

ED 375 732

HE 027 816

AUTHOR Colbeck, Carol
 TITLE The Contexts of Academic Work: What Matters to Faculty. ASHE Annual Meeting Paper.
 PUB DATE Nov 94
 NOTE 32p.; Paper presented at the Annual Meeting of the Association for the Study of Higher Education (19th, Tucson, AZ, November 10-13, 1994).
 PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS Academic Deans; Case Studies; College Administration; *College Faculty; Department Heads; Higher Education; *Incentives; Policy Analysis; Research Universities; *School Policy; *Teacher Attitudes; *Teacher Behavior; Teacher Motivation; Universities
 IDENTIFIERS *ASHE Annual Meeting

ABSTRACT

In order to understand how college faculty incentives and other policies influence faculty behavior, this inquiry used case studies to gain insight into faculty motivation and work behavior. Data collection involved semi-structured interviews with the department chairs and seven or eight tenured faculty in each of four departments and with each department's academic dean. Research was conducted at one research university and one comprehensive university. Analysis included tabulation of supports and constraints, comparison for similarities in themes, within-case analysis of each department, and a cross-case analysis for similarities and differences in policies and faculty responses. Four policies emerged as particularly important to faculty in at least three of the four departments: merit pay, course load, course releases, and admissions. Overall, the analysis showed that what administrators say matters is frequently not what matters to faculty. For example, annual merit raises matter far less to faculty in this study than administrators think they do. When incentive policies were perceived as "pressures," they were not any more likely than regulations to motivate faculty. Faculty spoke of their perception that myriad policies serve actually to ensure that while teaching gets done, it does not impinge on research opportunities. (Contains 43 references.) (JB)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED375732

**The Contexts of Academic Work:
What Matters to Faculty**

Carol Colbeck
Stanford University School of Education

Paper prepared for the annual meeting of the Association for the
Study of Higher Education, Tucson, Arizona, November 10-13, 1994

HE 27 816

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

ASHE

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it
- Minor changes have been made to improve reproduction quality

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy



**ASSOCIATION
FOR THE
STUDY OF
HIGHER EDUCATION**

**Texas A&M University
Department of Educational
Administration
College Station, TX 77843
(409) 845-0393**

This paper was presented at the annual meeting of the Association for the Study of Higher Education held at the Doubletree Hotel, Tucson, Arizona, November 10-13, 1994. This paper was reviewed by ASHE and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC collection of ASHE conference papers.

THE CONTEXTS OF ACADEMIC WORK: WHAT MATTERS TO FACULTY

by
Carol Colbeck

Faculty produce new knowledge by doing research; they disseminate knowledge by teaching students; they apply knowledge by providing public service. Concern that faculty are allocating their time inappropriately to these roles is escalating as colleges and universities seek ways to cope with growing student enrollments, increasing student diversity, drastic budget cuts, and public demands for accountability. Critics inside and outside the academy charge that faculty are neglecting undergraduate students to pursue the pay, promotion, and prestige they can gain from doing research (Greenberg, 1993; Mingle, 1993; Sykes, 1988). Many academic administrators seek policy changes that will modify the ways faculty do their work (Edgerton, 1993a). Assuming that faculty are rationally motivated by such formal organizational incentives as salary increases and tenure, and promotion, progressive reform in the academy, in this view, will come from recognizing that "incentives work better than regulations" to convince faculty to modify their roles (Edgerton, 1993b): 6). In particular, changing standards for tenure and promotion system are seen as the best ways to modify faculty priorities (Diamond, 1993).

BUT DO INCENTIVES MATTER TO FACULTY?

There are substantial reasons to question whether faculty are primarily motivated by formal organizational incentives, and whether faculty will modify their work behavior in response to changed incentive policies. First, the range of formal incentives available to induce most faculty to change their behavior is small. Incentive most often considered include tenure, promotion, and salary increases. The critical career gatekeeping incentive of tenure mentioned by many who would like to modify faculty priorities is personally irrelevant to most faculty. More than two-thirds of full-time tenure-line faculty have already attained that reward. Furthermore, more than half of the tenured group have already attained promotion to full professor. Of the three formal principal incentives most considered by academic policy makers and scholars investigating faculty roles and rewards, salary increases are the only meaningful incentive to offer senior faculty.

Second, formal incentive policies comprise just one element of the organizational context in which faculty work. The effects of organizational incentives on faculty work must be considered in relation to the effects of other important elements of academic workplace environments. Research in secondary schools and other organizations shows that causal links between incentives and performance are weak (Baker, Jensen, & Murphy, 1988), and that many elements of the work place beyond incentives support or constrain individual work performance (McLaughlin, 1992). Elements of context that apply to higher education work settings include availability of resources (Martin, Schermerhorn, & Larson, 1989; Peters & O'Connor, 1980), governance systems (Blau, 1973), evaluation and work assignment policies (Dill, 1986; Hind, Dornbusch, & Scott, 1974), communication patterns (Maehr & Braskamp, 1986; McLaughlin, 1992), and the behavior and normative expectations of co-workers (Maehr & Braskamp, 1986; Scott, 1992).

In addition, faculty work is embedded in a "master matrix" (Clark, 1983). Faculty perform their work simultaneously in the organizational contexts of their colleges or universities and the professional contexts of their disciplines (Light, 1974). The structure of intellectual tasks and modes of social interaction around the generation and dissemination

of knowledge are important elements of the disciplinary contexts that affect the ways faculty do their work (Becher, 1989). Organizational and disciplinary contexts of faculty work intersect and interact in academic departments. Departments have their own governance structures, policies, resources, communication patterns, norms and values. Therefore, each faculty members' work is influenced by a pattern of contextual elements in their employing college or university organization, their discipline, and their department.

Third, the effects of organizational, disciplinary and departmental contexts on faculty work must be considered from the perspective of faculty members themselves. Studies that show faculty are rewarded more for research than teaching provide information about what administrators value when determining rewards (Fairweather, 1993; Gomez-Mejia & Balkin, 1992; Konrad & Pfeffer, 1990; Tuckman, 1976); they do not explain how or in what ways incentives or other elements of their work contexts matter to faculty. In a recent study of faculty work, Blackburn and his colleagues (Blackburn, Bieber, Lawrence, & Trautvetter, 1991a & 1991b) linked motivational variables and faculty work. They found that faculty self-valuation and perceptions of their environments were significant predictors of how much time faculty allocated to teaching and how much research they produced. In Blackburn's studies, faculty rated how much time they believed their institutions wanted them to allocate to various activities and in general, how much support they received for the activities. Blackburn's studies do not show, however, how faculty develop their perceptions about institutional priorities, nor which environmental variables support or constrain their work.

Thus, as much as administrators and higher education policy makers would like to figure out effective ways to induce faculty to devote more time to teaching, they have yet to adequately determine how faculty respond in attitude and behavior to existing incentives and other elements of academic workplace contexts. My study begins to fill this gap by exploring faculty perceptions of their institution's and department's priorities, faculty beliefs about which elements of their work contexts support and which elements constrain their teaching, research, and service work, and their attitudinal and behavioral responses to perceived supports and constraints. Specifically, this paper focuses on faculty perceptions of and responses to institutional and departmental policies by addressing the following questions:

- 1) What institutional policies regarding their teaching, research and service work are salient to tenured faculty?
- 2) How do faculty perceptions of and responses to these policies vary across institutions and disciplines?

CONCEPTUAL UNDERPINNINGS

The theoretical frame for this study is that work contexts are social constructions which are created and maintained through every day human interaction and interpretations of those actions (Berger & Luckmann, 1967; Blumer, 1969). In this view, human action is neither wholly independent of social context, nor wholly determined by it. As individuals act, they invest their actions with meaning. Understanding why faculty do what they do is a case of sensemaking (Weick, 1993). When sensemaking, individuals derive meaning from their actions by interpreting them and justifying them in relation to relevant and salient social contexts. Universities and disciplines are constantly evolving social constructions. They are the contexts within which individual faculty activities are constrained and according to which faculty members justify their actions.

Much existing research on faculty work shows that work contexts affect what faculty do and how they do it. Repeated large scale quantitative studies show that the type of higher education institution¹ predicts variations in faculty research productivity (Creswell, 1985; Fox, 1985), teaching practices (Clark, 1987; Finkelstein, 1984), self-reported allocation of time to work roles (Astin, Korn, & Dey, 1991; Fulton & Trow, 1974), and in stated preferences for teaching or research (Boyer, 1989). Many studies also show that differences in discipline are related to variations in publication rates (Creswell, 1985; Fox, 1985), in involvement in teaching (Zuckerman & Merton, 1973) and in self-reported allocation of work time (Blackburn, et al., 1991b; Creswell, 1985; Fulton & Trow, 1974; National Center of Education Statistics, 1990; Smart & McLaughlin, 1978). However, because these studies treat organizational and disciplinary contexts as aggregate concepts, they do not show how incentive policies interact with other features of organizational and disciplinary contexts to affect the ways faculty do their work.

