This paper examines the status and role of teaching faculty at research-intensive universities. After agreeing that research was the dominant element in the university's reward system, a case study format was used to examine the attitudes of 11 active and 18 less-active researchers at a large public research institution regarding their own adaptation first to the institutional reward system, and secondly to their stated attitudes and beliefs toward teaching and research roles. The study found that while active researchers reported somewhat more positive attitudes toward research than did the less-active researchers, there was considerable variation across and within the two groups; both groups held strong allegiance to the historic teaching mission of public universities. The paper concludes by placing the tensions between research and teaching within the broader context of the contemporary debate over the character of higher education. (Contains 27 references.) (CH)
Faculty Perspectives on Teaching at a Research University

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This paper was presented at the annual meeting of the Association for the Study of Higher Education held in San Antonio, Texas, November 18-21, 1999. This paper was reviewed by ASHE and was judged to be of high quality and of interest to others concerned with higher education. It has therefore been selected to be included in the ERIC collection of ASHE conference papers.
Abstract

This paper examines the status and role of teaching faculty at research-intensive universities. It does so by reporting results from a case study of committed undergraduate teachers at one such institution. Having agreed that research was the dominant element in the university's academic reward system, sample members were cross-classified along two dimensions: First, their own adaptation to the reward structure, as indicated by their five-year records of involvement in funded research; second, individuals' stated attitudes and beliefs toward the teaching and research roles. Although the 11 active researchers (AR's) within the sample reported somewhat more positive attitudes towards research than did the 18 less-active researchers (LA's), we found considerable overlap across, and variation within, the two subsamples. Particularly noteworthy were the presence of a strong allegiance to the historic teaching mission of public universities among both groups and, among the LA's, an oppositional cadre of politically adept senior faculty who had achieved some success in preserving or expanding the place of undergraduate teaching in the reward systems of their departments and colleges. The paper concludes by considering the significance of both of these tendencies in light of the continuing debate over the responsibilities of the research university.
Faculty Perspectives on Teaching at a Research University

Tensions between the teaching and research functions of university faculty members have been an object of intense scrutiny for many years. Critics have warned that the intellectual demands of advanced scholarship may be incompatible with the tasks of educating the growing proportion of American youth enrolling in higher education. Much of the blame is placed on the reward systems of the research universities, which are said to tie faculty advancement to individuals' ability to attract research grants and to generate publications. Because tenured and tenure track faculty have few incentives for devoting time and effort to undergraduate teaching and advising, these tasks are often left to loosely-supervised graduate assistants and temporary instructors (Anderson, 1992; Boyer, 1990; Boyer Commission, 1998).

Although this interpretation has gained wide currency among policy-makers and the general public, the actual evidence on faculty performance offers a more complex picture. Three generalizations are particularly relevant. First, despite the proliferation of teaching awards and other public affirmations of the importance of teaching (Glassick, Huber, & Maeroff, 1997), there is little doubt that salary, promotions, and tenure at research universities continue to depend more on research productivity than on instructional performance (Fairweather, 1996; Gomez-Mejia & Balkin, 1992; Konrad & Pfeffer, 1990). Second, the disparity in rewards notwithstanding, national faculty surveys consistently report high levels
of interest and involvement in undergraduate education. Even at research universities, perceptions of the teaching role tend to be positive and large majorities of respondents consider themselves to be effective instructors. Indeed, a substantial proportion consider teaching to be the focal point of their professional lives (Blackburn & Lawrence, 1995; Ladd, 1979). Third, judging by the conclusions of several prominent meta-analyses and research reviews (Braxton, 1996; Feldman, 1987; Hattie & Marsh, 1996), the overall relationship between teaching performance and research productivity is apparently much less a zero-sum game than the critics have contended. In the words of one of the reviewers, “Research does not interfere with teaching effectiveness...this conclusion is particularly salient in research universities in which (it) receives strong confirmation” (Braxton, 1996, page 8).

