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Teaching and the Faculty Role: Enhancing the Commitment to Instruction in American Colleges and Universities

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This article focuses on the role administrative action, socialization, and self-motivation play in shaping faculty behavior related to the teaching role. Drawing on a national database, the authors introduce a model that examines two teaching-related outcomes: (a) percentage of time spent on teaching and instruction and (b) preferred amount of teaching. The authors discuss policy implications in terms of four areas: early intervention, faculty/institutional fit, work allocation and workload, and rewards.

Over the last 2 decades critics too numerous to count have assailed the American professoriat and the colleges and universities in which they work for emphasizing research at great cost to undergraduate education. A report from the National Institute of Education asks colleges and universities to “increase the weight given to teaching in the process of hiring, and determining retention, tenure, promotion, and compensation” (1984, p. 59). Similarly, a report published by the Association of American Colleges maintains that, “Unless the reward system in higher education measures teaching performance as well as research, all efforts to improve college teaching will be to no avail” (1985, p. 37). More recently, in *Scholarship Reconsidered* Boyer (1990) argues that to the detriment of higher education scholarship has come to mean “research and publication.” Boyer proposes a redefinition of teaching as a form of scholarship that “both educates and entices future scholars” (p. 23).

The criticism of the perceived emphasis by college and university faculty on research is not limited to national reports. Public concern about the cost of higher education and the value received for expensive tuition, anecdotes about attending college to work with

renowned professors only to be taught by graduate students, and debates within the academy about curricular content and whether or not faculty have the time to spend on curricular reform add to the lore about the limited role of teaching in the faculty reward structure (Fairweather, 1993). In addition, many constituencies are concerned about decreased access resulting from increased tuition and declining capacity to enroll students.

These criticisms carry substantial policy implications. As Hearn points out,

it is the instructional function of higher education, not the research and service missions, that most endears higher education to the public. There is no evidence that the public believes the benefits of college are independent of what is taught and learned there. (1992, p. 21)

Responding to pressure from their constituents, some state officials have tied budget allocations to the demonstration by college and university administrators of the instructional productivity of their faculty (Jacobsen, 1992). Other state legislatures and agencies have developed or are considering regulations to require faculty in public institutions to spend a specified minimum number of

hours in the classroom under the assumption that such requirements will enhance faculty commitment to teaching (Russell, 1992).

Recent trends in public attitudes toward higher education are at least in part a negative response to the perceived driving force in academe today, research, or, more specifically, research that is valued by academic peers through a peer-review system of publishing and grant awarding (Bowen & Schuster, 1986; Boyer, 1990; Trow, 1984). The intense focus on research initially was a response by major universities to a clear national need, expressed by various federal programs during and immediately following World War II (Geiger, 1986). As research funding and scholarly productivity increased, "research" became synonymous with "prestige" (Alfred & Weissman, 1987; Garvin, 1980; Trow, 1984). Today, the normative value of research is apparent in all types of 4-year institutions, not just major research universities, including those traditionally devoted to teaching (Fairweather, 1993). Trow (1984), following the seminal work of Jencks and Riesman (1968), discussed institutional drift toward a research orientation: "Competition and the accompanying emulation of high-status exemplars by lower-status institutions tend to make for a leveling upward of the whole system toward the characteristics and styles of the leaders" (p. 143).

Diamond (1993) maintains that institutional forces, namely promotion and tenure, direct faculty interests away from teaching. For the purposes of this article, institutional forces that shape faculty behavior may be seen as *administrative action*. Administrative action consists of direct faculty rewards, such as compensation or promotion and tenure, where either a dean or department chair (or in some cases the provost or chief academic officer) have at least some say. Administrative action also includes the allocation of workload and work assignment, such as hours assigned to classroom instruction, advising loads, research support, and the amount of support staff. In many cases, the locus of control for work assignment lies with department chairs, but faculty also play a role in this process.

The academic culture and its emphasis on research, however, is not merely a creation of administrative action (Rhoads, 1993; Tierney & Rhoads, 1993). Although Diamond (1993) and others suggest altering an institution's tenure and promotion system, something is missing from any strategy that focuses primarily on institutional forces. We argue here that simply redefining scholarship will not enhance the value of teaching in academe. Faculty perform a variety of complex roles for a variety of perhaps even more complex reasons. During graduate school faculty adopt many of the values, norms, and beliefs needed to succeed in academe (Bess, 1978). The training of prospective faculty largely takes place at research and doctoral-granting institutions where faculty mentors are likely to emphasize research over teaching. Hence, socialization into the role of faculty member has an inherent orientation toward research.

Socialization is the process whereby individuals acquire the values, attitudes, norms, knowledge, and skills needed to exist in a given society (Merton, 1957). Graduate training serves as a primary agent of socialization for faculty (Bess, 1978; Clark & Corcoran, 1986). From this perspective, practice as a teaching or as a research assistant shapes early expectations of the role of teaching in faculty life. To examine the nature of faculty work without acknowledging the values learned during graduate training is to underestimate the power of socialization.