In this interpretive study, I take faculty member's perceptions and responses as central to understanding how teaching, research and service work gets done within overlapping university, disciplinary and departmental contexts. This view of faculty work renders problematic the notion of a straightforward correlation between rewards and faculty performance outcomes.

RESEARCH DESIGN

While previous quantitative research indicates that organizational and disciplinary contexts do affect faculty work, qualitative methods are necessary to improve understanding of **how** and **in what ways** incentives and other organizational policies interact with other contextual elements to influence what faculty do. This inductive inquiry uses case studies of four departments purposefully selected for organizational and disciplinary variation. The data from these case studies is not meant to be generalizable to populations of faculty. Rather, richly detailed pictures of four specific departments yield evidence generalizable to developing theory about faculty motivation and work behavior in overlapping work contexts (Yin, 1989).

Sample and Methods

Differences in governance structure guided selection of institutions. Previous research indicates that governance, the methods of managing and coordinating the principal tasks of a university, vary from "bureaucratic" (usually in comprehensive universities) to "professional" (usually in elite research universities) (Baldrige, Curtis, Ecker, & Riley, 1978; Blau, 1973; Ruscio, 1987). Bureaucratic governance systems exert more explicit control over faculty work activities than professional governance systems (Blau, 1973; Finkelstein, 1984). Therefore, to understand how faculty perceptions of policies and other contextual elements might vary by institutional type, I conducted research on one research university, Vantage University, and one comprehensive university, Metropolitan State University. (Both institution names are pseudonyms.)

Differences in knowledge structure guided selection of disciplines. Prior research indicates that the way knowledge is understood and developed in disciplines varies from

¹Researchers frequently distinguish colleges and universities according to the Carnegie Classification types (Boyer, 1989). Amount of external research support, type of academic program and numbers of students are the primary distinguishing characteristics between institutions offering at least a four-year degree program, including research universities, doctoral-granting universities, comprehensive colleges and universities, and liberal arts colleges.

"hard" (featuring analysis, reduction, focus on universals, and precision of measurement) to "soft" (featuring synthesis, complexity, focus on particulars, and minute conceptual delineation) (Becher, 1989; Biglan, 1973a). These disciplinary differences affect the ways that faculty approach teaching, conduct research, and interact with one another (Becher, 1989). Therefore to understand how faculty perceptions policies and other contextual elements might vary by discipline, at each university I conducted research in one "hard discipline" department in the sciences, and one "soft discipline" department in the humanities.

Data collection involved semi-structured interviews in 1993-1994 with the chairs and seven or eight tenured faculty in each of the four departments. I also interviewed the academic deans of the schools in which those departments reside. (See Table 1.) The four departments range in size from less than 20 to more than 50 tenure-track faculty members. Eight-six percent of the total number of faculty in these four departments have already attained tenure. Of those with tenure, 23% are women. Among the sample of 30 faculty interviewed for this study, 23% are women. The ages of the faculty in the sample range from mid-30s to mid 60s. Career age of faculty in the sample ranged from less than one year since tenure to 25 years since tenure. Only one informant is considering retirement within the next few years.

Open-ended conversations allowed the informants to focus on the contextual issues salient to them rather than on topics predetermined as important by the researcher (Seidman, 1991). During the one-to-two hour interviews, I asked faculty to tell me about aspects of their university, disciplinary, and departmental work environments that influence what they do and how they do it. They spoke both as informants and respondents, telling their impressions of how their work contexts affect all faculty and themselves in particular. The interview protocols used to guide the conversations included prompts for faculty to discuss governance, policies, resources, norms, values, decision making processes, and communication patterns within their work contexts. I asked the administrators to tell me about their major roles as either chairs or deans and to describe the authority they have over the work of faculty. All but two interviews were audio taped and transcribed.

Data Analysis

The process I used to analyze the interview data follows guidelines suggested by Miles & Huberman, (1984); Strauss, (1987), and Yin (1989). I began the study by developing a developing a working pattern of contextual elements grounded in existing literature and three pilot interviews. After data collection was complete, I constructed a table to analyze systematically all of the transcribed interviews and notes. Each time an informant described a support or constraint of their work, I tabulated a) the context from which the support or constraint originated (university, department, or discipline) b) the purpose of work that was supported or constrained (teaching, research, service, or a combination) c) the means by which the faculty member perceived the support or constraint, and d) the faculty member's attitudinal or stated behavioral response to the support or constraint. An average of 19 supports or constraints was identified in each interview.

During the next stage of analysis, I focused on similarities in themes suggested by all the informants. I compared this evidence with the original pattern derived from the literature and pilot interviews. The analysis relevant to the present paper emphasized how faculty perceive that university and departmental policies interact with other elements of their contexts to their teaching and research work. Comparing the empirically grounded data with the original pattern provided important evidence of what contextual elements are not salient to faculty in addition to evidence of what contextual elements do influence they ways they go about research and teaching.

Next, I conducted a within-case analysis of each department, looking for supports and constraints that were salient to most of the faculty in each department sample. I identified themes that emerged when an issue was raised by 40% of the informants in a department. Again, this stage of analysis focused on similarities among faculty members. Of course there were differences in what faculty within a given department considered salient about their work contexts; faculty are "independent and cantankerous" group of people according to one informant.

Finally, a cross case analysis revealed similarities and differences in policies and faculty responses to those policies across universities, across disciplines, and across departments. Four policies emerged as particularly important to faculty in at least three of the four departments: merit pay, course load, course releases, and admissions.

FACULTY PERCEPTIONS OF AND RESPONSES TO POLICIES

Faculty members perceptions of the effects of merit pay, course load, course releases, and admissions policies on their research and teaching work are summarized by department in Table 2. Faculty perceive more unambiguous supports for research than teaching in all four departments. Faculty at the research institution, Vantage University, perceive more overall policy support for both research and teaching than faculty at the comprehensive institution, Metropolitan State University. Humanities faculty perceive more constraints and mixed effects from policies than science faculty in this sample.

Although Table 2 provides a concise picture of faculty perceptions of the effects of policies on their work, it does not begin to tell the whole story of their responses to policies for three reasons. First, university and departmental policies regarding merit pay, course load, course releases, and admissions vary widely across the four departments. Second, implementation and faculty perceptions of these policies interact with other important elements of their workplace contexts, including other policies, department traditions and values, university missions, persuasion by deans and chairs, and available resources. In the following four sections, I discuss how merit pay, course load, course releases, and admissions policies vary across institutions and departments in this sample, the other elements of workplace contexts that interact these policies, and faculty members attitudinal and behavioral responses to the policies. These findings are summarized in Table 3.

I. Merit Pay

Evidence from the four departments in this study contradicts the view that rewarding effective teaching with annual salary increases will induce faculty to pay more attention to teaching. Faculty informants initiated discussions about salary less than discussions about course load, course releases, or students. Nevertheless, faculty did talk about salary, and revealed policy differences between the two institutions. The ultimate authority for setting salary rests with the Senior Dean at Vantage University. Metropolitan State University operates with a collective bargaining agreement; stepped salary increases are uniform throughout the institution. However, Metropolitan State also offers annual one-time 'merit pay awards' for excellence in teaching and/or research. There is little variation in faculty responses between disciplines within each university.

Vantage University: At Vantage, deans and faculty disagree about the importance of annual increases, faculty consider outside offers more important than annual increases, and faculty work behavior is more attuned to departmental culture and perceived university mission than to salary. The deans at Vantage University said they consider salary increases important, and assumed that faculty agree. When discussing improving teaching, the senior dean said, "Salary setting is a signal and people honestly pay very close attention to

it." However, the deans themselves seem to pay more attention to other issues. When asked about their major responsibilities, all three Vantage University deans spoke much more about appointments and promotions than salary. And one dean acknowledged, "The main thing that we're concerned about is simply, you know, productive faculty members doing high quality research."

Despite recent administrative rhetoric about reemphasizing teaching at Vantage, faculty informants in both departments continue to perceive stronger messages that major financial rewards come from research. In fact, annual salary increases have little impact on improving teaching according to the chairs of both departments. For one thing, one chair said the deans actually weight research more in annual reviews. Describing conferences he has had with deans about faculty salaries, one chair said the deans "look first at a list of publications, then want to know about teaching." "Minuscule raises are not much threat," according to the other chair. In fact, the humanities department chair said faculty "might get no raise if they have done nothing, and they might get a small raise if they have done a lot, barring the outside offer."

