is interesting to speculate as to whether discouraged women associate professors form a significant proportion of that group.

In June 2006, a LEAP workshop was held for associate professors, prompted by evaluation data suggesting the needs of this group. The interest with which it was met[5] confirms the need. Post-workshop evaluation surveys from this particular workshop indicated that over 75% of respondents felt the workshop "fully met" their expectations and all "would recommend it to others." While open-ended comments provide guidance to how this workshop can be improved, this session may be examined as a pilot for an ongoing program directed at this group.

b) Trying on administrative roles

One category that was surprisingly large reflected interest among senior faculty in the possibility of taking on administrative roles, at 26 observations (8% of the total), half of all senior faculty observations. Interest in administration was motivated by a mix of altruistic desire to help the university, a sense that one's skills matched the requirements, and a wish to try something new.

> I think research universities are an incredibly valuable and important part of society, and if I can do my little bit to promote that, and to make the public and the government and so on, appreciate how important research universities are—you know, to the economy and to society and to culture in general—then I would feel that I'd done something worthwhile.

> I would like to make a difference in how things are done…. I've seen a huge difference between department chairs, and our current department chairs are really good and I feel like it's made a really important contribution to the department and the satisfaction of the faculty members. …And I feel like if I could do something like that, it would be worth doing, because I really do. …I'm kind of a team player, I mean, I want to do what will help people in general, and my department chair says that I need to do less of that and write more papers. (laughs) But I think it's something that I could be good at, although I don't think I'd ever get elected in my department.

What senior faculty most wanted was the chance to experiment—to try on an administrative job without completely cutting off their options to return to their current work activities.

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[5] Thirty faculty expressed interest in the 15 slots available for the first workshop in June 2006; a second was scheduled.

> I guess I'm excited about experimenting with some kind of administrative job. So I'm gonna apply for things as they come up and see how it goes. And maybe I'll try it and it'll be awful, and I'll just want to go back to teaching and doing research. But I guess I'm optimistic that it'll go well. And maybe I'll end up as a dean or a vice chancellor or something, I mean, that would be interesting, I think, at the moment.

They also wanted guidance and advice from experienced administrators, on how to make choices that would both prepare them for this possible career change and enable them to test the waters (see also Outcomes pp. 74-75).

> *Professor*: If I said to myself, "Okay, I wanna be dean someday," you know, well, what would I do? You know, I don't, necessarily, but what would I do? or, you know, I just have these rumblings of these ideas, and I have some idea kind of how to pursue them, but, but not necessarily. I'm groping a little bit. I'm saying, "Well, okay, I need to demonstrate leadership…."
>
> *Interviewer*: Yeah, well, and there's two elements in what you're saying. One is, "How would I position myself to do this thing I think I want to do later?" And the other one is, "How would I do things that are like it in some way in order to find out if those are what I want to do?" (laughs) I mean, there's both. There's the setting up the résumé to be the right thing, but there's also, "How do I try it in a way that doesn't…"
>
> *Professor*: Yeah, good. How can I try it, yeah. Exactly. Because it does feel like, yeah, if I were to make a decision, "Okay, I'm gonna go be chair of a department at a teaching college," that's jumping off a cliff. Because I could never come back, you know, and I know that and it scares me. So it's like, well, I don't know if I'd like that, you know. What if I try it and I don't like it?

While most observations in this category concerned formal administrative roles, such as department chair, dean, and upper administration, faculty were also interested in less formal leadership roles in initiating and developing programs.

> Well, you can be the chair and then the dean and then, you know… that's sort of it. And I don't really want that path of administration. I'm much more interested in… the program-building kind of stuff. Which I think, unfortunately, the administrators now—maybe it started out that way, but the dean doesn't do that. Maybe he or she never did, but they certainly don't do it now. It's about budgets and hiring faculty and… you know.

A few mentioned interest in administrative roles in professional societies, research institutes or funding agencies. A similar mix of interests in formal and informal "leadership" was noted by LEAP workshop participants in their motivations for attending those workshops.

In sum, interest in trying administration was high among the senior faculty interviewed (probably higher than in general among the faculty).

c) The LEAP AVC fellowship as a model: Lessons learned

The LEAP project has already experimented with a program offering senior faculty a chance to try on an administrative role via a one-year "internship" in Regent Hall. The program was established to address concerns about the representation of women in university leadership positions. LEAP has supported a fellowship to place individuals in a half-time associate vice chancellor (AVC) position; four individuals, all tenured women faculty, have held this fellowship during the grant period (2002-06). While the fellows who were interviewed found the position personally beneficial, their experiences also suggest ways the program could be improved both to serve the individual and to align it better with institutional goals that it could help to accomplish.