Alpert (1985) argues further that the orientation of new faculty toward research is continued with a "publish or perish" emphasis in the promotion and tenure process. Such an emphasis in the ongoing socialization of faculty further enhances the value of nationally visible disciplinary research at the cost of local functions, such as teaching.

Self-motivation also plays an important role in faculty behavior. Previous research has shown that psychosocial development, including commitment to the values of achievement, autonomy, and intellectual satisfaction, distinguishes individuals who choose a faculty career from those who pursue other occupations (Finkelstein, 1984). Although market factors strongly influence mobility, so do individual faculty attitudes

and values: "If the structure of the academic career determines the timing of job changes, then ingrained faculty values and interests determine the nature of those job changes" (Finkelstein, 1984, pp. 64–65). Frequently couched in the phrase "intrinsic motivation" or "intrinsic rewards" (Clark, 1987, p. 222), self-motivation is often used to explain the reason why many faculty remain satisfied with their jobs despite periods of financial retrenchment and public criticism: "When faculty members believe they are actively engaged in providing man's best hope for improvement, they possess an extreme fiction of great power that echoes with a sense of calling" (Clark, 1987, p. 222).

Our goal in this article is to provide insight into the nature of faculty teaching behavior by examining the combined influence of administrative action, faculty socialization, and self-motivation on faculty effort devoted to teaching. We then examine the implications of these findings for various types of policies meant to enhance the commitment of faculty to teaching and instruction. We base our discussion on an analysis of a national database of faculty.

Defining the Problem

Although faculty research behavior may be related to administratively influenced incentives, including salary, left unanswered is the relative importance of these incentives vis a vis the internal values and interests faculty bring with them to the job. In his explanation of organizational socialization, Van Maanen (1983) discusses a "culture of orientation" that new recruits bring with them to their organizations. By "culture of orientation" Van Maanen refers to the set of predispositions and norms possessed by a new recruit: "Whatever cultures of orientation recruits possess will help shape their understandings and responses to task demands and performance requirements made of them in any new setting" (p. 217). Van Maanen's point has significance for understanding faculty behavior. Are faculty more motivated to spend time on teaching because of or despite tangible rewards, or do they pursue teaching endeavors because of a socialization process that instills certain norms? Even if the de-

cline of the instructional mission is a function of faculty self-interest, as Huber (1992) claims, what is the origination of this self-interest?

Researchers who study the relationships between faculty pay and behavior imply the importance of direct administrative action and faculty reward structures in reinforcing research norms. Levin (1991) argues that faculty salaries are a form of institutional incentive, a mechanism to reinforce certain norms and values. Kasten's (1984) review of the literature notes that faculty research productivity is consistently positively related to promotion and tenure, and to salary. Fairweather (1993) demonstrates that faculty research productivity is positively related to salary regardless of type of institution or discipline.

The focus on incentives and rewards is also the major component of reform proposals (Bowen & Schuster, 1986; Boyer, 1987, 1990), and of advocates for using rewards to enhance the campus teaching environment (Green, 1990; Seldin, 1990). In addition to pay, some authors argue that administrative support for teaching or for research is expressed through control of workload and assignment of duties, and through making resources such as instructional development widely available (Austin, 1992; Boice, 1992; Fink, 1992; Jarvis, 1991, 1992; Stanley & Chism, 1991). In this context, administrative behavior creates or at least strongly reinforces the prestige of research activities (Seldin, 1990). Tuckman expresses this view when ascribing faculty research behavior to norms reinforced, perhaps even created, by explicit reward structures:

While legislatures, regents, trustees, and other governing boards may mandate standards for faculty to perform against, it is unlikely that these will have a major effect on faculty behavior in the absence of a more explicit and direct set of rewards for these activities. (1979, p. 187)

Administrative control of organizational structures is also touted as an effective approach to altering faculty behavior (Friedman & Friedman, 1985; Geiger, 1990). The proliferation of organized research units, for example, is based on the belief that applied

research and technology transfer may be enhanced by developing alternative structures to traditional academic departments. Unlike the evidence about the importance of pay in faculty research behavior, however, the effectiveness of structures in altering faculty behavior is uncertain. In a recent study of biotechnology, Dooris and Fairweather (1994) report that instructional faculty identified more closely with the norms of their traditional academic departments than with organized research units even when they were housed in and supported by nondepartmental research centers.

Administrators may have substantial influence, but they cannot create and maintain a research-oriented atmosphere without the consent and participation of the faculty: "The deadliest devaluation of the teaching role lies in the widespread belief, shared by administrators as well as faculty, that scholarship keeps the mind supple whereas teaching deadens and rigidifies" (Sheridan, 1990, pp. 172–173). In this context, faculty are socialized at an early stage in the career to value research more than teaching (Baldwin & Blackburn, 1981) through direct and indirect messages about the relative value of research and teaching in promotion and tenure (Boice, 1992; Boice & Thomas, 1989; Jarvis, 1992; Reynolds, 1992).