Outside offers, rather than annual review raises, matter to faculty at Vantage University. Outside offers result from recognition for research. "People only get major increases in their salary," according to one professor, "when there is an effort to retain them against outside offers, but those outside offers only come if you've produced important scholarship." In contrast, extraordinary recognition for teaching does not pay off. A humanities professor said that university teaching awards that come with salary increases, "even one of the really big ones . . . might equal to publishing a book." Two kinds of faculty feel disadvantaged by outside offers. One group includes scientists whose professional career began at Vantage. Early in their careers, they had to teach, secure funding, and perform service in addition to developing their research agendas. Years later, they see colleagues of the same career age who avoided such responsibilities by conducting research in corporate or national laboratories hired at salaries larger than their own. The other group disadvantaged by outside offers includes those who are unwilling to move for family reasons. Salary differentials appear to pose a threat to collegiality. To avoid this, faculty at Vantage don't talk with each other about salary. A professor in the science department said he really didn't know how salary decisions are made, and "faculty members here in general do not know each other's salary. In some cases, you have some idea, but it's certainly not published."

In this institution where, except for outside offers, faculty are not sure how administrators are using salary increases as incentives, faculty in both these Vantage University departments say work behavior is influenced more by their departmental cultures than salary. They also feel that their department colleagues share their individual values of striving for excellence at both research and teaching. Moreover these values are closely aligned with the university mission. Faculty in both departments trace a cultural legacy of valuing teaching to charismatic former chairs. Professors told me that the well-respected chair of the science department 20 years ago maintained that "You can't do good research unless you also teach." A tradition of valuing teaching continues in the department because fundamentally many believe, "we are paid to teach." A science professor described how values align with mission: "My salary would not stop if I stopped doing anything--except teaching. But I assure you that there's nobody at Vantage who has even the remotest desire to stop doing what they are doing." Similarly, in the humanities department, teaching is important, and "there is no tolerance for not being a good teacher." However, in contrast to the science department, there is some concern that the disproportionate rewards for research "lead to self-centered professionalism" among some humanities faculty, while others are "penalized for their loyalty" to the department and the university.

Ultimately, outside offers, mission, and individual values contribute to Vantage University faculty perceptions that "the teaching you're involved with [is an] important issue." But "not quite as paramount in most faculty member's minds as research. There is no question that the top dog is research." Vantage University faculty distaste for salary as inducement was perhaps best summarized in a comment by a newly promoted full professor in science. "Salary and promotion are not incentives," he asserted. "They are pressures."

Metropolitan State University: For different reasons, Metropolitan State University also do not consider salary an incentive. Neither dean I spoke with at Metropolitan State mentioned salary or merit pay awards as one of their responsibilities or as an incentive for faculty. Most faculty I talked with seemed quite comfortable with the union-negotiated uniform salary scale, and distrust administrative attempts to reward meritorious performance.

The stepped salary scale minimizes internal competition among faculty and administrative interference in faculty work. A full professor in the humanities department told me he left a tenured position at a research university and came initially untenured to Met State to get away from the politics that swirled around intra-departmental competition for position and power. He remembered spending 15 to 20 hours a week dealing with intra-departmental political issues. "So I came here, at least in part, feeling if I was going to spend that degree of time, I'd rather do it teaching in a saner environment." A senior professor in the science department also thinks he and his colleagues are more comfortable with the uniform salary scale than they would be if some people were getting paid more than others.

Faculty at Metropolitan State have long distrusted the use of salary to regulate faculty work. Another senior member of the science department told me that stepped salary increases were "in place prior to the union. . . . The union, I think legitimately reflecting the faculty, didn't trust the administration to be fair in how they would assign merit differentials in pay." This professor, like many I talked to at Met State, "had reached the top of the pay scale some years ago, and just stopped worrying about" five year reviews. As a full professor at the top of the pay scale, he feels "pretty much impervious" to administrative incentives or messages

Faculty informants in these two departments also distrust special university merit pay awards. The merit pay policy allows faculty to nominate themselves for one-year boosts to their annual salaries. Only two members of the science mentioned receiving such an award. One faculty told me he received his because the chair "applied for me while I was out of the country on a sabbatical. I had never applied for one of those because I just haven't liked the idea of treating people differently. . . . and I've suspected the motives of people who want to steer us by this reward thing." Distrust of "the reward thing" in the humanities extends to open resistance. One professor described the situation to me:

Now some years ago, I would say, almost 10 years ago, it was proposed that there be merit salary adjustments based on excellence in research, teaching, and the like. I, as someone who is very active in research and generally does rather well in teaching evaluations, was against this idea. I feel that invariably merit adjustments cannot be applied in any equitable manner, and leads to a fighting over crumbs mentality. And after awhile, several others joined in, and we were able to resist that particular policy.

His chair was delighted with the resistance. "The department in a wonderful moment--actually I'm quite proud of this--just decided not to participate as a department in the [merit]

awards. This was our way of saying, even then, "This is a dumb way of using scant resources."

There is a wide range of faculty work interests and behavior among the faculty I spoke with at Metropolitan State. Like most Vantage faculty, some Metropolitan State faculty work hard at both teaching and research. Others focus primarily either on teaching or on research. The reasons faculty give for their work behavior, however, have little to do with salary and much to do with issues of course load, course releases, and students.

II. Course Load

The amount and kind of classroom teaching done by faculty varies widely, even though policies mandating course load are nominally the same across both departments within each university. Faculty informants discussed six components of course load that affect both their teaching and their research work: the number of courses they actually teach, the number of preparations, the issue of who teaches introductory and service courses, the use of adjunct faculty and teaching assistants to supplement faculty teaching, course releases, and student quality. I will discuss the first four issues in this section. Course release and admissions policies loom large for faculty in these four departments, so I discuss them in the third and fourth sections of these findings.

Vantage University: The senior dean at Vantage University told me, "The teaching load is fairly uniform," averaging 1.3 courses per term. However, he immediately qualified that assertion by saying, "There are some cases you have to interpret. For instance, the lab sciences do some of their teaching in the lab."

Science Department: The course load for all faculty in the science department is an average one course per term. Although this number is the smallest of the departments in this study, it is neither the lightest course load at Vantage University nor the lightest in the same discipline at comparable universities. The legacy of valuing teaching bequeathed by the long ago chair influences not only *that* faculty in this department teach regularly, but *what* they teach. One senior professor with an especially long memory (because he had been a student in the department) said:

From the time I can remember, which was from 1954 on, this department had a tradition of the most experienced teachers -- we take teaching very seriously -- and our most experienced teachers are almost always assigned the most difficult courses, which are the introductory courses.

Many of his younger colleagues interviewed for this study agreed, and most of them teach such courses now. However, the department has structured the teaching of these courses to provide compensating time benefits to the faculty who take on the task. One faculty member who joined the faculty at a senior level a few years before described his experience with such courses:

The standard within this department is one course per term. However, some of the large lecture courses where you have to give each lecture twice, and you have as many as 18 teaching assistants working under you, that's regarded as a double teaching load. Which means that if you ever teach one of those large courses, then you get one free term. I've been doing that ever since I came here. I think that's one of the reasons I got [a major teaching award.] My attitude has always been that if it's a double teaching load, then I should be putting most of my efforts into that teaching. For instance, I have four hours of office hours when I do this. It ends up being an awful lot of work.

Another colleague who has taught such classes for the last ten years says the term free of classes makes "dealing with the problems of the research programs more palatable, although the term that I'm teaching that double class is overwhelming."

Graduate student teaching assistants ease the burden of teaching the large introductory classes. They run the labs and do all the grading of homework and tests. The amount of time that faculty spend training the TAs for a particular introductory class and coordinating their work varies from professor to professor. However, the department provides general teaching training for all their teaching assistants since they all must fulfill a teaching requirement to graduate. The department also requests students taking TA-led classes to complete a more extensive evaluation of TAs than the one requested by Vantage University. An associate professor told me, "That's to find out if there are problems and correct them. . . I think the special form distributed by the department is taken more seriously."

Research may be "top dog" in the Vantage science department, and most of its members are stars. However there is no attempt made to reduce the number of preparations. In fact, to ensure that teaching stays fresh, the department norm is to teach a course no more than three times in a row. A full professor said, "It's my experience that the first year is a learning experience. The second year, you tend to overcompensate. The third year you've got it just about right, and if you teaching it any longer than that, it's a mistake, and it's all down hill."