Fellows were attracted by the opportunity for released time to complete a project of interest to them and by the chance to try an administrative role for just a year, as compared with the longer

commitment required of a regular administrative position: "Three years—for a lot of people that's too much time, too much time out of your research—a whole generation of graduate students." They also benefited by gaining greater understanding of the broader structure and function of the university, greater appreciation of excellence in areas of the university with which they were not previously familiar, and a broader professional network.

Collectively, the fellows indicated that their experience would have been even more beneficial had they received the following types of assistance:

- Greater clarity of the expectations for the position;
- Some form of individual support, especially as they were getting started in the new role (e.g., training, an individual mentor, a cohort of colleagues in similar positions);
- A well-specified balance between integration into the everyday activities of the office where they were posted, and time to work on a special individual project;
- More help in making contacts and having exchanges with other administrators with whom they could discuss the plusses and minuses of the role.

Upon synthesizing fellows' comments, we suggest that an effective model would be one that combines time to work on an individual project with some responsibility for the ordinary duties of the campus administrative office in which the fellow is placed. Individual projects should be of interest to the person and of value to the host office, and possibilities might be proposed by either party. Having a personal project is likely to be important for motivating and attracting applicants; in providing the fellow with a concrete task that can reach some closure in a year and boost professional credentials; and as a way to complete campus projects of the type that are important but may be deferred because they are less urgent than day-to-day concerns. But taking part in the ordinary duties of the host office is also important, because it provides real exposure to the everyday work of university administrators; helps to acccomplish the regular work of the host office and thus provides incentive to that office; and enables the fellow to network more widely across campus.

Another alternative was suggested by one speaker, referring to the American Council on Education (ACE) fellowship model where participants "shadow" university administrators.

> I think something that's an internal ACE model would be a really great idea.. Because then you wouldn't be just in the provost's office, you'd be in the graduate school or you'd be somewhere else interesting. And you could have a number of ways in which these people could bid for you and you can match up what you do and what they do to get real life experiences, and it would be integrated into an ongoing function with the different departments.

In sum, our evaluation data indicates that this experiment offers useful lessons about the benefits of a program whereby faculty could test the waters of university administration. Refining the structure of the LEAP AVC fellowship could make it more broadly beneficial to both fellows and the university as a whole.

F. Miscellaneous Needs

A small number of miscellaneous needs (10 observations; 3% of total) addressed: the needs of specific groups, including non-tenure track faculty and minority faculty; the need for "clearer policies" and for faculty to know policies; and the need for support systems when faculty have a life crisis, such as a child or parent with a serious illness. One model program for life crisis support is the Vilas Life Cycle Professorships developed by the University of Wisconsin's

ADVANCE program, WISELI, which supports faculty whose scholarship has been disrupted by life events (WISELI 2006).

The small number of mentions of minority faculty is not because this issue was not important to interviewees, but because it is treated in our analysis as a systemic problem that requires solutions beyond faculty development (discussed later). The single observation noted here refers to the fact that minority faculty should not be assumed to be identical to majority faculty when designing and presenting programs. Their concerns and experiences should be treated separately—e.g. women of color do not have the same experience of academic life as do white women and thus do not have identical needs from faculty development offerings.

G. New Approaches to Faculty Career Development

We choose to conclude our discussion of faculty development needs with this category because it is an over-arching one that ties together many of the observations reported in other categories. We include in this section 28 observations (9% of total) that relate to a larger problem, discussed in Section III, that of the faculty reward structure. However, the observations included here differ from those named as "systemic problems" in that they are framed by the speakers in terms of the way *individuals* consider and plan their career, and the flexibility that they desire. When speakers framed the problem in terms of policies, procedures, or academic cultural practices and beliefs, we categorized such observations with the systemic problems. The analytical distinction speaks to the range of solutions, both individual and structural, that faculty envisioned for what emerged as the single largest problem across all those discussed. Moreover, we argue, their comments might well guide the philosophy and aims of a faculty development program.

Two themes emerged from these observations: First, faculty wanted to think about their careers from a holistic and long-term perspective—not focused on short-term goals, such as tenure, but on building a satisfying career as a scholar and teacher. Second, they wanted the university to support more flexible models for what it means to be a faculty member, both in terms of variation among individuals and for one individual over time.

Observations about a long-term perspective on their career stemmed from faculty's experience with the single-minded focus that seemed to be assumed or expected of pre-tenure faculty, in programs for first-year faculty and through the pre-tenure years through award of tenure itself. While they wanted clarity about the process and expectations, hearing advice always framed in terms of "how to get tenure" generated stress and indecision, described by some as "panic and paralysis."

