Facilitating and Fostering Research across the University: Staffing Issues in Research
Capacity Development

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I should confess at the outset my conviction that conducting research is a
fundamental role of any true university, and therefore of the collective staff within it.
Both of its other two major roles depend on this one: in educating our students and in
serving our communities, we are obliged to transmit and apply the most recently
available knowledge that has been validated through research in our respective
disciplines; and this requires that we be actively associated with the networks of scholars
currently engaged in generating this knowledge – hence, we must be participants in the
research enterprise. Thus, while I acknowledge that research can be conducted outside of
the university, I do not believe there can be a university that doesn't conduct research.

But this function is notoriously difficult to manage for many reasons, several of
which we've already discussed here. The university is a very complex institution: (1)
because its major roles of teaching, research and service are characterized by vast
differences in their principal clients, their behavioural norms, their resource bases, etc.;
(2) because it pursues its work through a wide variety of disciplines comprised of diverse
concepts and modes of inquiry (in the social sciences and humanities, in the natural
sciences and mathematics, in the fine arts and professions), each with its own domains of
discovery – a complexity that has become further complicated by contemporary needs for
us to function in a multidisciplinary context; and (3) because it is challenged by a
schizophrenic relationship with its counterpart organizations, oscillating between
simultaneous demands for cooperative partnership and for adversarial competition – the
university is a dependent entity that prizes its independence. So managing any function
within such a chaotic environment is problematic, and research is certainly no exception
– particularly since its main performers' primary allegiance tends to lie not with their
employing institutions anyway, but rather with their scholarly peers wherever they may
be.

I remind us of these complications not to discourage our efforts at promoting
research through analyzing its management, but rather because their impact is powerfully
evident in the managerial area that I have been asked to discuss – capacity development
through staffing. My basic message is that the *great complexity* inherent in a university
necessitates a *comprehensive perspective* on research management which entails a
prudent flexibility in personnel administration. I'll try to substantiate this by outlining

some examples of human resource issues that must be addressed through the university's research management in half-a-dozen areas: staff categories, staff assignments, staff supervision, staff motivation, staff understandings, and staff support. In developing this brief sampling I found that, among our pre-reading documents, the presentation by Oktem Vardar on "Research Management" at EUA's 2003 Institutional Evaluation Induction Seminar was particularly relevant; and the challenges of motivating faculty members to focus their research efforts on commercializable projects are well analyzed in the 2003 ASHE paper by Mendoza and Berger. My short review of staffing issues will assume that you are already familiar with those papers.

Staff Categories

In building capacity for research, university managers must recognize that there are several categories of staff involved – all with different skills, duties, needs, norms, expectations, and aspirations. These differences must be accommodated differentially, with a view to integrating them into a functional whole that is greater than the sum of its disparate parts. For example, there are:

research administrators – these include Vice-Rectors responsible for research on a university-wide basis, Deans or Vice-Deans responsible for research in particular Faculties or Schools, Directors of research Institutes or Centres, and Directors of Institutional Research;

teaching scholars – these are the people responsible for actually designing and conducting university research, and they typically contribute to the institution's educational function as well;

research associates – these include analysts, methodologists, statisticians and technologists, who spend all their time providing their specialized talents to enable our research projects;

support staff – these include the clerical, technical, custodial, and other workers who maintain the facilities and services necessary to support the research enterprise;

graduate (especially doctoral) students – these are often both students and employees of the university, they may serve as "apprentices" to faculty scholars and as principal investigators for their own dissertation studies, and their employment (if any) may be as Teaching Assistants or Research Assistants (or even both); and

postdoctoral fellows – these are "journeymen" scholars who temporarily devote most of their time to research endeavours as a final stage in learning to become teaching scholars – their position (although not their status) is similar to that of visiting scholars.

There are different role expectations for each of these staff categories and they vary widely in qualifications, mentalities, ambitions, etc. – which means that they must be managed differently, but collectively. And there is diversity *within* each category as well

– depending on whether their engagement is in "big science", individual investigations, team projects, interdisciplinary efforts, inter-institutional endeavours, university-industry collaborations, basic (curiosity-driven) or applied (entrepreneurially-inclined) research, etc. So the staff categories in university research entail numerous management challenges, and each of the following sets of issues will play out differently for these different categories of staff.

Staff Assignments

The forms that these employees' assignments take must have some flexibility because of such factors as the vicissitudes of research funding, the desirability of multidisciplinarianism, and the shifts in strategic direction that are inevitable for universities over time. Among the varying employment arrangements are:

permanent/tenured staff – here there are issues especially with the research administrator category (e.g., whether one should be appointed to those responsibilities with or without a limited term of office) and with the teaching scholar category (e.g., whether a "matrix" structure should be established wherein one axis identifies the "home" departments through which teaching is done and the other axis identifies centres or institutes to which staff may be assigned on an ad hoc basis for research projects – which also raises the issue of whether such "regular faculty members" should be expected to conduct both teaching and research at all times or be able to vary the proportion of time they spend on each [from 0% to 100%] over different career periods);

temporary/project staff – these are recruited to their duties as needed, with some possibility but no guarantee of continuing appointment, and they are assigned only to the research-project axis of the matrix where one exists; and

ad-hoc/part-time staff – these have other interests and engagements such that the university is not their principal employer or concern even while they do their occasional work for it, and they too are assigned only to the research-project axis of a matrix.