Humanities Department: While teaching is not downhill in the Vantage University humanities department, the required course load is down. A former dean strongly suggested a reduction in average course load because he "wanted more time spent on research and publication to enhance the reputation of the department." This democratically-run department voted on the issue, and less than ten percent of the faculty voted against the reduction. Two of the dissenters participated in this study. One said, "We did not believe we should [reduce the teaching load] because we thought teaching was as important, if not more important, than research. But the department's reputation is not based on teaching." Since the change, the department's national ranking has increased two or three places. Currently in this department, faculty teach two classes for each of two terms, then take an "inservice term." "This has greatly increased the amount of available research time," one professor said, "without changing the [inadequate] sabbatical policy."

Like science, the Vantage humanities department takes pride in its tradition of valuing good teaching. The tradition now extends to honorably fulfilling non-classroom duties during the inservice term. One faculty member compared this department to a slightly more rigid policy adopted in another Vantage department where the teaching tradition is less strong. In the other department, faculty teach two courses for one term, then one course each for the next two terms.

The zero term only means no teaching. It doesn't mean you are free of departmental or university service or office hours or anything else. So in the [other] department model, the presumption of abuse has to be structurally policed, or structurally eliminated. In this department there is no tolerance for abuse, but there is a desire to take care of it on an individual basis so as to commit the benefit of the zero term to extend it to as many people as possible.

Occasionally faculty arrange two back-to-back inservice terms "to get more sustained work time," according to one faculty member. "It makes a lot of difference to humanities faculty to do that." Another whose back-to-back inservice terms were scheduled soon said that since "this configuration of classes, I think people have produced a lot more." The associate dean believes this configuration "has the effect of emphasizing the importance of research with the faculty." He said further, "I hope it does."

One of those who voted against the new course configuration is concerned that "of course it does reduce the number of courses we teach, which is why classes are larger." However, the actual classroom teaching work of faculty in this humanities department is also lightened by three factors. First, all introductory courses are taught by a separate sub department of adjunct lecturers. Second, until recently, the department has a ready supply of visiting professors willing to teach classes as adjunct faculty. At the time of our conversation, the chair was concerned that the deans had reduced the department teaching replacement budget. Third, Ph.D. students are required to serve as teaching assistants for several terms as part of their degree training. TA's teach pull-out sections for the lecture courses and grade student papers in all undergraduate classes except seminars.

Overall, faculty perceive the new course load policy supports research. Only a few feel that the policy has any effect on teaching in the department.

Metropolitan State University: At Metropolitan State, the union contract stipulates a teaching load of 12-units, or four 3-unit classes per term. In practice, faculty in the humanities department are more likely to teach four courses than faculty in the science department.

Science Department: A senior professor told me, "My impression is the standard teaching load [in the department] is the same as the university and that would be 12 units. But my impression is also that some people get by with less." He is right. Faculty in the science department are divided between those who routinely teach four courses per term and those who never teach more than two. The guiding philosophies of the dean and chair foster this variation. The dean is an active proponent of the primacy of research. His goal has been "to develop faculty research . . . as an absolutely essential part of the pedagogical mission of the institution." So he "set about to provide the supportive environment." A key obstacle to such an environment was Metropolitan State's mandated 12-unit load. He looks for ways in his school "to keep it down to 6 or 7 because that's a [research university] load, and you can get some work done when you have that kind of load." About half the department were hired before the dean, however, and are more oriented to classroom teaching. The dean wanted to encourage these senior faculty to develop active research agendas. "We had senior faculty who were inactive, and we started bringing in these junior faculty and pushing them, and they shamed some of the senior faculty into getting active again." The dean manages course load variation with buy-outs, which will be discussed in more detail in the next section. The faculty I spoke with who are not active researchers are the faculty who are teaching four courses per term.

The vision of a strong research department also motivates the science department chair. He finds additional ways to manage course load to facilitate faculty research. One way is to reduce faculty time spent in course development by assigning them to teach the same classes over and over. One research star feels that he and his colleagues "take their work seriously, especially their teaching, unlike many other places." He feels he is effective in the classroom despite the heavy demands of his research program because he has taught the same courses so many times. "I've only taught four or five different courses . . . in the 10 years I've been here. And if it wasn't for that, I would be dogmeat." Another researcher in the department appreciates the chair's efforts, but finds the repetition is beginning to wear. "I think what he tries to do is minimize new preparations which is good. On the other hand, I would dearly like to--I'm probably unusual among my colleagues because I get sick and tired of teaching the same thing all the time. I would actually like to rotate through."

Faculty who are not active researchers have mixed feelings about the differential course load. One senior faculty member who long ago gave up on being a research star said

he didn't mind the difference. He seemed more resentful that when the university four course load policy was uniformly applied, his own research career was stifled. He thinks that "a four course load leaves no mental resources for creative thought." Another feels there is "only a very tiny effort to balance" work among faculty.

Both tenured faculty and adjunct faculty teach the large introductory and service courses provided by the department. The chair hires adjunct faculty "to support the research program." There are actually more masters students than undergraduate majors, and many of the masters students work as graders and teaching assistants. Almost all the labs for the introductory courses are taught by student teaching assistants. Grad student grading assistants review homework, while most faculty grade exams. Some faculty who were concerned about student complaints about ineffective or sexist TAs, instituted informal training sessions in an attempt to improve TA teaching quality.

The differential treatment of primary researchers and primary teachers contribute to some personal divisions between faculty in the science department. The effects on teaching and research appear to be mixed.

Humanities Department: The chair told me that because the humanities department has traditionally been reluctant to increase class size or use student teaching assistants, the department has traded away opportunities to teach fewer courses. Other departments at Metropolitan State have "variable unit loads" where some classes count include more class time and cover more material and count for four or five units. This humanities department recently tried to secure administrative approval for variable unit courses. However, after a brief trial period, the Metropolitan State administration disallowed variable units for the department in this study. The administration continued the policy for departments who had a longer tradition of such courses. Faculty informants told me of their resentment, and the effects of teaching four courses on teaching practice. One full professor said,

I had to give up the notion that you can everyday teach four superlative classes, which of course was my goal before. I mean to teach as well as one can, as often as one can. When you have to teach 4 courses, one of them is going to be better, one of them you wish you could do again, and the other two will be somewhere in between. And if that weren't the plan, then they wouldn't ask us to teach to that degree.

Faculty in this department have also developed a number of strategies to deal with a course load they feel is disproportionately high. The chair feels it's a "psychological boon" if he can assist faculty by assigning them three "preparations" among their four classes. One Associate professor told me how she makes this work:

I teach this theory course, with different titles, but it's basically the same course, at the upper division and at the graduate level. And I teach more or less the same text, just with higher expectations in the graduate course, and give more explanations in the upper division course.

Several other faculty told me about using the same texts with slightly different approaches in different courses. One faculty says he has modified his teaching approach from covering a quantity of material in class to using "students' responses as part of a text to work toward the material."

This same faculty member told me that he has also modified his approach to research in response to the teaching load. He tends to edit books rather than write them. When he does write, his research is more "suggestive than exhaustive." Several other faculty who want to maintain research agendas despite the course load have developed alternatives. To accomplish teaching and research responsibilities, most spend half their

week in student-filled hectic days on campus. The other half the week they stay home to get their "own work" done. Several faculty consciously look for ways to integrate their teaching and research work. For example, two faculty told me of works in progress based on how they teach their specialties. Others tailor course the content of their courses to support their current research projects.

However, opportunities to integrate teaching and research have recently been limited since dean reduced the budget for adjunct faculty and required all tenured and tenure track faculty to teach at least one introductory or service course per term. The Chair told me, "people didn't like it. On the other hand, they also didn't complain as vociferously as they might have."

Thus faculty in the Metropolitan humanities department find that a heavy course load not only constrains research, they also feel it inhibits effective teaching. Nevertheless, because some faculty members still desire to do both, they are proactive in developing ways to integrate research and teaching.

III. Course Releases

Given the variation in actual course load across the four departments in the sample, perhaps it is not surprising that methods and extent of use of course releases vary greatly as well. On the whole, course releases are used far less at Vantage University than at Metropolitan State, but course loads at Vantage are much lighter. In addition to course load, departmental values, university mission, and dean support are elements of faculty members' work contexts that affect the use of course releases within each department.

Vantage University: Faculty from the Vantage science department do not take course releases. Certainly, their course load is the lightest of the departments participating in this study. However, other science departments at Vantage University and comparable disciplinary departments elsewhere with even light loads still allow faculty to buy out teaching time with research grants. A former chair told me, "We have a very egalitarian system here. It doesn't really matter how famous you are or how many prizes you have. You still teach. No one is ever brought in with a lighter teaching load. You're told up front that you're going to teach [one course per term], the same as everybody else." The chair takes this policy very seriously. Although he knows chairs of other departments at Vantage take compensatory course releases, the current chair does not.