> The first year that you are here, they bring you through all these programs and scare the living crap out of you.
>
> And I think the university is tremendously counterproductive in this, like is tenure really the goal? If you hate your job, is getting lifetime tenure in it really what you're [after]…? So I stopped thinking about tenure, and I started thinking about having absolutely as much intellectual fun as I could have before they could catch me.

Instead, faculty wanted the focus to be on building a long-term scholarly career. "Tenure should be a byproduct of a rich, engaging, meaningful, intellectual life, not the goal," said one assistant professor. Another suggested that this too-tight focus—the "line in the sand" approach—was what led to the post-tenure slump noted by associate professors (Section E.3).

> There's such this goal to get tenure, and all of a sudden you get tenure, and tenure was your end goal as opposed to the goal being to become a scholar. And that's the one thing, I guess, that would be something

> to think about as we instill… change the culture. It's not so much just focus on tenure as the end goal, but be counting the scholar as being the end goal.

In the end, faculty job satisfaction had a great deal to do with feeling that their day-to-day work was accumulating and building in a fruitful and rewarding direction—that their long-term professional goals were not at cross-purposes with the short-term goals of tenure and promotion.

> We are creating our careers as we go, and every day we can decide... how much it's worth it to us to really mentor a graduate student or to spend time in a committee meeting.

> I don't envision doing anything different the day after [receiving tenure] as I'm doing the day before. And if I had to do something different the day before, I don't necessarily want the job. So, it's like if I can't keep doing what I'm doing, and being a reasonably productive faculty member, tenure in and of itself doesn't mean anything to me.

Closely related to this longer-term perspective was the second theme, the desire for more flexible models of faculty career. As faculty wanted to think about the big picture of their careers, they also recognized that different people have different strengths, and one size does not fit all.

> I would seek more flexibility in the tenure process, multiple ways of being successful, that's what I would seek. And that flexibility be realized by all the committees of the path and that one individual approach… the one successful candidate for getting tenure could very well look different from somebody else in the same department. And I think that's not there, I think it's a conforming process, which I don't think is very useful.

Supporting a wider range of models for faculty careers was seen as not only beneficial to individuals but for departments, by allowing each person to play to his or her strengths.

> There's a great tendency to try to make everybody fit the same mold. That there's one formula for making it through—and I don't think that's true at all. I don't think it should have to be true, because people are individuals and there are different ways to be successful…. I think it's important to have different mixes of skills and interests, to have a healthy department, and so it's a shame to me that there's this tendency to channel people into the same path over and over and over again. This is the way to success, this is the way to tenure, and this is way to promotion... it kind of squashes all the diversity.

> I wonder if—Are we losing people who would be really good? …We have one guy who is great at research—he gets so much money, he has a huge research group and he doesn't like teaching and he's not very good at it. And we sometimes are like, 'What can he teach where he won't mess people up?' I mean, we're trying to find the place he'll do the least damage. And then you look at other people like me, and I'd be like, 'Put us two together,' and I would say, you know, "I'll take some of your teaching load, I'll reduce my research load, and probably the whole department would benefit. 'Cause [then] you're not wasting some of your time, doing teaching that you don't even like and you're not very good at. And I'd be more than happy to do that and work with the students, and I'm not getting as much research funding right now." So to have a little more flexibility built in could be useful. But, you know, it just seems like a mountain, like you're never going to change that in your lifetime.

Teaching and service were two areas where many felt some faculty could contribute differently. There was work to be done, and people with talent for doing it—but all acknowledged that the current reward system did not value such contributions equally with research and creative work, and shared examples of this.

> Students are coming to CU expecting to get a good quality undergraduate education, and so if we're continuously being required to just focus on research dollars and research publications, we're not servicing that huge need of these students. So to me I still feel like there's an important place for people who value that at CU—but your tenure road is probably going to be a little bit rockier than most. (laughs)

> We lost someone … who was amazing for our department. …He developed two new undergraduate courses that changed some curriculum issues that we had, he ran the computer lab, he was doing all these things—that you could look at that and say, "We aren't mentoring him because this stuff is not gonna get

> him tenure." And it didn't even get him reappointed. But as a group, we benefited so much from him. …We were hurting to lose him, and it was part our fault, but it was also this thing that we needed this guy and that's what he liked to do, and now he's doing it somewhere else. And so if our system had been more flexible, we would see, yes, we need that person and we want them, and we're going to make a system where that person is allowed to succeed here.

> Early on in my career, I had started a research project that had a very long lead time and... while... I was sort of waiting for things to spin up… I put more energy, because I had the time, into some service activities. And when I came up for reappointment, I was very heavily criticized by my department for that. That I hadn't published enough papers because I was putting too much time into service. When that really wasn't at all what was happening, …it was the spin-up to getting data, and data that papers could be written on. Yeah, just that perception that service, in particular, is a detriment to research productivity was definitely there.