Studies about the relative importance of self-motivation, socialization, and administrative action in faculty behavior rely mostly on anecdotal data gathered from a small number of institutions; none use a national sample of faculty (Dunn, Seff, & Rouse, in press; Tierney & Rhoads, 1993). The limitations of these data are problematic because of the need to control for academic discipline and type of institution in the study of faculty behavior (Alpert, 1985; Bieber, 1992; Bullis & Bach, 1991; Clark, 1983; Creswell & Roskens, 1981). In this article, we use a national database to develop and test models of faculty teaching behavior and of faculty attitudes toward teaching.

Policy Perspectives

Although not always well understood, policy initiatives to enhance the value of teaching in colleges and universities have imbed-

ded in them assumptions about the relative importance of administrative action, socialization, and self-motivation in faculty teaching behavior. We elaborate four of these policy perspectives.

Perspective 1: Early Intervention

Proponents of the importance of early faculty socialization argue that the place to intervene is during graduate training, not afterward (Bess, 1978; Clark & Corcoran, 1986). From this perspective, faculty trained in the most prestigious research universities and as graduate research assistants should exhibit greater emphasis on research than on teaching in their faculty work lives. Faculty trained as teaching assistants in graduate school may be more inclined toward teaching in their subsequent careers.

Graduate school is also a period when values toward teaching and research are shaped (Clark, 1987; Finkelstein, 1984). During this fundamental period, individuals evaluate whether or not faculty life is for them. Individuals identify disciplinary interests and receive appropriate training prior to entering the faculty profession, not during it.

The focus of early intervention strategies is on institutional and departmental policies to reform graduate education. Efforts to involve graduate students meaningfully in curriculum development, active learning, and so on are seen as vehicles for encouraging potential faculty to place greater emphasis on the teaching side of the profession (Millar & Fairweather, 1992).

Perspective 2: Fit With Institution

Alpert (1985), Baldwin and Blackburn (1981), Boice (1992), Boice and Thomas (1989), Jarvis (1992), and Reynolds (1992) claim that socialization experiences during the faculty career shape attitudes toward teaching and research, which are reflected in faculty behavior. Clark (1987) adds that intrinsic rewards derived from activities as a faculty member influence the commitment to teaching and/or research. From these viewpoints, faculty dissatisfied with either the mix of their work activities or with the mission of the institution are more likely to spend their time on activities inconsistent with espoused

institutional missions. Whether or not a faculty member believes that teaching or research should be the most important criterion for promotion might be related to the faculty member's research and teaching behavior.

The policy implications here are twofold. The first is that a crucial focus of the hiring process is to assess the fit between the mission or missions of the institution and the interests of the prospective faculty member (Finnegan, 1992). The second is to recognize that socialization does not stop with the hiring process, but continues (or should continue) with orientation programs, mentoring, advice from colleagues, and the like (Tierney & Rhoads, 1993).

Perspective 3: Work Allocation and Workload

In contrast to the previous perspectives, a prominent feature of many legislative attempts to enhance the value of teaching in public colleges and universities, particularly undergraduate teaching, is to target academic policy directly. Specifying minimum required course loads for faculty is the current trend. Some foundations, including the National Science Foundation, have considered making a specified commitment to teaching a requirement for awarding grants, which would affect faculty in private as well as public institutions. The underlying premise is that devotion to teaching can be enhanced by having powerful external constituencies mandate minimum participation in relevant activities.

This perspective is consistent with research carried out by Austin (1992), Boice (1992), Fink (1992), Jarvis (1991, 1992), and Stanley and Chism (1991), although the focus in their research is on internal administrative decisions. These authors assert that administrative support for teaching (or for research) as shown by the allocation of work responsibilities, such as hours assigned to classroom teaching, affects faculty teaching behavior. From this point of view, assigning fewer hours in class per week is related to spending less of the work week on teaching-related activities. Assigning faculty to teach only graduate courses in their specialty is also con-

sistent with encouraging faculty research behavior, but not instruction-related behavior.

Perspective 4: Rewards

Although work allocation may influence faculty commitment to teaching, faculty are more likely to emphasize research or teaching behaviors in response to direct rewards and incentives (Bok, 1992; Bowen & Schuster, 1986; Boyer, 1987, 1990; Diamond, 1993; Fairweather, 1993). From this perspective, faculty who believe that their institution rewards research more than teaching should behave accordingly. Paying active researchers higher salaries should encourage faculty research behavior.

Faculty reward initiatives focus on all levels of academic administration involved in relevant decisions. Changes in promotion and tenure policies focus on department chairs, deans, and even provosts. Salary initiatives primarily focus on department chairs and deans, but in smaller institutions may include the central administration. Reward policies, however, are only partly under the control of specific administrators. Promotion and tenure decisions, for example, involve faculty peers as well as administrators. Salaries may reflect institutional norms as Levin (1991) claims, but they also reflect supply and demand (Bowen & Sosa, 1989) and state funding decisions (Hansen, 1986), which typically lie outside the control of any given institution.