In contrast, the Vantage humanities department has a formal system for compensating faculty for service and one-on-one teaching with students. As the associate dean told me:

They are the most policy ridden department -- in good ways. But they've set out policies about, for example, non-classroom teaching. Most departments at the university, certain people do most of the graduate teaching, or larger portions of the graduate teaching, but they get no extra credit for that. You just have a course load which is your course -- how much you teach in the way of formal courses. But one person might be supervising 7 graduate students and another person might not have had a graduate student in 5 years. And that imbalance is all written up into policies in the [humanities] department. So you get credit for your graduate students. I don't think other departments in the School anywhere have such extensive policies.

The chair of the humanities department told me that the course release policies extend to major department service and supervising senior honors theses. Service positions that earn one full course release per year include chair of the department, director of undergraduate studies, and director of undergraduate studies. "We also have points for the number of

dissertations either supervised or that you're second or third reader on. When you muster 60 points, then you get a course relief, but that takes a long time. You have to muster them within five years in order to cash in a course relief." One faculty I spoke with was currently enjoying a term with such a course release for supervising dissertations and honors theses. Faculty in the department seem to appreciate that this system recognizes their individual teaching while providing occasional additional time for research. The humanities department course release policy, in effect, trades off classroom teaching for individual teaching, preserving and protecting faculty research time.

Metropolitan State University: Course releases are one of the most important ways that faculty manage the heavy course load at Metropolitan State.

Science Department: As evidenced in the discussion of course load, the dean who oversees the science department at Metropolitan State is committed to keeping the actual course load low for active researchers. He told me that Metropolitan State deans have substantial independent budgetary and administrative control of their schools. He uses part of his budget to buy out teaching time of faculty who secure external funding.

We can't afford to just release everybody, but what I did was to have a general policy that for people who get part of their salary paid by the granting agency, I would match that, so that they would only have to get . . . three units of their salary matched, a quarter of their time actually. I would release them for another quarter after that which would bring them down to a 6-unit load. Some agencies like NSF were not used to that. I talked to the program director and he said, "We don't have to do that at research universities." And I said, "Yeah, well we're not a research university, and if you want something done here, you've got to help, but I am willing to do just as much as you are, so doesn't that mean something to you?" And they said "Yes, it does."

One of the department's research stars said of this system, "I'm grateful for that sort of thing. It helps."

The chair told me that in this department, "the research people are doing counts toward their teaching load." In addition to the school-level buyouts, at the department level, research-oriented faculty decrease classroom time two ways: first, by teaching large classes, and second, by supervising student research assistants who work for units and/or stipends. Unit compensation for large classes seems to depend on the extent of one's research program. One researcher told me that "the chair has managed to give everybody practically some sort of time off who is doing anything outside their teaching. . . . but he gives more release time to people who have more active research programs. . . . It's possible to give units for courses that are larger than the average, for supervising the labs, and various other things. I don't quite know how he juggles that." In contrast, a senior faculty member with no research program said that despite complaining, he was given no unit adjustment for teaching "humungous overloads."

Researchers who employ students for money and/or units also earn course releases. One faculty member told me, "I could probably get rid of two or three units just because of the volume of [research] students I have." Although no longer sustaining an active research program, another professor still supervises many masters theses. "That counts as part of my twelve units, and [the chair] hasn't taken that away."

Thus, course releases support research by limiting teaching for those who already have research programs in the department. Faculty who are not active researchers then carry the burden of teaching, and have few mental resources left to begin a research program.

Humanities Department: Faculty in the Metropolitan humanities department have fewer opportunities for external funding, and course releases for supervising masters theses and independent study have been eliminated. Nevertheless, many faculty in this department use one or more of the following ways to gain releases from their four course load: They gain course releases for performing university service, they seek university-sponsored course reductions or mini-grants, or they personally buy out their own time.

One member of this department earned a course release for his service on an important university committee. He told me he resisted giving up a class for this purpose, and that he thinks "very few people are so self-centered that they want to give up classes in order to do something else." Finally, at the urging of his colleagues, he decided to forgo teaching an introductory class "because if I don't teach it, that's that much more work for a lecturer who would otherwise be laid off." On the other hand, he said he wished the university administration would offer course releases to faculty members of another committee.

In the past several years, Metropolitan State has been offering faculty ways to reduce their teaching load to produce more research. Only the three most recently tenured of the eight faculty informants in this department had the opportunity to take advantage of one method of course releases: They received course load reductions during their first year as assistant professors. Although this policy ostensibly affected their course load only during their first year in the department, side effects of this policy continue to affect their work and the work of other faculty in the department. The chair spoke of the resentment and the work crunch felt by senior faculty:

When [the central administration] decreed that incoming faculty would have three-course loads, they didn't decree funds or release funds to pay for it. They just said, you know: 'Find a way to do it.' So we gave our new faculty three-course loads. We, in effect, ate the costs as part of our departmental budget. A little more leeway then, but it's not as though it was absolutely easy. All right. What we created was an interesting kind of resentment in those who had come the year before and in no small measure in those who had been here for a number of years who said, 'How about three-course loads for those who have taught 20 years or more.' They didn't go on strike, kind of thing, but certainly I heard grumbings about it. And the grumbings had to do with the sense that suddenly they're paying a whole lot of attention to our novitiates. What about the rest of us?

Unlike their senior colleagues, the new generation of tenured faculty continue to actively pursue other options for course releases. Each of the three mentioned competing for university-sponsored mini-grants or affirmative action grants as a means for obtaining course releases. Applying takes time, and results are not guaranteed. One associate professor told me, "You have to go through this whole application process to get a course off, but sometimes you do, so that's one resource." Another member of the department who is an active researcher considers applying for university grants a waste of valuable research time:

Some people do get these grants and do write -- you have to write a proposal for why. And some of my colleagues do this quite a lot. But in my experience, I often find that in the amount of time that it would take to write the proposal, I can write a section of the essay. And in the amount of time that it takes to respond to the other proposal, I can finish another section of the essay. And as a result, I often do not apply for that sort of thing here because the procedures are so cumbersome on an already overtaxed situation, that it's very difficult to set up that kind of application. And of course one knows you're not expecting -- one doesn't expect money to be given away. One expects that there has to be a responsible means. But such is often the state of our times, that in my particular case, I can't -- I just won't be able to manage it. I can do more constructive work by using the time that the application would take.

In addition to applying for Metropolitan States competitive grants, each of these younger tenured faculty told me they have taken less salary to teach fewer courses per term. Essentially, they buy out their own time, perhaps because their discipline does not afford them the same opportunities as scientists to secure external funding to buy out some of their course load. An associate professor expressed some concerns about how personal buyouts hurt teaching, but feels they are necessary to get research done:

Another thing that a lot of junior faculty in the English department do is to just teach fewer courses and just get less salary, which is awful, but people have to do that. I've done it, and a bunch of other people in the [humanities] department have done it, so -- And in this time of budget cuts--in a sense the department is glad to do it, cause that saves some money. But in a sense that's terrible because they're losing their teaching. . . . But that shows how strongly people want to do their research.

The chair sees this as "a disturbing trend" but perhaps symptomatic of what he perceives as institutional "schizophrenia." He told me that as Metropolitan State grew, it's direction shifted away from teaching and toward research. He dates the shift to the tenure of a former president who thought, according to the chair, that "you could have a teaching faculty that also did research." He feels that increased expectations for publication would have been reasonable if the administration had reduced loads for all faculty to three courses per term. "But we didn't go to a three-course load. What we went to was some more schemes for encouraging faculties to take time off." These schemes support research at the expense of department teaching.

Admissions

Students matter to faculty and to their teaching and research work. Some find that students contribute to research success. Others have neither time nor energy for research after working intensively with students. Some find that bright students inspire them to teach material with thought and depth. Others find heterogeneous groups of students baffling. Still others delight in providing opportunities for disadvantaged students. Vantage University is highly selective when admitting undergraduate and graduate students. While Metropolitan State has admission criteria, in recent years more and more students poorly prepared for college level work are filling its classrooms. Faculty responses to students vary within and across departments. Other contextual elements that interact with admissions policies to affect faculty work include level of graduate program, department values, and course load.

Vantage University: The faculty at Vantage know they benefit from very selective admissions processes that allow them to work with very bright and ambitious graduate and undergraduate students.

Science Department: When most of the faculty informants in the Vantage University science department talked of students, they meant graduate students. When discussing undergraduates, they tended instead to talk of faculty teaching. Faculty in this department rave about their graduate students. For example, one professor said,

The most important resource that Vantage University provides for me is excellent graduate students--a continuous flow of them--and I don't just mean for me. I mean for my colleagues here, because I interact with them as well. And some of my research is sort of--it's certainly not what you would call multidisciplinary, but it does overlap other areas of science. And so the accessibility of really good students and really good faculty--this is the most important resource for me--the intellectual resource. The intellectual resource, you know, of first rate minds in a

common housing here is what universities are all about and that is what I want. That's why I'm here.