As several of these quotations indicate, faculty view the tenure and promotion process, and faculty reward structure as a whole, as complex systems that are entrenched in the culture and difficult to change. We have much more to say elsewhere about their observations and ideas for change, but have included these observations in this report because there are two implications for faculty development efforts. First, there is a need for opportunities for individuals to share, discuss, and reflect on their individual careers as they evolve. We have already noted some of the specific concerns of faculty in different career stages, as well as the wide desire for exchange of ideas with colleagues from other departments and across career cohorts.

> They say you can change your 40/40/20 if you want. So if you and your department chair agree that, you know, you're going to spend more time on teaching because that's something the department needs, you can do that. I didn't even know I could do that, and now it's a question of, do I want to do that? Maybe I do. Maybe I don't. I don't know anyone else who's done it, that I can talk to.

Second, there is a need for campus-wide conversation about how to recognize and value different forms of contribution to campus. As Shapiro (2006) argues, we should "stop assuming that every year should have the same balance among teaching, research, and service" and "recognize that each of those areas may have its own rhythm." Action on these issues would extend beyond faculty development alone, but can be initiated by conversation, consensus-building, and support of experiments to change the way faculty contributions are evaluated.

> Twenty years ago, thirty years ago, tenure wasn't that big a deal at this university. Well, the guidelines have been becoming more... the bar is becoming higher... and... as part of it universities have tried to say there is a model... and there is a path. And that's a legalistic way of framing the tenure process. And there's advantages to that, because you don't want it to be completely capricious, you want to know when it's not there and you need to be able to say why it's not there. But on the other hand... there must be other multiple ways to demonstrate scholarship. If we are so uncreative that we cannot recognize and think about scholarship in multiple forms, then we don't belong here, you know?

As this speaker notes, creative thought is required—but creative thinkers are available.

III. Faculty-Identified Systemic Problems

As discussed in the introduction, we distinguish "faculty development needs" from other types of problems on somewhat arbitrary—though functional—analytical grounds. Faculty development strategies are one tool in the arsenal of tactics for institutional change of any type. We do not argue that all problems are amenable to solution through faculty development alone, nor are the issues discussed so far in this report are the only concerns for the university and its faculty. Faculty raised a variety of concerns about their lives and work as faculty—issues that constrained their ability to do their jobs well, and changes they would like to see to the university or to academe in general. These were very often issues that seemed hard to solve, and where

solutions were not obvious. They were thus not generally discussed as individual "needs" but as broader issues that required thought or as problems to be solved. Many of these arose in the interviews during discussion of the "institutional transformation" that is the goal of LEAP and its sister ADVANCE projects, as faculty thought about what institutional transformations were needed and how they might be accomplished.

We are still analyzing these data, but the results of initial sorting are informative. Table 2 presents preliminary frequency counts for a large group of codes about "other faculty concerns" in addition to the faculty development needs indicated in Table 1 and described in the bulk of this report.

**Table 2: Faculty Concerns Reported in LEAP Interviews:
Areas where Systemic Change is Needed**

Faculty concern	Number of observations	Percentage of all observations
Faculty reward system and processes	**341**	**45%**
Reward structure, general	260	
Interdisciplinary research and teaching	81	
Work/life balance	**208**	**27%**
Family concerns	176	
Personal and philosophical concerns	32	
Diversity	**79**	**10%**
Issues for women faculty	63	
Issues for minority faculty	16	
Nature of faculty work	**45**	**6%**
Workload	20	
Competition	15	
Managing multiple job requirements	8	
Work not understood by public/taxpayers	2	
Emotional concerns	**44**	**6%**
Stress	37	
Lack of confidence	7	
Miscellaneous concerns	**44**	**6%**
Research and publication goals	10	
Individual difficulties; time-specific issues and controversies	34	
Total	***761***	*100%*

These numbers are taken to approximate the magnitude of issues on faculty members' minds, and should not be over-interpreted. The counts are preliminary in that we are analyzing other

parts of the codebook and may identify additional concerns that might properly be added to these. Topics absent from this list should not be assumed to be unimportant. For example, among a large number of codes about "department life," some codes do describe difficulties of department life. We have not yet separated them into categories analogous to those presented here nor determined if it makes sense to do so. Other faculty concerns about the quality of department life—such as leadership and communication—have already been noted among faculty development needs. Likewise, diversity issues are also covered in other areas.