The Study

Data for this research were gathered in the 1987–1988 National Survey of Postsecondary Faculty (NSOPF), sponsored by the National Center for Education Statistics. The NSOPF examined a nationally representative sample of 11,071 faculty (i.e., individuals who had some instructional duties during fall term, 1987) from 480 colleges and universities of all types. In all, 8,383 full- and part-time faculty from 424 institutions responded, an individual response rate of 76% (Russell et al., 1990). The institutional sample was stratified by institutional type (Carnegie Foundation, 1987), source of control (public/private), and size (number of faculty).

For this article, we used data on *full-time, tenure-track* faculty from 4-year institutions

($n = 4,344$). We also examined faculty who held the rank of *assistant professor* ($n = 1,031$). We included the analysis of assistant professors to assess more fairly the relationships between early socialization experiences with later faculty behavior.

The Model

We examined two teaching-related outcomes, one related to current teaching effort and the other future-oriented. *Percentage of time spent on teaching and instruction* includes time spent on working with student organizations; teaching, advising, and supervising students; and grading papers, preparing courses, and developing new curricula. As such, it includes both components of work assignment and of personal commitment to teaching reflected in the extra time a faculty member devotes to instructional activities. Time spent on teaching reflects the percentage of hours worked per week spent on teaching-related activities relative to the total hours spent on all activities, including research, administration, professional development, and consulting.

The second teaching-related criterion—*teaching preference*—was based on a survey item that asked faculty: “If you were to leave this job to accept another position, would you want to do more, less, or about the same amount of teaching as you currently do?” The scale was scored 1 = more, 2 = about the same, 3 = less. We attempted here to determine the factors related to desired work assignments, preferred institutional values, and the like. For the regression and correlation coefficients, we reversed the sign of the relationship with teaching preference so that higher values reflect the greater importance of spending time on teaching in the decision to change positions.

The model to predict the two criteria—percentage of time spent on teaching and teaching preference—contains four principal parts. *Early socialization* consists of experiences during graduate school. *Current socialization and self-motivation* contains measures of beliefs and attitudes, which reflect faculty preferences. Administrative action contains *time allocation/workload and rewards*.

Early socialization is measured by the highest degree attained and the prestige of

the institution awarding the degree (1 = no doctorate, 2 = doctorate from a nonresearch university, 3 = doctorate from a major research university). Early socialization is also measured by whether or not the faculty member was a teaching assistant in graduate school (0 = no, 1 = yes).

Four indicators measured *current socialization and self-motivation*. The first was the degree of satisfaction with the mix of teaching, research, administration, and service duties (scale from 1 = very dissatisfied to 4 = very satisfied). The second measured the degree of satisfaction with time to work with students (scale from 1 = very dissatisfied to 4 = very satisfied). Third was the extent of agreement with using research publications as the principal criterion for promotion and tenure (scale from 1 = strongly disagree to 4 = strongly agree). Finally, we included an item that asked faculty if they were to leave their current position, what would be the importance of reduced pressure to publish (scale from 1 = not important to 3 = very important). The latter measure addresses both commitment to teaching and fit with institutional mission.

Administrative action contained *work allocation* measures and indicators of *faculty rewards*. Work allocation was assessed by hours in class assigned per week and whether or not the faculty member was assigned only to graduate classes (0 = no, 1 = yes). Direct measures of faculty rewards included the faculty member’s assessment of whether or not the institution rewarded research more than teaching (scale from 1 = strongly disagree to 4 = strongly agree), and basic salary during the academic year (see Figure 1 for a list of study variables).

Analyses

The analytical focus was on the statistical significance of the relationships between predictors and outcomes, and on the relative proportion of unique variance contributed by measures of early socialization, current socialization/self-motivation, work allocation, and rewards in explaining both current commitment and preferred devotion to teaching. Our strategy required regressing time spent on teaching and teaching preference sep-

STUDY VARIABLES

Criteria

- Percent of time spent on teaching/instruction
- Importance of spending time on teaching in seeking a new position

Early Socialization

- Highest degree awarded and prestige of institution
- Teaching assistant in graduate school

Current Socialization/Self-Motivation

- Satisfied with mix of teaching, research, administration, and service
- Satisfied with time to spend with students
- Agree that research publications should be the criterion for promotion
- Importance of reducing the pressure to publish in seeking a new position

Work Allocation

- Hours in class assigned per week
- Taught only graduate students

Rewards

- Research rewarded more than teaching at institution
- Basic salary

Control Variables

- Type of institution
- Gender
- Race/ethnicity
- Academic rank
- Time in rank

FIGURE 1. *Study variables.*

arately on the various measures of socialization, motivation, and administrative action. In addition, estimating the unique variance required calculating the delta R^2 for each predictor.