A recently promoted full professor agrees that "the best thing about being here at Vantage is the students. They are the best students in the country. That is why a lot of faculty are very successful." Most of the faculty I spoke with feel that graduate education and research are inseparable parts of their work.

However, faculty do feel some tension between the teaching and supervising aspects of their relationships with graduate students. One faculty acknowledged that there is a component of working with graduate students that does not directly further his own research. He feels that faculty need to be supportive during critical periods when students fail and must learn that they can recover from failure. "So there's a maturing of graduate students," he said, "that takes a good deal of time and effort that is not research, per se." Others spoke of tensions that arise because they feel a tightening funding market is reducing the luxury of allowing students to learn from their mistakes:

So a new student comes in and you really rely on this person because he's the one who is going to take the data and everything like that. There is a certain tension in the university. You can treat the graduate students a bit like technicians, in which case, if they are good hands, they'll do what it is you want. But they don't learn; they don't mature as scientists. Or you can give them lot's of freedom; let them make mistakes. Through their mistakes, they learn. But of course mistakes take time. . . . I'm trying to do the best job I can in training these students within the boundaries of what I have to produce in order to keep funded.

Although all the faculty informants I spoke with in the Vantage science department are obviously proud of their long tradition of valuing undergraduate teaching, few talked directly of undergraduates as students. A couple of faculty lamented changing admissions policies that favored "student body president" types who were less likely to pursue careers in research science. For example, the chair expressed concern about declining numbers of majors and his efforts to modify the major to make it more attractive. Faculty told me they sometimes include an undergraduate or two in their student research groups. However, most talk of teaching focused on faculty values and teaching abilities, not on student learning. For example, one faculty said, "We've had some outstanding teachers who have written classic textbooks." Another said, "I think we maintain a high caliber of undergraduate education."

Thus, the Vantage University science faculty find quality graduate students invaluable support for their research. Otherwise, faculty seem to find students supportive of effective teaching in the sense that students are convenient audiences before which science professors display their teaching talents.

Humanities Department: Perhaps because different disciplinary knowledge structures foster different faculty-graduate student relationships, faculty informants in the humanities department had much less than their science colleagues to say about direct student contributions to research. Research is conducted independently by both faculty and students. Therefore, supervising student research is seen primarily as a teaching activity. The department policy of awarding course release compensation for this one-on-one teaching activity has the effect of managing faculty teaching time to minimize effects on research time.

Like their colleagues in science, Vantage humanities faculty informants are proud of their department's traditional emphasis on teaching. Also like their science colleagues, they tend to talk more of teaching than student learning. A couple feel that overall student

ability has declined in recent years. One professor discussed how the quality of students challenges her and her colleagues to prepare thoroughly for teaching:

We drive ourselves more than we need to in preparation just with the sense that we need to be right on top of it, and that the students will just assume that you just lead them through the [literature] gently. . . . And you do have some very, very sharp students, who -- well I mean you start talking to them about late 18th century medicine, and they run out and get books -- these are undergraduates, and they buy the book and come and want to talk to you about it. I think that it's that. The feeling that to do your job, you do have to do the best you can to be up as well as you can in what's really interesting, in what's going on. And that is what makes for that burden of rereading and rethinking. I bet you very few people break out the yellowed sheets of old lectures and just read them over again.

Most, however, talk about the quality of instruction in terms of faculty teaching. For example one said, "This is a department that really prides itself on teaching. It would be very hard to be a member of this department and be a poor teacher." As with science faculty, Vantage students provide an intelligent audience before whom the humanities faculty teach. And at least for some faculty, the presumption of student intelligence and initiative is an inspiration to teach especially effectively.

Metropolitan State University: Diverse is the best word to describe students at Metropolitan State. The relatively open admissions policy means that the variety of students is huge. Students range in age from freshly minted high school graduates to senior citizens. There is both broad ethnic diversity and language diversity. Many students are as busy trying to learn to speak, read, and write English in addition to their academic subjects. While the best students "are as good as the best anywhere," there are many students "who don't know how to write a paragraph." The range of faculty responses to this student population is almost as diverse.

Science Department: Whether their orientation is toward research or teaching, faculty informants in the Metropolitan State science department are focused on students and student learning. Faculty recognize their students' needs are different from needs of students at research universities like Vantage. Some faculty respond by devoting extra out-of-class time to help students digest the course work. Others try to capture student interest and develop student abilities with research projects.

Many faculty in this department are proud of providing educational opportunities to students who are the first in their generation to go to college and students who might fare well at an institution less tolerant of diversity. One professor used the metaphor "impedance matching" to describe the department's work with students:

Impedance matching means you hook electrical systems together so that when you send a signal down, you don't bounce away at the connections. And so the notion being that if you hear people coming down the pipeline, if they just hit the Ph.D. institutions, bam! they reflect off. But if they go through Metropolitan State, they mesh in.

He talked about "hero tales" of students who came to Metropolitan State with checkered backgrounds and not only "meshed in," but succeeded. People who formerly dealt drugs or did time in prison came to Metropolitan, got "themselves back in the mainstream" and went on to Ph.D. programs at well-known research universities.

Hero tales do not happen without substantial faculty as well as student effort, however. A heroic minority of the faculty in this department hold office hours long beyond the required one hour per three unit class. One such professor with a reputation for being a tough

grader wants students to emerge from classes knowing as much as students in comparable classes at research universities:

They don't all have to be as brilliant, but I don't think we should automatically assume that they can't get there. Some of them can. We need to teach them differently because they don't have the same preparation, so it's harder on us. We need to give them more help, more time, more hints. We can't assume that they will just pick it up like that. But it's wrong to assume that they can't get it. That's doing them a disservice.

This professor feels "I have to spend a lot of time with them in order to help them." Though the professor found it impossible to sustain a research program while doing this kind of intensive teaching, there is a pay off: "It's really exciting when they do get it, you know!"

The chair is also committed to student learning, although he feels strongly that the best way the department can help students is by providing them opportunities to do research projects. He is less concerned about classroom teaching:

I have learned that the day of looking at a transcript is over, and the day of thinking that the student can do problem four in chapter 12 where the other student who has trouble with problem 4 in chapter 12 distinguishes between the two is over--is nonsense. And therefore you're talking about the whole fundamentals of education. It's almost as if you're saying that what goes on in the classroom is irrelevant. And so the basis of education is 'Do it.' And the people for whom education matters, namely the graduate schools who want to admit people, and companies who want to hire people recognize this. They are always saying, 'Show me what you can do.' And so, ergo, we strongly encourage and strongly support every single student to do some kind of research project.

The chair actively encourages faculty to engage all students in research. Research-oriented faculty do find students whose work advances their research work. One professor told me that the best students are those who are willing to work long hours for little or no money. Then he knows they really love the work and will actually get something meaningful accomplished. The dean, chair and several faculty told me a department legend: An undergraduate who worked with one of Metropolitan's research faculty presented a co-authored paper at a conference and skillfully handled the challenges of an internationally famous scientist. Years later faculty, chair and dean exult in the David and Goliath tale, and other students continue to present at conferences.

Because the admissions policies at Metropolitan State are so open, the range of students both constrains and supports research. However, most faculty informants seem to relish the challenges of working with a diverse student group and find a variety of ways to improve student learning.

Humanities Department: Faculty responses to the diversity of Metropolitan State students vary widely within the humanities department. The dean feels strongly that "the very heart of the institution is teaching and that "serving disadvantaged students is the most important part of Metropolitan State's mission." The humanities chair agrees: "I think the honorable response to a serious social issue has been to say, 'Okay, we will take in people who are not technically ready, but we will get them ready.'" On the other hand, the chair also knows many of the faculty in the department resist this notion. He told me, "Talk to some of my colleagues, and they'll tell you it's scandalous that we spend as much of our time and as much of our resources as we do on remedial work." The combined budget and admission pressures present conflicts between offering service or majors courses. Given the administrative requirement that faculty teach introductory courses, the department has

trimmed range of elective courses. At least three senior faculty told me that this has had a serious effect on department morale.

While most of the faculty informants enjoy the ethnic and age diversity of the students, several feel stymied by the range of student preparation and ability. Most believe that their research time is constrained by the heavy course load combined with the extreme needs of many students. Many also believe that teaching is more difficult. One said that the "absurd range" of students presents challenges. "Whether it's high or low level, you know, it's just easier to teach a homogeneous class." Two faculty compared teaching at Metropolitan State with teaching at a research university. Both feel teaching at Metropolitan is a challenge, but one sounds daunted, the other sounds inspired by Metropolitan's students. The first said:

It's the preparation that they come here with, the learning styles they have, the huge variety of cultural backgrounds. That kind of thing is very challenging, because at a research university, for example, you can read your lecture notes. Here that doesn't work."