Thus, the overall conclusion emerging from these studies is that teaching and research have been effectively compartmentalized, so that the demands of neither research nor the reward system deter some faculty members from significant involvement with teaching. This is in keeping with other well-known generalizations about loosely-coupled governance and the centrality of faculty autonomy within university life. (See, for instance, Clark, 1987.) More recent studies, however, offer an unsettled outlook for the future, insofar as they posit a steadily escalating expectation for faculty research entrepreneurialism as a dominant factor in the daily life of universities. In this view, the traditional perquisites of the faculty will have fallen victims to a resource dependency born
of economic globalization. Faced with pressures to rationalize their own activities in ways that offset the universities’ overhead costs, faculty members will no longer enjoy the opportunity to chart their own course among research, teaching and other responsibilities (Slaughter & Leslie, 1997; Etzkowitz, 1997).

Given these uncertainties, it would be useful and timely to take a closer look at the role of undergraduate teachers at contemporary research universities. The present paper will do so by focusing on a group of faculty members known to actively involved in undergraduate education at one such institution. The question that guided this case study was as follows: What do sample members understand the roles of teaching and research to be within their own careers and within the reward system of their university?

Method

This study grew out of an earlier investigation of faculty participation in a regional reform coalition in engineering education. Contrary to the notion that academic reward structures drive faculty members at research universities away from contact with undergraduates, we found that participants viewed the reform program as a source of significant rewards, including financial and moral support and a sense of personal empowerment from playing a direct part in improving the undergraduate curriculum (Serow, Brawner, and Demery, 1999). Thus, the question arose whether a similar dynamic might obtain among faculty members
in other disciplines who had chosen to be actively involved in undergraduate teaching and advising.

To answer that question, a case study was implemented at the pseudonymous Sun Belt State University (SBSU), one of the four public research universities that had participated in the original study. This institution is located in the same region as the others and, like them, has risen rapidly in recent decades from its land-grant origins to its present status as a large Research I university with particular strengths in science and technology.

An advantage of the case study format is that it is highly context-sensitive, allowing the researcher to probe more deeply into connections between local conditions and individuals' attitudes or behaviors than might be possible in a multisite study. A further payoff is that such detailed knowledge sometimes leads to theoretical insights, which, in turn, may provide a basis for broader generalizations (Merriam, 1998; Yin, 1994).

Sample

To minimize differences in research practice among the faculty, a decision was made to limit the sample to full-time faculty members in the natural, applied and behavioral sciences. The next step was to screen for individuals with histories of active involvement in undergraduate education, as indicated by two or more of the following criteria: Membership in the university-wide Academy of
Excellent Undergraduate Teachers (elected by faculty-student committees), current or recent service as departmental coordinator of undergraduate education, membership on one of the university’s three committees dealing with undergraduate academic affairs, participation in one of the university’s major teaching improvement initiatives, and nomination by another sample member. A total of 33 current faculty members were so identified; of these, 29 agreed to participate. In addition, invitations were extended to three administrators with particular knowledge of faculty personnel policies and the institutional climate for teaching. All three invitations were accepted. In addition to providing background, the information obtained from these interviews was used to triangulate data provided by faculty participants.

Data Collection and Analysis

The 32 interviews ranged from 30 to 90 minutes in length, with the typical session lasting just under an hour. Each interview was conducted individually, usually in the participant’s office; followup conversations were sometimes held via telephone or email. A semistructured interviewing format was used in which specific questions were posed about the faculty member’s career history and involvement with undergraduate instruction; then, interviewees were asked whether they believed that teaching was adequately recognized and rewarded at the university. This often led to a broader, open-ended discussion of the faculty...
role. Similar questions were posed in the administrator interviews, with the exception that the focus was on overall trends within the university rather than on the individual's own career.

In addition to the interviews, information for this study was obtained through the examination of two types of documents: Publicly accessible archival material maintained by the university (faculty handbooks, records of contracts and grants, and minutes of committee meetings) and personal documents obtained from sample members, including curricula vitae, course syllabi and statements of teaching philosophy. Personal home pages also proved to be a fruitful source of information and an excellent supplement to the interview content.