Estimating the model for teaching preference was straightforward; all predictors were included and ordinary least squares estimates derived. More complex procedures were employed for the study of time spent on teaching. Time spent on teaching was first regressed on all predictors except for basic salary. Basic salary was then regressed on time spent on teaching. Two-stage least

squares estimates were used for both equations related to time spent on teaching.

Gender, *race/ethnicity*, *academic rank* (assistant professor or not), and *time spent in rank* (measured in years) were included as individual-level control variables in the regression analyses. *Type of institution* (research- or teaching-oriented institution) was included as an institutional-level control. According to the Carnegie Foundation for the Advancement of Teaching (1987), 4-year colleges and universities can be divided broadly into *research-oriented* and *teaching-oriented*. Research-oriented institutions contain two

specific types of universities: *research universities*, whose faculty train the majority of doctorates in the United States and which house the majority of research funded by the federal government; and *doctoral-granting universities*, whose faculty also train doctoral students and conduct research but generate fewer doctorates and research funds than their counterparts in research universities. Teaching-oriented institutions include *comprehensive colleges and universities*, which focus on liberal arts and professional programs at the undergraduate and masters-degree levels; and *liberal arts colleges*.

Previous research also suggests that faculty behavior varies by discipline (e.g., Bowen & Schuster, 1986). We checked this assumption by testing the homogeneity of variance for program area (defined as arts and humanities, natural science, social science, health sciences, other professional fields, and other fields; Morrison, 1967). The hypothesis of homogeneity of variance for program area [$\chi^2(680, N = 4,344) = 3610.7, p < .0001$] was rejected. Accordingly, the pooled within-groups covariance matrix was estimated (based on within-program area groups) and used in the regression analyses. We examined separately equations for (a) all full-time, tenure-track faculty and for (b) assistant professors. We included the separate analyses for assistant professors both because the equation for all faculty indicates an effect of academic rank and because effects of early socialization are more likely to appear in the examples of newer faculty members (Boice, 1992). Additional tests showed no evidence of multicollinearity or heteroscedasticity in the regression analyses.

Limitations

Cross-sectional survey data are useful in estimating relationships between early socialization and later performance, but longitudinal data are better suited for this purpose. The distinction between socialization and motivation is not as clear as desirable, making separation of the effects resulting from socialization and motivation problematic. Although administrators have some influence on setting workload, work allocation, and salary, so do other individuals and fac-

tors. For example, salary is not merely a function of work assignment and workload, but includes market-related factors beyond the scope of this study. Accordingly, administrators may find it difficult to implement changes in policies that are the most influenced by external factors. Finally, although percentage of time spent on instruction does reflect effort and commitment above and beyond work requirements, the measure is an imperfect indicator of commitment to teaching. Despite these limitations, the use of national data to explore relationships between various factors that may influence faculty commitment to teaching expands our knowledge in this crucial policy arena.

Findings and Discussion

Table 1 presents the means and variances for study variables. Tables 2 and 3 present the results of the two-stage least squares regression estimates for time spent on teaching. Table 4 summarizes the unique variance accounted for in each criterion by socialization, motivation, and administrative action. Table 5 shows the ordinary least squares estimates for teaching preference. We examine these results in what follows.

Percentage of Time Spent on Teaching and Instruction

Table 2 shows a strong negative relationship between working in a research-oriented institution and time spent on teaching for all faculty and for assistant professors. This finding is consistent with many previous studies (e.g., Russell et al., 1990). For all faculty, women are likely to spend more time teaching than men. Women and minority assistant professors are (modestly) more likely to spend greater time on teaching than their male and majority counterparts. This finding supports previous research. For example, Boice (1993) reports that women value teaching to a greater degree than men. Also, in a study of faculty at a research university, Olsen (1991) notes that White men were more involved in research and women and minority faculty were more involved in teaching and service. The difference in commitment to teaching (and to service) has significant implications for women and minority