Nonetheless, we draw some conclusions from this data. First, the number of coded observations on these concerns is over twice the number of observations categorized as faculty development needs. That they were so widely discussed by faculty indicates the seriousness of some of these concerns. Second, while the counts may be quibbled with, there is no question that the two top issues on this list—the faculty reward structure and work/life balance—were very prominent in the minds of our interviewees. Third, it is significant that the same two issues played a very large role in discussions of their career decisions by non-tenure-track academics—researchers and instructors—and graduate students in STEM fields, in data from the LEAP "Career Pathways" research study conducted in parallel with this work. In particular, many raised concerns about the faculty reward structure and about the perceived difficulties of leading a fulfilling personal life as factors that deterred them from pursuing tenure-track academic careers. We expand a bit on these two dominant categories below.

In the second large category, reward structure, we gathered a range of observations about the process of tenure and promotion and other faculty rewards, such as merit pay for individuals and departments. In large part, these observations address the informal processes rather than the formal procedures for tenure and promotion. Many interviewees interpreted for us the unstated norms and expectations in their department, worried that these might vary unfairly, and analyzed how the reward structure caused stress for individuals and upward pressure on the bar for tenure.

> The bar for just sheer output is going up every year … you know, I think we have a system which pushes people into producing just *crap* in order to get the numbers, you know, "minimum publishable units." And the stuff that comes out in some of the journals, you're like, "Oh my god, who made you write that?" you know, "Wait until you have something to say, okay?" You know, even, I don't read because I have no time to read a book any more, because I'm so busy writing all the time—there's something deeply wrong with that.

Faculty observations in this category raised concerns about:

- the relative importance of research, teaching and service in evaluation of faculty work;
- measures of quantity vs. quality in rubrics for evaluating scholarship, and the difficulties of evaluating the quality and impact of scholarly and creative work;
- the effects of the reward structure on risk-taking in scholarship and teaching; on voicing one's opinion in the department; on collaboration and collegiality;
- the difficulties of evaluating teaching, and peer reluctance to do so;
- the difficulties of identifying and valuing informal service roles, such as student mentoring;
- differing norms about faculty evaluation among departments, disciplines, or subdisciplines;
- evaluation of interdisciplinary scholarly or teaching interests: peer evaluation, expectations for individual publication and leadership in an intrinsically collaborative endeavor, lack of intellectual support;

- evaluation for faculty with uncommon types of appointments: joint appointments, administrative roles, museum and library faculty, research institutes;
- communication about standards and departmental values for tenure and promotion;
- the role of the faculty reward structure in retaining a diverse faculty;
- effects of the faculty reward structure on graduate and undergraduate education;
- post-tenure evaluation of faculty.

Concerns about faculty reward structures are by no means unique to this campus—they have been discussed intensively for at least a decade by groups from professional societies (APS 1998), funding agencies (NSF 1996), and educators (Glassick, Huber & Maeroff 1997; Boyer Commission 1998) to state legislators (Spears 1998). Ongoing analysis will enable us to more carefully delineate these issues—and solutions suggested by faculty—for this campus. But it is clear that a multifaceted approach will be required to address the problems perceived in the faculty reward structure; piecemeal efforts are likely to patch one problem while generating another. This is in part why we have raised this issue in both parts of the analysis presented in this report—as a faculty development need, where we may imagine efforts that help individuals work effectively within the present system, and as a larger problem that may require changes to the system.

In the category of work/life balance, the majority of observations address faculty concerns about maintaining a satisfying family life while holding an academic job. Other observations address other types of balance, such as personal time for non-work commitments, friendships and hobbies. Many observations are individual stories and examples of difficulties and coping strategies, while other, more philosophical observations seek a holistic view of faculty as people, and a desire for a different culture in academia around work/life balance:

> I think one of the biggest things for faculty is just learning to, to relax. (laughs) It's okay to have a life and it's important. And I guess, actually, there's one thing else that the university could do—is to find ways to really... make it clearer that they need us to be whole people. They do not need us to be... just worker bees.

Work/life balance issues are so significant in individuals' experiences and perceptions of academic careers that they are alone the topic of a forthcoming paper from our group, drawing on interviews from tenure-track faculty, non-tenure-track researchers and instructors, and graduate students. Briefly, however, observations in the faculty data set describe concerns about:

- "two-body problems"—difficulties of finding appropriate, local work for academic or professional partners; coping strategies and policies pertinent to this problem;
- dual career households—time management, coping strategies, decision-making;
- whether and when to have children; risks to women waiting to have children after tenure;
- whether and when to take parental leave or stop the tenure clock; the personal and career costs and benefits of using these policies;
- availability and cost of childcare arrangements; mismatch of school vacations with CU breaks;
- time issues related to family balance, and coping strategies to manage these;

- time issues related to personal balance (recreation, health, stress management, friendships, travel, etc.), and coping strategies to manage these;
- perceived and actual support (or lack of it) for family life from departmental colleagues; differences in this support for men and women faculty, including "daddy privilege" (Drago 2004);
- cultural values that place the burden of child-rearing on women, and the costs to academic women of bearing this burden;
- awareness of, questions about, and critiques of university policies related to family and personal life;
- issues for single parents;
- benefits for adoption and foster care vs. biological children;
- caring for elderly or ill family members;
- financial concerns related to family needs;
- the "ideal worker" norm (Drago 2004)—academic norms about time and productivity, and their impact on family and personal time;
- impact of work/life balance on recruiting and retaining a diverse faculty.