The key steps in qualitative analysis are the reduction of the various discrete bits of data into coherent categories and the generation of conclusions on the basis of the observed patterns among the categories. The approach used in this study, constant comparison, is suited to accomplishing both tasks. According to Strauss and Corbin (1998), constant comparative methods entail continuous testing and refinement, both of analytic categories and of the resulting theoretical insights.
Results

A major point of agreement among the interviewees was that research outranked teaching in the university's faculty reward system, and that externally funded research and publication in appropriate outlets were essential not only for promotion and tenure but also for maintaining esteem in the eyes of one's peers. According to one natural scientist, anyone not doing the right type and amount of research would "never be accepted as a legitimate, card-carrying member of the faculty." Undergraduate instruction, by contrast, was consistently described as having little standing with either faculty leaders or university decision-makers. This did not imply, however, that teaching and advising were ignored altogether. When asked if teaching received adequate recognition, a senior member of the engineering faculty said "Only if it's not very good. If you do a reasonably good job of teaching, that's what's expected. If not, the department can use it against you." A veteran behavioral scientist concurred and indicated that this tendency had become more pronounced in recent years. "The emphasis has gone from 'How good a teacher is he?' to "How many complaints have we had about him?" What the university was doing, this observer suggested, was making small investments in upgrading the quality of undergraduate instruction. By sponsoring teaching awards, cash grants for instructional innovations, and other incentives, the administration's real aim was to "avoid the ramifications of bad teaching" by minimizing pressures from students, parents, alumni, and state legislators.
The consensus on the centrality of research allowed us to organize subsequent data analysis around the sample members' adaptation to the reward system. Although all of the faculty interviewees had established reputations as committed undergraduate teachers, significant differences were found in other dimensions of their faculty roles. Three distinct elements of adaptation gradually emerged from the data: Participation in research, other coping behaviors, and communicating a personal account of one's actions.

Involvement in Research

As we have seen, engagement in funded research is widely acknowledged as the surest route to faculty advancement in research-intensive universities. Based on archival data for the previous five calendar years, 11 of the 29 faculty members were found to have attracted moderate to substantial amounts of external funding (ranging from $50,000 to almost $2 million) and thus were classified as active researchers (AR). The remaining 18 sample members were coded as less active (LA); in fact, 14 had no funded research during this period.

In examining sample members' involvement in research, other factors that proved to be relevant were faculty rank and length of service. For instance, the LA's holding the rank of full professor had usually been hired, tenured, and promoted under an earlier reward system—one that recognized their own strengths as teachers. One 30-year veteran recalled,
Back when I came here, the old hierarchy was in place. The younger people were enthusiastic for teaching. We jumped into two or three courses (each semester).

Today, a new assistant professor has to say, 'To hell with teaching.'

Among the associate professors, the non-researchers had not fared so well, as all eight members of this subcategory were past the customary time for promotion to the next rank. By comparison, most of the five active researchers were on time for promotion to full professor. Table 1 summarizes these relationships.

Other Coping Behaviors

The next step in the analysis was to consider other behavioral adaptations to the academic reward structure at Sun Belt State. Our primary interest here is the means by which the less-active researchers managed to sustain their faculty careers at a research-intensive institution.

Irrespective of rank or seniority, interview statements made by most LA's suggested that they had been pushed to the margins of faculty life by an institutional reward system that demanded ever-rising levels of research
productivity. Their coping strategies fell into two distinct clusters. Most simply
continued being productive in the areas that mattered most to them, hoping to
be shielded from the system's harshest consequences by a combination of tenure
(a status enjoyed by all but two of the faculty interviewees), their own
reputations for excellence in teaching and advising, and decent working relations
with their department heads and colleagues. This sometimes meant doing jobs
that no one else wanted to do. One associate professor said that in addition to
being the department's undergraduate coordinator,

I have 100-plus advisees of my own. This is 4 to 5 times
the usual advising load. Why do I do it? Because students
come to me to be their advisor. It's ultimately related to
the reward system. If 70 per cent of someone's faculty
appointment is (funded by) research, why should they
spend time on advising? It's a disincentive.