TABLE 1
Means and Variances for Study Variables

| Predictor | Assistant professors | | All faculty | |
|---|----------------------|-----------|-------------|-----------|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |
| <i>Criteria</i> | | | | |
| Percentage of time, teaching | 56.82 | 23.09 | 52.80 | 23.63 |
| Importance of teaching in seeking a new position | 2.23 | 0.62 | 2.25 | 0.61 |
| <i>Early socialization</i> | | | | |
| Highest degree/prestige of institution | 2.28 | 0.84 | 2.47 | 0.74 |
| Percentage TA in graduate school | 58.43 | 49.28 | 55.62 | 49.68 |
| <i>Current socialization/motivation</i> | | | | |
| Satisfied w/activity mix | 2.72 | 0.94 | 2.91 | 0.94 |
| Satisfied w/time for students | 2.91 | 0.78 | 3.07 | 0.78 |
| Agree w/publications as promotion criterion | 2.26 | 0.88 | 2.36 | 0.89 |
| Reduced pressure to publish, new position | 1.81 | 0.74 | 1.79 | 0.76 |
| <i>Work allocation</i> | | | | |
| Hours in class/week | 9.70 | 6.47 | 9.33 | 6.94 |
| Percentage taught only graduate students | 11.39 | 31.77 | 11.73 | 32.18 |
| <i>Rewards</i> | | | | |
| Research rewarded more than teaching at institution | 2.84 | 1.08 | 2.91 | 1.07 |
| Basic salary (\$) | 32,202.00 | 12,762.00 | 42,812.00 | 18,559.00 |
| <i>Control variables</i> | | | | |
| Percentage in doctoral institution | 52.49 | 49.94 | 56.10 | 49.63 |
| Percentage male | 64.66 | 47.80 | 80.25 | 39.81 |
| Percentage minority | 13.56 | 34.24 | 10.33 | 30.34 |
| Percentage assistant professor | NA | NA | 25.43 | 43.55 |
| Time in rank (years) | 4.97 | 4.66 | 7.96 | 6.37 |

Source: NSOPF, 1988. NA = not applicable.

faculty: "One needs to remember that research tends to be rewarded; consequently, such work habits partially explain the differential rates of tenure and promotion as well as higher attrition for women and people of color" (Tierney & Rhoads, 1993, p. 67).

Additionally, assistant professors are likely to spend more time on teaching than their senior colleagues. However, assistant professors who have been in their rank for longer periods of time are somewhat likely to spend more time on teaching than their colleagues who were just starting out on the job. This finding may reflect departmental policies to ease new professors into the job, requiring slightly less teaching of them until they become better acquainted with the requirements of the new position. At first glance, our finding seems contradictory to research by Boice (1992), who reveals the extensive time commitment new faculty make to classroom preparation. The appar-

ent inconsistency can be explained by the fact that our variable "time spent on teaching" includes much more than classroom and preparation time; it also includes advising students and student groups as well as developing new curricula. Although new faculty may spend more time on preparing to teach (in many cases learning to teach), their overall time commitment to the variety of teaching-related activities is lower.

Neither the prestige of the institution where the professor received the degree nor experience as a teaching assistant (TA) are significantly related to time spent on teaching. This finding holds true for assistant professors as well as for other faculty. One interpretation of these results is that early socialization experiences, which typically occur during graduate school, have little to do with time spent on teaching. The finding that prestige of the institution is not significantly related to time spent on teaching may reflect

TABLE 2
Two-Stage Least Squares Regression Percentage of Time Spent on Teaching

| Predictor | Assistant professors $R^2 = .31$; $N = 837$ | | All faculty $R^2 = .30$; $N = 3,433$ | |
|---|---|----------------|--|----------------|
| | Standardized beta | Delta R^2 | Standardized beta | Delta R^2 |
| <i>Early socialization</i> | | | | |
| Highest degree/prestige | -.023 | .000 | .002 | .000 |
| TA | -.046 | .003 | .013 | .000 |
| <i>Current socialization/motivation</i> | | | | |
| Satisfied w/activity mix | .006 | .000 | -.031 | .001 |
| Satisfied w/time for students | .054 | .003 | .044** | .002 |
| Agree w/publications as promotion criterion | -.130**** | .014 | -.095**** | .008 |
| Reduced pressure to publish, new position | .120**** | .011 | .159**** | .020 |
| <i>Work allocation</i> | | | | |
| Hours in class/week | .145**** | .018 | .207**** | .037 |
| Taught only graduate students | -.151**** | .020 | -.145**** | .019 |
| <i>Rewards</i> | | | | |
| Research rewarded more than teaching | -.123**** | .010 | -.084**** | .005 |
| <i>Control variables</i> | | | | |
| Doctoral institution | -.195**** | .022 | -.162**** | .015 |
| Male | -.079** | .006 | -.077**** | .005 |
| Minority | .064* | .004 | .014 | .000 |
| Assistant professor | NA | NA | .111**** | .011 |
| Time in rank | .075* | .004 | .096**** | .008 |

Source: NSOPF, 1988. NA = not applicable.

* = $p < .05$. ** = $p < .01$. *** = $p < .001$. **** = $p < .0001$.

the fact that doctoral granting institutions are more alike than they are different. Another interpretation is that experiences such as being a TA may produce opposite effects, and thus limit the power of "experience as a teaching assistant" as a predictor of later behavior. For example, some TAs may learn to value teaching through experiences they gain in the classroom. Others may be socialized to value research over teaching by the fact that TAs are often used to enable faculty to spend greater time on research. In the latter case, experience as a TA is a lesson in the priorities of many larger universities. Staton and Darling note that,

For those who plan careers as college or university faculty members, the TA role can be considered as an internship or training period. The skills, behavior, and attitudes developed while one is a TA are important determinants of one's future faculty role. (1989, p. 16)

What we suggest here is that the lesson learned through the TA experience is com-

plex and may involve simultaneous and contradictory messages about the relevance of teaching.