While faculty development initiatives might ameliorate some of these problems—for example, time management skills might enable someone to cope with conflict between work and personal demands—the underlying problem is systemic: the conflict would not be removed. Gender inequities in family roles, academic norms equating productivity with 'time on task,' and the competing ticking of tenure and biological clocks all contribute to the problem (Drago 2004; Drago et al. 2001; Jacobs 2004; Mason & Goulden 2002). Non-systemic initiatives are likely to be temporary and unsatisfying, 'fixing' the person instead of the system (AAUW 2004; BEST 2004, cited in Leggon 2006; Menges & Exum 1983). Thus solutions are likely to lie in some combination of effective policies, effective use of those policies, and changes to culture, climate, norms and expectations (Drago et al. 2001) that collectively do not just passively allow but actively support more flexible solutions to different individuals' balance needs throughout their lives.

IV. Conclusion

A. Summary of Findings

Faculty identify needs for professional development that span all career stages and others that are specific to particular career stages. The needs identified in our interviews for the LEAP project are consistent with recent calls for a broader view of faculty development, to address the needs of faculty across their roles as professionals and as people and across the full "faculty life cycle" (POD 2002; Sorcinelli et al. 2006). Faculty development is one strategy that can be enlisted as part of larger efforts to address the many changes taking place on higher education campuses. A coherent and comprehensive menu of faculty development offerings and a culture that values participation can help to build a faculty who can weather challenges and offer creative solutions.

B. Recommendations

From faculty comments, we can distill the following recommendations.

1. *Pre-tenure faculty would benefit from:*

- Clear communication about campus tenure procedures at the department and higher levels;
- Clarity about campus and college tenure expectations, and perhaps more important, advice and guidance about how to go about getting that clarity from their departments:

> There's such a weird balance in my department—or balance is the wrong word, tension I guess—between giving advice and wanting to give people the space to make their own decisions because of academic freedom. And so, I think, as a result the department errs on the side of academic freedom, that we're not gonna tell you how to teach, we're not going to tell you how to run your life, you just have to do it and show up. It has to be good enough at the end, right. So we're going to tell you how to do it once you've done it, but not while you're on your way.
>
> Part of it too is just needing to kind of educate my department… you know, they need to figure out what their expectations were when they hired me too, so.

- Training to build desired skills, including those currently offered in the LEAP introductory leadership workshops (especially time management and communication skills), and additional topics such as graduate student mentoring;
- Clarity and accountability in university expectations for departmental mentoring, reinforced by recognition of departments where it is done well;
- Opportunities to meet, and coaching and other relationships, with peers and senior faculty outside the department.

  We note that our previous analysis of the LEAP coaching program discussed some difficulties of formal, cross-departmental coaching. These were primarily in recruitment of assistant professors—not of coaches, of whom there were more trained volunteers than needed. Few implementation problems were noted, and the program was reported to be beneficial by both pre-tenure and senior faculty who did participate (pp. 57-62). Participants made a number of suggestions for alternate structures to support coaching interactions, or to provide the same benefits in other forms, that may be explored (Outcomes pp. 71-72, 75).

- Conducting all these activities within an ethos of helping new faculty make the critical transition to their new roles, while simultaneously fostering a long-term view of their career development.

2. *Tenured faculty would benefit from:*

- Opportunities for dialogue and peer coaching among associate professors, including topics such as long-term career planning, post-tenure career shifts, sabbaticals, service responsibilities, and how to mentor others;
- Training on further development of skills, especially running meetings, and other leadership and "executive" skills;
- Individual coaching on self-presentation and preparing for promotion to full professor;
- Opportunities for faculty to try out university administrative roles without requiring a long-term commitment or risking their research careers, including a restructured position similar to the LEAP-sponsored AVC position.