Post-tenure review, a policy recently adopted by the university, did not as yet
loom as a credible threat, but perceived salary inequities and, for most of the
associate professors, promotion delays or denials produced considerable pain.
Some felt trapped and rued their decision to come to the university rather than
to an institution oriented primarily to teaching. A self-described "un promotable"
associate professor mentioned one such college, saying "I should have gone
there. I'd have been happier and I wouldn't have this thing hanging over my head—trying to get an average pay raise."

The other position favored by the non-researchers had more of an oppositional flavor, in that its proponents actively sought to elevate the status of teaching within the university or at least to prevent its further erosion. The effectiveness of this strategy seemed to depend mainly on the political astuteness of the individuals involved. At one end of the spectrum, public complaints about the neglect of undergraduate teaching were counter-productive in the case of a faculty member who believed himself to have been "punished in various ways" by his superiors for speaking out to a visiting committee from an accrediting association. In three instances where the oppositional strategy was more successful, senior full professors had used positions of power within their departments either to create new faculty lines dedicated to teaching or had been able to place a much heavier emphasis on teaching as a criterion for promotion and tenure. In gaining the approval of their superiors and departmental colleagues, all three individuals had made the argument that good undergraduate teaching would redound to the benefit of researchers by disarming potential critics. In the words of one successful strategist,

Those whose principal interest is in research have bought into what a strong undergraduate program does for their interests. They are convinced that the better things go
with undergraduates, the less the burden on them. They're better off if the undergraduate program does well.

Accounts

In sociological terms, an account is a "linguistic device employed whenever an action is subjected to evaluative inquiry," particularly when the action is considered unconventional or deviant (Scott and Lyman, 1968, p. 46). Its purpose is to reduce tensions by bridging the gap between actual and expected behavior; in so doing, it provides a "subjective explanation" that reflects the actor's understanding of the situation in which the behavior occurred (Orbuch, 1997, p. 467).

Some of the statements made by our informants can be considered accounts of their own anomalous status as teaching-oriented faculty in a research-intensive university. In a few instances, the commitment to teaching was discussed in the context of personal characteristics, such as an especially strong desire to teach a particular academic discipline. More typically, though, the frame of reference was Sun Belt State University itself and its mission as a public, land-grant institution. With its close ties to local communities, agriculture and industry, SBSU was described as a "people's university" and as an important source of educational and economic opportunity for the state's younger citizens.
For instance, the ideal of the university's undergraduate program in agriculture was, according to a faculty member in that field, to produce a society-ready graduate, someone with the skills needed to be successful in a career, someone with values, someone with knowledge of different aspects of the world—the humanities, social science, business, math. Our obligation is to give them the opportunity to be well-educated.

In explicating the role of the undergraduate teaching faculty within this environment, respondents' accounts were divided between complementary and competitive models. The complementary version placed teaching alongside research and extension as interdependent (though not necessarily equal) parts of the land-grant mission. Especially in applied science fields with close links to a specific industry, faculty members spoke of their responsibility to integrate into their teaching any information gleaned from their own research and consulting that might help students with workplace preparation and placement. A full professor in one of the applied science colleges highlighted the importance of these outcomes. After mentioning an upcoming accreditation review, he stated that for his department, "the ultimate certification is: Can our students get a good job? Our industrial allies are impressed...They want to go with a winner."
Proponents of the competitive model agreed that the undergraduate faculty were agents of economic opportunity but claimed that their effectiveness had been compromised by the university's undue emphasis on externally funded research. Most stated or implied that undergraduate education should be the faculty's foremost task and that time away from teaching was usually not time well-spent. Teaching is "the only justification for receiving their salaries," said one departmental administrator. Non-teachers, claimed another, "should be off in a government lab somewhere, generating their own salaries." A cadre of a dozen or so committed non-researchers was openly skeptical of any efforts to combine research and teaching. Some of these associate and full professors claimed to have abandoned their own research programs in order to concentrate on teaching and advising. An applied scientist said that he had done so after becoming convinced of "a natural antagonism between research and teaching." It might be otherwise at a private institution, he suggested, but working at a state university required that he focus his efforts on instruction:

Sun Belt State is one of the best-supported universities in (the state). Mom and Pop blue-collar workers are paying lots of money to support a world-class institution. They expect their kids to get a quality education. They're paying us to teach. I'm not doing my job if I use federal funds to buy
my way out of teaching. It's a war between state and federal funds, and they're both coming from the same taxpayers.