The second professor once taught as an adjunct professor at Vantage University and directly compares that experience with her teaching work at Metropolitan:

I don't doubt that I will never teach at a place where I enjoy the students as much as I enjoy them at Metropolitan. . . . The students at Vantage have everything to gain. They have lives before them that they of sort of orchestrating now. People at Metropolitan are coming from lives that they're trying to put back together again. So they have nothing to lose. The classrooms are so lively and the ideas are so --. They don't have the preparation. They don't have the education. But they have a kind of daring and intelligence that they bring to whatever they read that's beautiful to me.

Whether or not they enjoy working with the students, talk of teaching in this department is definitely student-centered. And even if the teaching is difficult and cuts into research time, many are committed to helping students. An associate professor who turned down a job offer at a selective liberal arts college compared students during her campus visit. "I had lunch with some of the students and I thought, 'Boy these are very nice students, but I'd be bored in about 10 minutes.' I think the students here [at Metropolitan] need me. They don't need a generic teacher."

SUMMARY AND CONCLUSIONS

What administrators say matters is frequently not what matters to faculty. In particular, annual merit raises matter far less to the faculty participating in this study than administrators think they do. Many faculty simply did not even bring up the issue of salary. When faculty had reactions to merit raises, they ranged from skepticism to distrust to open resistance. These reactions often stemmed from faculty members' perceptions that administrators tend to use merit raises to manipulate rather than to empower.

The findings from this study challenge the notion that "incentives work better than regulations" (Mingle, 1993) to encourage faculty to pay more attention to teaching. When policies portrayed as incentives are perceived instead by faculty as "pressures," then these inducements are not any more likely than regulations to motivate faculty to modify their work behavior. National academic policy leaders' focus on incentives masks multiple, overlapping policies that operate at all levels to support faculty research and constrain faculty teaching. Listening to faculty, we hear them speak of an cacophony of policies that subtly harmonize to ensure that while teaching gets done, it does not impinge on faculty opportunities for research. For example, deans at Vantage University say annual

salary increases are an important way to reward effective teaching, but faculty all know the deans will award the really big raises to faculty whose publications make them desirable by other universities. Metropolitan State mandates a four course load, but a contrapuntal strain of university-level, school-level, and department-level sub-policies loudly suggests that researchers can find many ways to manage and reduce the course load.

When the faculty at Metropolitan State talk about their work, they bring up a critical issue too often ignored in recent debates about faculty rewards and conflicts between teaching and research: Metropolitan faculty talk about students and student learning. Perhaps that is because Metropolitan students won't allow themselves to be ignored. According to one associate professor, "They can directly challenge you in various ways because they are working, a lot of them, and they have very complicated lives. They have all sorts of excuses for things, and reasons. They don't like to follow the rules. They speak up in class about all kinds of stuff. . . The typical research university student says, 'Tell me what you want me to do and I'll do it. . . Our students say, 'Why do I have to do this?' It's a big difference."

One positive consequence of the interaction of Metropolitan's students, course load, and increasing pressure to conduct research is that faculty are developing innovative ways to integrate their teaching and their research. More than Vantage University faculty, Metropolitan faculty describe ways that teaching supports their research, as well as ways that research supports their teaching. Their experience seems to neatly fit the axiom, "Necessity is the mother of invention." However, there are negative consequences as well. Inter-and intradepartmental conflicts simmer between primary researchers and primary teachers and between those with organizational support for course releases and those left to manage the course load for themselves. In addition, faculty at Metropolitan were far more likely to bring up concerns about burn out than faculty at Vantage. One faculty member said the university is "deferring maintenance" on its faculty and staff.

Important implications for research follow from the evidence from this study that aggregating to institution or discipline levels masks important consequences of workplace conditions for the conduct of faculty work. Within each department, policies that influence faculty work interact with a complex pattern of other policies and with university missions, department values, available resources, and individual goals and preferences.

Table 1: Informants

Institution Type	Research University		Comprehensive University	
	Science	Humanities	Science	Humanities
Department #	1	2	3	4
Deans	1	1	1	1
Chairs	1	1	1	1
Faculty	7	8	7	8

**Table 2: Faculty Perceptions--
Effects of Policies on Research and Teaching**

	VANTAGE UNIVERSITY				METROPOLITAN STATE			
	Science		Humanities		Science		Humanities	
	DEPT 1		DEPT 2		DEPT 3		DEPT 4	
Purpose of Work (Research/Teaching)	R	T	R	T	R	T	R	T
Merit Pay	+	0	+	0	--	--	--	--
Course Load	+	+	+	--	±	±	0	0
Course Relief	--	+	+	±	+	0	+	0
Admissions	+	+	--	+	±	+	0	±

+ Support 0 Constraint
 -- No Effects ± Mixed Effects

TABLE 3: FACULTY RESPONSES TO POLICIES

I. MERIT PAY

Dept	Policies	Interact with	Purpose of Work	Perceived Effect	Responses
1	•Small merit raises	•Fit with mission	R	+	•Outside offers and hires bring largest salaries •All are active researchers
	•Outside offers	•Dept values •Course load	T	0	•Small raises are "little threat" •Dean thinks salary matters; faculty don't •Belief that "we are paid to teach"
2	•Small merit raises	•Course load •Dept values	R	+	•Outside offers bring largest salaries •Active faculty who aren't stars feel resentment •Most are active researchers
	•Outside offers	•Dept values	T	0	•Small raises are "no incentive" •Dean thinks salary matters; faculty don't •Tradition of teaching
3	•Step salary scale	•Dept values	R	--	•Few apply for merit awards
	•Annual univ merit awards		T	--	•Little mention of salary •Division between teachers, researchers
4	•Step salary scale		R	--	•Refusal to participate in merit pay awards
	•Annual univ merit awards	•Dept values	T	--	•Little mention of salary •Mixture of teachers, researchers

Perceived Effects:

+ Support
--No Effects

0 Constraint
± Mixed Effects

TABLE 3: FACULTY RESPONSES TO POLICIES

II. COURSE LOAD					
Dept	Policies	Interact with	Purpose of Work	Perceived Effect	Responses
1	•One course per term	•Intro courses	R	+	•Many faculty teach double intro courses, earn one term off
		•Rotation •Adjunct faculty	T	+	•Course rotation keeps teaching fresh •Adjunct faculty cover courses •Faculty use trained TAs
2	•Two courses for two terms, one term off	•Adjunct faculty •Intro courses	R	+	•Dean urged course load reduction •Adjunct faculty teach intro courses
		•Dept culture	T	--	•Course load change limited subject range •No tolerance for bad teaching, abuse of "inservice" term •Faculty use trained TAs
3	•Four courses per term	•Course releases •Adjunct faculty	R	±	•Actual load is from 2 to 4 courses; researchers teach less •Adjunct hired to support research •Course repetition reduces prep time
		•Intro courses •Admissions	T	±	•Faculty teach intro courses •Unequal course load resented •Limited time to help needy students •TAs for labs, grading
4	•Four courses per term	•Changing univ. mission	R	0	•Faculty modify research approach
		•Intro courses •Admissions	T	0	•Faculty resent required intro courses •Limited time to help needy students •Faculty modify teaching approach •No TA's

Perceived Effects:

+ Support
--No Effects

0 Constraint
± Mixed Effects

TABLE 3: FACULTY RESPONSES TO POLICIES

III. COURSE RELEASES					
Dept	Policies	Interact with	Purpose of Work	Perceived Effect	Responses
1	•No releases	•Course load	R	--	•Flexible course load gives free term for teaching double intro courses
		•Dept. values	T	+	•Legacy of valuing teaching •Even chair not taking course release
2	•Release for ind. teaching and service	•Univ. mission	R	+	•Limits impact of individual teaching, service on research
		•Dept values	T	±	•Provides recognition for individual teaching and service •Reduces classroom teaching
3	•Release for ind. teaching	•Course load •Funding •Dept. mission	R	+	•Dean & chair support buy-outs •Discretionary decrease in course load for researchers •Emphasizes differences between researchers and teachers
	•Buyouts •Admin options •Class size	•Course load •dept mission	T	0	•Course releases recognize individual teaching; reduce classroom teaching •Larger course load for non-researchers
4	•No Release for Ind. teaching	•Changing univ. mission	R	+	•Release for univ. service •Faculty take time to compete for univ. mini-grants •Some take less salary to buy out time
	•Univ service •Univ grants •Personal buyouts	•Course load	T	0	•Resentment of course releases in other departments •Generational differences •Reduced course coverage