3. *All faculty would benefit from:*

- Opportunities for chairs and emerging department leaders to build their skills and understanding, to engage in supportive, problem-solving conversations with peers;
- Conscious attention to chair succession as an opportunity for leadership development in departments;
- Greater awareness of and enhanced skills in interpersonal and group communication, especially within departments;
- Training and development structures that have clear goals and a coherent agenda, emphasize collegial exchange, tap into local expertise, and offer opportunities for feedback and follow-up on skills development;
- Opportunities to meet and discover common intellectual interests with other faculty outside their department and across career stages;
- Conversation and consciousness-raising around the faculty reward structure and strategies for supporting multiple models of a faculty career that are flexible over time and among individuals;
- Availability of skills training and leadership development opportunities to all research and teaching faculty, not just those in tenurable positions.

4. *Sustainability of faculty development programs could be enhanced by:*

- Building new faculty development into start-up offers for new faculty;
- Exploring synergies with and avoiding duplication of other faculty and leadership development programs, such as the Emerging Leaders program;
- Drawing on campus faculty expertise while also recognizing and rewarding that expertise;
- Creating faculty development opportunities that also address other needs (e.g. addressing department chair succession difficulties while also developing new department leaders; developing potential administrative talent while also relieving workload and creating time for special projects in administration units).

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Appendix A: Suggested Resources

Compiled by Jammie Speyer-Benton

The following resources have been briefly reviewed and identified as potentially useful resources in developing faculty development offerings for specific groups or to address specific issues discussed in the report.

A. Department Chairs

1) University of Washington ADVANCE Program: Leadership Training

   http://www.engr.washington.edu/advance/workshops/

   UW ADVANCE provides department chairs leadership training through half-day quarterly workshops. Chairs are asked to bring an emerging leader in their department. This site includes all of the materials and resources as they were presented at leadership workshops from 2002 through 2006. The program is outlined in a paper titled "Leadership Development Workshops for Department Chairs" at the WEPAN conference in 2004. For most chairs, this is the only training they receive, and evaluations of the workshops have been positive. Guidelines and samples of workshop topics are provided.

http://www.engr.washington.edu/advance/workshops/WEPAN_paper_UW_Leadership_Workshop.pdf

2) New Mexico State University: Advancing Leaders Program

   http://www.nmsu.edu/~advprog/Leaders.htm

   Tenured faculty, academic department heads, and deans are invited to apply for the Advancing Leaders Program at NMSU. The goal of the program is to develop leadership and managerial skills, improve personal skills for leadership in teaching, research, service, extension or admin, and to provide networking opportunities for campus leaders and emerging leaders. Selected individuals participate in an off-campus retreat and attend monthly luncheon meetings on campus. This website provides a description of the workshop, but no content, agendas, or resources are available at this time.

3) The University of Michigan Advance Program: Dean and Department Chair Toolkit

   http://www.umich.edu/~advproj/Toolkit.pdf

   This toolkit was intended to inform campus leaders of the resources available to them through the ADVANCE Program about faculty recruitment, retention, climate, and leadership. Several sections of the toolkit are useful beyond the Michigan campus and may be helpful for developing programs on this campus:

   - Section 10: Faculty Recruitment Handbook
   - Section 11: Candidate Evaluation Tool
   - Section 12: Giving and Getting Career Advice: A Guide for Junior and Senior Faculty (Section 7 specifically addresses department chairs)
   - Section 13: Creating a Positive Departmental Climate: Principles for Best Practices

   These documents can be accessed separately at the following site:

   http://sitemaker.umich.edu/advance/reports__publications__and_grant_proposals#adv

4) The University of Rhode Island ADVANCE Program: Chairs' Discussion Forum

http://ww2.wdg.uri.edu:81/testsite/index.php?id=1234

The Chairs' Discussion Forum seeks to support chairs and promote effective leadership through monthly discussion forums. Discussions are facilitated by current or past chairs, and include presentations, case study discussions and networking opportunities. The goals of the program include identifying the challenges chairs face, enhancing mentoring and leadership development for chairs, addressing issues inherent to the role of chair, and providing support and networking opportunities. Users of this site can access a workshop evaluation and suggest future topics. The form provides feedback from participants and a listing of suggested topics, which might be useful in determining the types of subjects chairs would like to see covered in a workshop.

5) American Council on Education, Department Chair Resource Page

http://www.acenet.edu/Content/NavigationMenu/ProgramsServices/DeptChairs/index.htm

This website offers a wide variety of information and resources. The site has two sections for chairs: information on workshops offered by ACE, and the Department Chair Online Resource Center. The resource center is broken down into categories such as:

- The Chair as Leader: assessing "fit" to the job; roles and responsibilities; appointment, compensation, and evaluation; getting started and staying informed;
- The Chair and Faculty: hiring, developing and evaluating faculty, including adjuncts; building a department;
- Resource Management: budget, physical plant, fund-raising, strategic planning;
- Legal Issues.