Finally, the patterns just discussed are highlighted in Table 1, which lists sample members in order of their external funding over a recent five-year period. As stated previously, the principal fault line occurs at the $50,000 mark. Above that point, Professor Lorenzo and most of her colleagues support the university's research function not only by generating significant revenues tied to that purpose but also by taking a positive or neutral stance toward one of the core tenets of the research university—namely, that teaching and research are complementary. By contrast, Professors Stevens through Lee bring in little external funding, generally see teaching and research as competitors, more often act in opposition to the reign of research in the academic reward structure, and pay the price for their actions by sometimes having their promotions delayed or denied.

Discussion

Recent studies of faculty behavior view the teaching function of higher education through the lens of resource dependency and economic globalization.
No longer sheltered from market forces, faculty members must spread their efforts across a wider range of activities in order to attract the financial support that academic institutions now require (Slaughter and Leslie, 1997; Etzkowitz, 1997). Similar developments have occurred in all but the smallest and most specialized of contemporary workplaces. The psychological consequences of these changes have yet to be fully understood, but some observers have discerned in them a crisis of personal empowerment: Sennett (1998), for instance, found that displaced IBM employees were more easily reconciled to their predicament if they understood it to be a consequence of their own actions. Rather than accepting the role of hapless victims of downsizing, the former employees concluded that a lack of information had led them to make bad judgments, which ultimately resulted in the termination of their corporate careers.

It may be not be entirely fair or accurate to compare members of our own sample to displaced office workers, as virtually none of the former were faced with the prospect of lost jobs or shrunken pay checks. Indeed, those interviewees who combined award-winning teaching with seven-figure research grants enjoyed very high levels of professional security. For others however, the contemporary research university was far from a congenial setting—one that they would not choose again were they in a position to do so. It is ironic then that in retrospectively accounting for their present circumstances, some individuals emphasized the impact of their own decisions. One such device that has already
been mentioned is the voluntary abandonment of research. In five or six cases, interviewees claimed to have set aside permanently their own funded research programs in order to concentrate more effectively on undergraduate education. The issue here is not the factual accuracy of such statements but their prominence within the individuals' personal accounts; because of the low regard that is generally attached to undergraduate teaching and advising, a complete commitment to those activities takes on altruistic qualities, particularly when it is freely chosen. In that vein, another ex-researcher remarked, "I'm not held in as high esteem in our department as some of our researchers. I don't think that's appropriate. I doubt that I'm paid as much. But am I doing as much good for society? Quite a bit more, actually."

The defensive tone of these comments echoes throughout the interview data. In some such instances, what was being defended was not so much personal dignity as the honor and worth of the teaching role itself. A common tactic was to attribute teaching's low estate to the flawed methods of personnel appraisal used by universities. One veteran of the prestige wars in a natural science department began to make the familiar case: "It's easy to measure research (productivity) by counting articles and grants," he said. "Teaching is harder to measure." But he then veered off to make a subtler argument:

I think that for faculty who don't have an active research program, it's too easy to say "I'm a teacher" instead. Maybe
they are, maybe they're not. People who say they're teachers may think they're better than they really are. Just because we have a degree in (the subject) and can stand up in front of a class doesn't make us experts in teaching.