In contrast to the weak relationship between early socialization and time spent on teaching, motivation and beliefs (and the ongoing socialization related to them), especially related to the value of publishing in academic life, are important indicators of the amount of time faculty devote to instruction. Professors who believe that publishing should be the most important criterion in promotion spend less time teaching. On the other hand, professors who are likely to leave their positions to reduce the pressure to publish are more likely to spend time on teaching. These findings apply to professors of all ranks. An important issue here, and one we expand upon later, is that of fit between the institution and the new faculty member. Professors who prefer teaching over research, especially ones new to the faculty position, may not be well-suited for research universities. Likewise, new faculty who prefer research to

teaching may not find great satisfaction outside of a research-oriented institution.

Regardless of academic rank, hours assigned to the classroom are strongly, positively related to time spent on teaching. Equally important is being assigned to teach only graduate courses, which is associated with spending less time on teaching. The belief that research is rewarded more than teaching in institutional promotion and tenure decisions is strongly, negatively related to time spent on teaching. Finally, Table 3 shows that time spent on teaching is strongly, negatively related to basic salary.

Table 4 summarizes these results by variable category. Early socialization is unrelated to the time devoted to teaching. This finding is as true for assistant professors as for all faculty. Current socialization and motivation, especially beliefs about the importance of scholarship, are related to the time spent on instruction. Work allocation is an even more important factor in time spent on teaching. When the relationship between pay and

percentage of time spent on teaching is included, the relationship between rewards and teaching behavior is the strongest of all variable categories.

The importance of faculty rewards is clear. When faculty believe that the institution rewards research more than teaching they are more likely to spend greater time on research. The fact that a negative relationship exists between time spent on teaching and pay provides support that faculty beliefs about institutional priorities are fairly accurate.

In brief, current socialization/self-motivation, work allocation, and faculty rewards are all related to the amount of time faculty in all ranks spend on teaching and instruction. Early socialization does not appear to be related to time spent on teaching, although a closer examination of the graduate experience and its lasting impact is warranted. These findings are consistent with much of the literature on faculty life (Boice, 1992; Tierney & Rhoads, 1993).

TABLE 3
Two-Stage Least Squares Regression Basic Salary

| Predictor | Assistant professors $R^2 = .12; N = 837$ | | All faculty $R^2 = .13; N = 3,433$ | |
|---------------------------|--|-------------|---------------------------------------|-------------|
| | Standardized beta | Delta R^2 | Standardized beta | Delta R^2 |
| Percentage time, teaching | -.664**** | .12 | -.703**** | .13 |

Source: NSOPF, 1988.

**** = $p < .0001$.

TABLE 4
Unique Variance Explained by Predictor Category

| | Assistant professors | All faculty |
|---|-----------------------------|-----------------------------|
| <i>Percentage time spent on teaching</i> | $\Sigma \text{ delta } R^2$ | $\Sigma \text{ delta } R^2$ |
| Early socialization | .003 | .000 |
| Current socialization | .028 | .031 |
| Work allocation | .038 | .056 |
| Rewards ^a | .130 | .135 |
| <i>Importance of spending more time on teaching in seeking a new position</i> | | |
| Early socialization | .015 | .014 |
| Current socialization | .048 | .030 |
| Work allocation | .007 | .009 |
| Rewards | .012 | .012 |

Source: NSOPF, 1988.

^aIncludes variance in basic salary explained by percentage of time spent on teaching.

Preferred Time Devoted to Teaching

Professors who work in research-oriented institutions and who received their doctorates from less prestigious institutions are more likely than their counterparts in teaching-oriented institutions to indicate likelihood of changing jobs to spend more time on teaching (see Table 5). Faculty who are likely to seek another position that permits them to spend greater time on teaching are more likely to be satisfied with their current mix of activities, to place less importance on research and scholarship in promotion and tenure decisions, and to seek relief from the pressure to publish.

For all faculty, professors indicating a desire to spend more time on instruction teach slightly fewer hours and are more likely to teach only graduate students. In contrast, assistant professors indicating a desire for more teaching in their jobs spend slightly more hours in the classroom. Regardless of academic rank, faculty who are likely to seek

a new, teaching-oriented position perceive that their institution rewards research more than teaching.

These findings suggest the importance of fit with institutional mission in efforts to encourage faculty commitment to teaching. Finnegan's (1992) finding that research-oriented professors in comprehensive institutions are unhappy and seek employment in research and doctoral-granting institutions appears to have a counterpart in research-oriented institutions, namely that some faculty in research-oriented universities find that they prefer to spend more of their time on teaching and instruction. For these faculty, often the only alternative is to move to a different type of institution; apparently they believe that the existing institutional culture is not amenable to change.