Perceived Effects:

+ Support
--No Effects

0 Constraint
± Mixed Effects

TABLE 3: FACULTY RESPONSES TO POLICIES

IV. ADMISSIONS

Dept	Policies	Interact with	Purpose of Work	Perceived Effect	Responses
1	•Highly Selective	•Ph.D. program	R	+	<ul style="list-style-type: none"> •Ph.D. students contribute to faculty research success •Grad students are closest colleagues •TAs free faculty time for research
		•Dept. values	T	+	<ul style="list-style-type: none"> •Trade-off between training students & completing research projects •Attempt to make major more attractive (# of UG majors declining) •Talk of teaching is faculty centered
2	•Highly Selective		R	--	<ul style="list-style-type: none"> •TAs free faculty time for research
		•Dept. values	T	±	<ul style="list-style-type: none"> •Extensive class preparation for quality students •Talk of teaching is faculty centered
3	Open	•MA program	R	+	<ul style="list-style-type: none"> •MA and UG students work on faculty research •Grad TAs need additional training, then free faculty time for research
		•Student diversity	T	+	<ul style="list-style-type: none"> •Most students not well-prepared; need extra attention •Talk of teaching is student centered
4	Open	•Course load	R	0	<ul style="list-style-type: none"> •Research time limited by student needs
		•Student diversity •Dept. mission	T	±	<ul style="list-style-type: none"> •Most faculty enjoy ethnic & age diversity of students •Faculty feelings about range of student abilities are mixed •Talk of teaching is student centered

Perceived Effects:

+ Support
--No Effects

0 Constraint
± Mixed Effects

REFERENCES

- Astin, A. W., Korn, W. S., & Dey, E. L. (1991). The American College Teacher: National Norms for the 1989-90 Faculty Survey. Los Angeles: Higher Education Research Institute.
- Baker, G. P., Jensen, M. C., & Murphy, K. J. (1988). Compensation and Incentives: Practice Vs. Theory. Journal of Finance, 43, 593-616.
- Baldrige, J. V., Curtis, D. V., Ecker, G., & Riley, G. L. (1978). Policy Making and Effective Leadership. San Francisco, CA: Jossey-Bass Publishers.
- Becher, T. (1989). Academic Tribes and Territories. Milton Keynes, U.K.: Open University Press.
- Berger, P. L., & Luckmann, T. (1967). The Social Construction of Reality. Garden City, NY: Double Anchor.
- Biglan, A. (1973a). The Characteristics of Subject Matter in Different Academic Areas. Journal of Applied Psychology, 57(3), 195-203.
- Blackburn, R. T., Bieber, J. P., Lawrence, J. T., & Trautvetter, L. (1991a). Faculty at Work: Focus on Research, Scholarship, and Service. Research in Higher Education, 32(4), 385-413.
- Blackburn, R. T., Lawrence, J. T., Bieber, J. P., & Trautvetter, L. (1991b). Faculty at Work: Focus on Teaching. Research in Higher Education, 32(4), 363-383.
- Blau, P. M. (1973). The Organization of Academic Work. New York: John Wiley & Sons.
- Blumer, H. (1969). Symbolic Interactionism. Englewood Cliffs, NJ: Prentice Hall, Inc.
- Boyer, E. L. (Ed.). (1989). The Condition of the Professoriate: Attitudes and Trends, 1989: A Technical Report. Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.
- Clark, B. R. (1983). The Higher Education System: Academic Organization in Cross-National Perspective. Berkeley, CA: University of California Press.
- Clark, B. R. (1987). The Academic Life: Small Worlds, Different Worlds. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.
- Creswell, J. W. (1985). Faculty Research Performance: Lessons from the Sciences and Social Sciences. Washington D. C.: Association for the Study of Higher Education.
- Diamond, R. M. (1993). Instituting Change in the Faculty Reward System. In R. M. Diamond & B. E. Adam (Eds.), New Directions for Higher Education #81: Recognizing Faculty Work: Reward Systems for the Year 2000 San Francisco: Jossey-Bass.
- Dill, D. (1986). Research as a Scholarly Activity: Context and Culture. New Directions for Institutional Research, 50(Measuring Faculty Research Performance), 7-23.
- Edgerton, R. (1993a). "Upside-Down" Thinking about the 21st Century Academic Workplace: A Conversation with Charles Handy. AAHE Bulletin, 46(1), 3-7.
- Edgerton, R. (1993b). The Tasks Faculty Perform. Change, 25(4), 4-6.
- Fairweather, J. S. (1993). Academic Values and Faculty Rewards. Review of Higher Education, 17(1), 43-68.

- Finkelstein, M. J. (1984). The American Academic Profession: A Synthesis of Social Scientific Inquiry Since World War II. Columbus, OH: Ohio State University Press.
- Fox, M. F. (1985). Publication, Performance, and Reward in Science and Scholarship. In J. C. Smart (Eds.), Higher Education: Handbook of Theory and Research (pp. 255-282). New York: Agathon Press, Inc.
- Fulton, O., & Trow, M. (1974). Research Activity in American Higher Education. Sociology of Education, 47(Winter), 29-73.
- Gomez-Mejia, L. R., & Balkin, D. B. (1992). Determinants of Faculty Pay: An Agency Theory Perspective. Academy of Management Journal, 35(5), 921-955.
- Greenberg, M. (1993, October 20, 1993). Accounting For Faculty Members' Time. Chronicle of Higher Education, p. A68.
- Hind, R. R., Dornbusch, S. M., & Scott, W. R. (1974). A Theory of Evaluation Applied to a University Faculty. Sociology of Education, 47(Winter), 114-128.
- Konrad, A. M., & Pfeffer, J. (1990). Do You Get What You Deserve? Factors Affecting the Relationship between Productivity and Pay. Administrative Science Quarterly, 35, 258-285.
- Light, D. W., Jr. (1974). Introduction: The Structure of the Academic Professions. Sociology of Education, 47(1), 2-28.
- Maehr, M. L., & Braskamp, L. A. (1986). The Motivation Factor: A Theory of Personal Investment. Lexington, MA: D. C. Heath and Co.
- Martin, T. N., Schermerhorn, J. R., Jr., & Larson, L. L. (1989). Motivational Consequences of a Supportive Work Environment. In M. L. Maehr & C. Ames (Eds.), Advances in Motivation and Achievement (pp. 179-214). Greenwich, CT: JAI Press Inc.
- McLaughlin, M. W. (1992). What Matters Most in Teachers' Workplace Context? No. P92-139). Center for Research on the Context of Secondary Teaching, Stanford University.
- Miles, M. B., & Huberman, A. M. (1984). Qualitative Data Analysis. Newbury Park, CA: Sage Publications.
- Mingle, J. R. (1993). Faculty Work and the Costs/Quality/Access Collision. AAHE Bulletin, 45(7), 3-6, 13.
- National Center of Education Statistics (1990). Faculty in Higher Education Institutions, 1988 (NCES 90-365). Washington D. C.: U. S. Department of Education Office of Educational Research and Improvement.
- Peters, L. H., & O'Connor, E. J. (1980). Situational Constraints and Work Outcomes: The Influences of a Frequently Overlooked Construct. Academy of Management Review, 5(3), 391-397.
- Ruscio, K. P. (1987). Many Sectors, Many Professions. In B. R. Clark (Eds.), The Academic Profession: National, Disciplinary, and Institutional Settings Berkeley, CA: University of California Press.
- Scott, W. R. (1992). Institutions and Organizations: Toward a Theoretical Synthesis (unpublished manuscript No. Stanford University).
- Seidman, I. E. (1991). Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences. New York: Teachers College Press.

- Smart, J. C., & McLaughlin, G. W. (1978). Reward Structures of Academic Disciplines. Research in Higher Education, 8(1), 39-55.
- Strauss, A. L. (1987). Qualitative Analysis for Social Scientists. New York: Cambridge University Press.
- Sykes, C. J. (1988). ProfScam: Professors and the Demise of Higher Education. Washington D.C.: Regnery Gateway.
- Tuckman, H. P. (1976). Publication, Teaching, and the Academic Reward Structure. Lexington, MA: Lexington Books.
- Weick, K. E. (1993). Sensemaking in Organizations: Small Structures with Large Consequences. In J. K. Murnighan (Eds.), Social Psychology in Organizations: Advances in Theory and Research (pp. 10-37). Englewood Cliffs, N.J.: Prentice Hall.
- Yin, R. K. (1989). Case Study Research: Design and Methods (second ed.). Newbury Park, CA: Sage Publications.
- Zuckerman, H., & Merton, R. K. (1973). Age, Aging, and Age Structure in Science. In R. K. Merton (Eds.), Sociology of Science Chicago: University of Chicago Press.