Claims to teaching prowess, in other words, must be submitted to those most qualified to render judgment—i.e., the students. In fact, reliance on student opinion was so ingrained among sample members as to preclude the possibility of applying other tests, such as the evaluation protocols associated with the scholarship of teaching (Boyer, 1990; Glassick, Huber, & Maeroff, 1997). Such exercises struck one behavioral scientist as "amateurish," while a former department chair questioned whether effective teachers had the time or resources to seek nationwide publication of their instructional methods. Unlike research, he suggested, good teaching was inherently local in nature. Naming three legendary instructors at Sun Belt State, he said that none had any national visibility; rather, they were simply "excellent teachers who served the university extremely well."

Conclusion

Stake (1998, p. 86) has written that the question that drives any case study is, "What can be learned from (this) single case?" The intent behind the present
investigation was to examine the tensions built into the faculty role at a contemporary research university, and, in particular, to explore from the teacher's perspective the conflict between research and teaching. For at least two reasons stemming from its history and mission, Sun Belt State University turns out to have been an appropriate setting for a case study on this issue. The first of these is the experience of goal displacement and its impact on faculty morale and role performance. Having come relatively recently to Research I status, SBSU still employs 30-year faculty veterans who had initially expected to spend their careers at a teaching- and extension-oriented state institution that required little in the way of competitive scholarly distinction. At universities where research has had a longer claim on faculty agendas, selective hiring usually mitigates the problem of poor person-to-environment fit, at least with respect to scholarly productivity (Clark, 1987). Yet, the holdovers from SBSU's earlier era were not the only source of anti-research sentiment within the sample. Thus, the second relevant attribute of Sun Belt State is its long-standing tradition of teaching and direct service, which, as we have seen, loomed large among some faculty members as a counterforce to the research imperative.

Against this backdrop, the tensions between research and teaching at Sun Belt State can be understood as embodying a broader debate over the contemporary character of higher education. The research university in particular is said to be "the child of middle-class pluralism; it relates to so much of the variety of the surrounding society and is thus so varied internally" (Kerr, 1994, p.
In directing the universities' development down one or another path, what is ultimately involved is a choice between competing visions of educational opportunity. Under the Jeffersonian or meritocratic ideal, universities contribute to the renewal of society by means of elite recruitment and socialization. The emphasis is on the highest attainable levels of institutional and individual excellence. For faculty and students alike, the prevailing ethos is competitive achievement. The opposing tradition is Jacksonian or populist in character; it stresses accessibility and the obligation of public universities to improve the quality of life on as broad a basis as feasible (Hearn, 1992; Nevins, 1962). It is precisely this tradition that members of our sample were invoking when they charged their research-minded colleagues with abandoning their responsibilities to teach the children of the state's "Mom and Pop blue collar workers." Some critics agree, contending that the avid pursuit of federal and corporate research grants constitutes nothing less than a "betrayal of the land-grant tradition" (Cooper, 1999, p. 776; see also Fairweather, 1996). The difficulty with this interpretation, of course, is that it overlooks the macroeconomic forces that constrain decisions about both individual and institutional educational priorities. Insofar as public universities experience the need to replace enrollment-based state subsidies with private or federal research funding, the crucial question is not whether faculty and administrators value teaching and advising but how much the public is willing to pay for those services. With the rapid adoption of Internet-based instruction, which minimizes the importance of traditional face-to-
face contacts, the overall outlook for those committed to such practices seems very bleak indeed.
Table 1:  
Summary of Characteristics of Faculty Participants

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Field</th>
<th>Rank</th>
<th>Funding</th>
<th>Account</th>
<th>Opposition</th>
<th>Promotion Delayed</th>
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<td>?</td>
<td></td>
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</tr>
<tr>
<td>Lee</td>
<td>BS</td>
<td>Associate</td>
<td>0</td>
<td>?</td>
<td>*</td>
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</tr>
</tbody>
</table>

Key

Field: AS = Applied sciences; NS = Natural sciences; BS = Behavioral sciences

Funding: $$$$ > $1 million; $$$ > $100,000; $$ > $50,000; $ > $1,000

Accounts: + = complementary; ? = neutral or undecided; * = competitive

Oppositional: * = took significant action in opposition to existing reward system

Promotion delayed: * = Has experienced delay of at least one year over usual time for promotion from current rank
References


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