Such different forms that staff assignments may take, while essential for research purposes, clearly generate some complex issues in personnel administration that university managers must anticipate and address.

Staff Supervision

The effective supervision of one's work requires clarity on both the work to be done and who is to supervise, and university research involves issues in each of these elements. On the first, what qualifies as scholarly productivity in studies of music is quite different from the nature of research in mathematics, medicine or mechanical engineering, and different performance indicators must be used to supervise and assess it. On the matter of who should do the supervision, I subscribe to Fayol's classical management principle called "unity of command", whereby "an employee should receive orders from one superior only" and that person should be the primary supervisor of the

staff member concerned; this raises issues in the context of university research, including the following:

1.   Where research administration is led by a Vice-Rector responsible for research across the university and Vice-Deans responsible for research in each Faculty, who should be the primary supervisor of a Vice-Dean – his or her Dean or the Vice-Rector for Research?

2.   In a matrix structure where a faculty member teaches courses in an academic department along one axis and conducts research in an institute along the other axis, who should be that scholar's primary supervisor – the Department Head or the Institute Director?

3.   Where should primary responsibility lie for supervising the progress of a doctoral student serving as a Research Assistant – the Head of the Department in which he or she is enrolled, the scholar whose research he or she is assisting, a university-wide Dean of Graduate Studies, or someone else?

Certainly, all of those for whom an individual works should contribute to the supervision of such staff; but in order to limit dysfunctional ambiguity and avoid destructive conflict, it is essential that one's primary supervisor be clearly identified so there can be no doubt as to who is ultimately accountable to the employer, funder or client for the quality of that staff member's performance and for his or her compliance with all applicable rules and regulations, laws and procedures, norms and standards, etc.

Staff Motivation

A crucial key to building a university's research capacity is motivating its staff to contribute their efforts in the desired direction. A basic issue in this regard is how to engage them in determining what that direction is to be – in generating the institution's research strategies and policies – because we know that staff motivation is higher when they have participated actively in deciding what they should do than when such decisions have simply been imposed on them. Similarly, given the relationship between research and freedom, staff in most of the categories outlined earlier will respond better to policy instruments based on incentives than to those relying on mandates; consequently, they are more likely to be motivated by rewards (such as sabbatical leaves and travel allowances, compensation and promotion, prizes and honours, etc.) than by sanctions (except those that involve withholding these inducements). More specifically, however, it must be recognized that those in different staff categories are motivated differently to do their research-related work: some seek to satisfy scholarly curiosity, some value peer recognition, some want employer approval, some desire public acclaim, some wish to solve problems, some hope to gain financially, and so on; and some respond best to extrinsic (often material) rewards while others appreciate more the intrinsic satisfaction of self-actualization. The issue here is that motivation is individualistic and, because of the immense diversity among the kinds of staff required for university research, it is extremely complex and must be managed very carefully.

Staff Understandings

In building our research capacity through the development of staff, there are additional issues related to certain understandings that must be imparted to them. For example, they need to be kept well informed about the current and emergent plans, priorities, policies and procedures of research-funding agencies; and they must also be fully familiar with those of the university itself, within the context of its strategic mission. More operationally, it is essential that staff clearly understand the institution's positions (and that the institution has established clear positions) on such value-laden issues as research ethics and standards, intellectual property and liability, performance indicators and evaluation, reward systems and sanctions, competition and collaboration, secrecy and disclosure, profit sharing and overhead allocation, roles and relationships concerning graduate students, conflict of interest and use of university resources. Without these understandings staff will be subject to confusion and uncertainty, they will waste time and other resources, and they will make mistakes – none of which is conducive to good research.

Staff Support

Finally, there are issues surrounding the support that a university provides to facilitate and foster the work of research staff. For example, *moral support* must emanate from an institutional culture that clearly values the research enterprise – as reflected in the actions and statements of senior managers, the goals and objectives of strategic plans, the procedures and policies of governing bodies, and the nature and clarity of reward systems. More concretely, there must be *operational support* to increase and improve the conduct of research by university staff; this includes the allocation of sufficient resources to supply them not only with laboratory facilities and library materials that are modern and accessible, but also with opportunities for career development (especially for new staff [this can be critical in the crucial recruitment process] and for those who change their research foci in mid-career) such as reduced teaching loads, peer consultation visits, and special equipment grants. Moreover, just as many of our campuses now have Centres for Teaching and Learning to nurture the *educational* role of faculty members, I would advocate the establishment of similar agencies to foster their *research* work – through dissemination of best practices, professional development workshops, help in proposal and report writing, and the like. The main issues here are what kinds of support to provide, which staff can access them, and how they will be funded.

In conclusion, there is obviously nothing surprising or erudite about what I have mentioned; I have simply outlined some illustrative practical issues that should be anticipated and addressed in the staffing domain of research management. It is important to recognize that there is considerable interaction among the different sets of issues that I have discussed: how one resolves a supervision issue depends on how the assignments have been worked out, effective motivation varies among the staff categories

involved, the support provided must be consistent with extant role expectations and staff understandings, etc. As I indicated near the beginning of this presentation, the staffing issues involved in research capacity development across a university are complex and their resolution requires a comprehensive perspective and a flexible approach. For us as senior managers of institutions where research is a fundamental role, I believe it is well worth the effort.