Most of the resources appear to be informative articles that offer suggestions, advice, research conducted on/with chairs, etc. Some provide specific contacts about a topic. This site provides an excellent glimpse into the needs and interests of department chairs and could help inform any chair training developed at CU.

B. Mentoring Graduate Students

1) The University of Michigan, Rackham Graduate School: How to Mentor Graduate Students: A Guide for Faculty in a Diverse University

http://www.rackham.umich.edu/StudentInfo/Publications/FacultyMentoring/Fmentor.pdf

This fully downloadable book provides suggestions and recommendations for busy faculty about mentoring grad students and is based on a series of interviews and conversations with grad students, faculty and staff. Topics include mentoring within a diverse community. The document is 49 pages long, including table of contents, and seems to be a fairly quick, user-friendly read. Readers can pick and choose sections of interest.

2) University of Washington ADVANCE: Mentoring Women Graduate Students

http://www.engr.washington.edu/advance/mentoring/index.html#grads

This program aims to encourage excellent female graduate students to pursue faculty careers. The program provides one-on-one mentoring with a female faculty member and career development seminars on making the transition from grad student to faculty member. The website that provides more info on this program is not working at present, but presumably

the ADVANCE program provides some guidelines or training to participating faculty, which might be useful. Contact them for additional information

3) The University of Washington Graduate School: How to Mentor Graduate Students

http://www.grad.washington.edu/mentoring/GradFacultyMentor.pdf

This 52-page fully downloadable guidebook provides practical strategies for creating successful relationships with grad students and seeks to enhance faculty knowledge of the mentoring process. There is a companion book for grad students.

4) *On the Right Track : A Manual for Research Mentors* (2003). By Margaret F. King.

Discusses the individual and corporate responsibilities of graduate faculty in producing competent scholars capable of conducting independent, original, and ethically sound research. Published by the Council of Graduate Schools. (not reviewed).

$10 per copy, reduced prices for volume orders for CGS members.

C. Faculty Reward Structure

1) Georgia Tech ADVANCE Program: Recommended Best Practices in Reappointment, Promotion, and Tenure Processes

http://www.advance.gatech.edu/ptac/RPT%20Best%20Practices.final.oct03.pdf

In 2000 an *ad hoc* committee at Georgia Tech examined procedures related to reappointment, promotion and tenure, and identified a number of opportunities to enhance this process by changing the way faculty are counseled and how the process is conducted at the unit level. This document provides suggestions for the improvement of the process overall. Three important findings relate to the equity of evaluations: the need for more information about candidates, clarity of advancement criteria and standards, and an open and transparent evaluation process. The report in its entirety can be accessed at: http://www.advance.gatech.edu/ptac/

2) The Awareness of Decisions in Evaluating Promotion and Tenure (ADEPT) Tool

http://www.advance.gatech.edu/ptac/ADEPT%20Tool%20with%20P&T%20Case%20Studies.htmb

This tool resulted from the report outlined above and aims to assist users in evaluating bias in order to achieve fair and objective evaluations. It is designed for use both by candidates for promotion and tenure, as an information source, and by members of unit-level committees, to help prevent bias. It was initially released for limited use, with the goal of making it available to a wider audience; a general version does not appear to be available at this time.

3) University of Washington ADVANCE Program: Part-time Tenure Track Policies: Assessing the Utilization

http://www.engr.washington.edu/advance/policies/WEPAN-2004-Part-Time-Tenure-Track.pdf

Part-time tenure-track positions may be imagined as one potential solution to some of the balance and reward structure issues discussed above. This paper, presented at the WEPAN conference in 2004, details the part-time tenure-track options at UW. UW has both a permanent and a temporary part-time tenure-track option. Recommendations include communication of policy availability, and making policy implementation more consistent.

D. Additional Faculty Issues

1) DiversityWeb, An Interactive Resource Hub for Higher Education. AAC&U.
www.diversityweb.org

This site has an extensive collection of resources on diversity, begun in 1995. Of particular interest may be the "Faculty and Staff Development" links under "Diversity Innovations." Resources include practical strategies, model programs, and materials for use in consciousness-raising and other faculty development activities, and address both the development of existing faculty and recruitment and retention of a more diverse faculty.

2) Professional and Organizational Development Network.

This professional network offers a variety of resources and meetings for faculty developers. While much of their information focuses on development of faculty teaching skills and pedagogical knowledge, other issues are covered. Of particular interest may be the POD reading packets, intended for campus-based discussion or training programs. See especially Packet #11: Change, Renewal, and the Professoriate, as addressing needs identified in this report for post-tenure faculty.
http://www.podnetwork.org/publications&resources/readingpackets.htm