The work of Van Maanen (1983) is helpful in making sense of fit between the professor and the institution. When the culture of orientation a faculty member brings to an insti-

TABLE 5

OLS Regression Importance of Spending More Time on Teaching in Seeking a Position

| Predictor | Assistant professors $R^2 = .16; N = 836$ | | All faculty $R^2 = .10; N = 3,447$ | |
|---|--|-------------|---------------------------------------|-------------|
| | Standardized beta | Delta R^2 | Standardized beta | Delta R^2 |
| <i>Early socialization</i> | | | | |
| Highest degree/prestige | -.139**** | .015 | -.129**** | .014 |
| TA | .003 | .000 | -.001 | .000 |
| <i>Current socialization motivation</i> | | | | |
| Satisfied w/activity mix | .109*** | .009 | .095**** | .007 |
| Satisfied w/time for students | -.036 | .001 | .000 | .000 |
| Agree w/publications as promotion criterion | -.175**** | .022 | -.099**** | .008 |
| Reduced pressure to publish, new position | .147**** | .016 | .141**** | .015 |
| <i>Work allocation</i> | | | | |
| Hours in class/week | .087* | .006 | -.070**** | .004 |
| Taught only graduate students | .034 | .001 | .076**** | .005 |
| <i>Rewards</i> | | | | |
| Research rewarded more than teaching | .128**** | .011 | .127**** | .011 |
| Basic Salary | -.013 | .001 | .033 | .001 |
| <i>Control variables</i> | | | | |
| Doctoral institution | .129**** | .001 | .031 | .001 |
| Male | .047 | .002 | .047** | .002 |
| Minority | -.010 | .000 | -.025 | .001 |
| Assistant professor | NA | NA | .057** | .003 |
| Time in rank | .035 | .001 | .040* | .001 |

Source: NSOPF, 1988. NA = Not applicable.

* = $p < .05$. ** = $p < .01$. *** = $p < .001$. **** = $p < .0001$.

tution does not match the organizational culture, the new faculty member will undergo what Van Maanen terms *divestiture socialization*, in which the organization attempts to transform the new recruit. When transformational efforts fail, the new faculty member may leave the institution for one that offers a better fit. A professor who does not get tenure may be seen as an example of the failure of divestiture socialization.

Investiture socialization involves affirmation of the culture of orientation of faculty members, particularly for assistant professors. Investiture socialization processes are, of course, more likely to occur when there is a good fit between the new faculty member and the organization. The problem for all professors and for new faculty in particular is that "qualities of new faculty are affirmed or transformed through informal mechanisms that are, for the most part, imprecise and haphazard (Tierney & Rhoads, 1993, p. 30).

Conclusion

In concluding, we return to the four policy perspectives introduced earlier. The first policy perspective deals with *early intervention*. As Bess (1978) and Clark and Corcoran (1986) allude to in their work, the place to intervene in shaping faculty behavior may be during graduate school. However, our findings suggest that graduate student socialization may not have a significant impact on one's commitment to the teaching role. Our finding may be an outcome of the complexity of the graduate experience. What is clear to us is the need to better understand graduate student socialization and any effects of serving as a teaching assistant or research assistant. It makes intuitive sense to believe that the graduate experience has a lasting impact, although the impact may be outweighed by later factors such as faculty rewards and work allocation.

The second policy perspective deals with *fit with institution*. A significant finding of our research relates to the importance of congruency between the organizational culture and the culture of orientation the new faculty member brings to the institution. Our re-

search confirms the findings of Finnegan (1992) and the position of Tierney and Rhoads (1993), who stress the importance of the recruitment and selection process in developing a good match between faculty and their respective institutions.

Additionally, because faculty socialization is ongoing, the experiences of a new faculty member continue to shape values, norms, and beliefs about faculty roles. The implication for colleges and universities is that a degree of incompatibility between the institution and the faculty member may be overcome through ongoing efforts such as faculty development and mentoring programs. Institutions might also consider how the organizational culture might be modified to better suit the orientations of diverse faculty. This is particularly relevant to women and minority faculty.

Our third policy perspective relates to faculty *work allocation and workload*. The finding that hours assigned to the classroom is positively related to time spent on teaching is hardly surprising. We have included this relationship because of the trend to consider mandatory classroom hours for faculty. Although our findings suggest a strong relationship between hours assigned to the classroom and time spent on teaching and instruction, other factors are important. For example, rewards emphasizing research may outweigh the importance of hours spent in class and the total time faculty commit to teaching. In addition, our measures do not provide any indication of the quality of instruction offered by faculty who have extensive classroom assignments, nor do we assess potential labor market problems related to some institutions mandating minimum classroom requirements while others do not.

Finally, the fourth policy perspective deals with faculty *rewards*. Our findings clearly indicate that research is rewarded over teaching. The simple solution to elevate the importance of the teaching role is to increase the rewards. Unfortunately, the faculty reward structure is not controlled entirely by colleges and universities; disciplinary peers, funding agencies, and the labor market all exert significant influence over faculty rewards. Our

recommendation, however, is that academic institutions increase the relative importance of teaching through those reward structures over which they do have control.

Notes

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