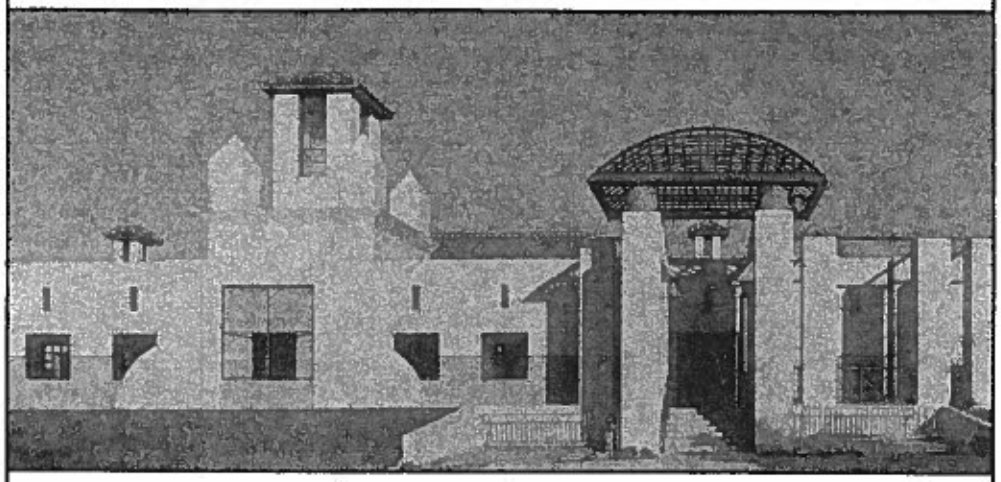
NEW DIRECTIONS FOR INSTITUTIONAL RESEARCH



Analyzing Faculty Workload

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The findings and methodologies from recent faculty workload studies are reviewed and implications for higher education policy are suggested.

What We Have Learned About Faculty Workload: The Best Evidence

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How do faculty spend their time? Faculty workload studies attempt to answer this question about the single largest allocation of resources, both human and fiscal, in our colleges and universities. In more complex terms, however, faculty workload studies are undertaken in order to understand faculty resources and to manipulate how they are deployed. Consequently, once the initial question about faculty workload is asked and institutions begin to answer the inquiry, the simplicity is lost and complexity takes over. The process of answering the question becomes not only technically complex, but laden with perceptions by both the inquirer and the focus of the question, the faculty.

Is the initial question fair? Absolutely. Is it in the interest of colleges and universities to study faculty workload? Without a doubt, because failure to address and understand the distribution of faculty effort has policy dimensions for each institution that will affect its ability to achieve its role and mission. However, the evidence suggests that faculty workload studies are no more than a means to a more important end: improvement in learning.

There are widespread concerns that faculty value research more than teaching. The evidence offered to support this perception is the undisputed fact that many faculty spend only six to ten hours per week in the classroom. As one author has noted (Layzell, 1992), many public policy makers believe that faculty care little about undergraduate education, particularly at the lower division, and are more concerned with their graduate students, research, publication, and other professional activities. Classroom contact (teaching load) studies are certainly one measure of faculty effort. As Dennis Jones and Lloyd Byrd note later in this volume, however, such studies capture only a portion of the faculty effort toward instruction. Workload studies are an attempt to display

the breadth and depth of the entire faculty effort and to relate it to the roles and missions of institutions.

I have two objectives in this chapter. First, I will review the findings and summarize the common elements from recent faculty workload studies. Second, I will comment on the implications faculty workload studies have for higher education policy, particularly the shifting national focus from the inputs of faculty effort to the outputs of student performance.

Recent Workload Studies

In response to widespread perceptions that faculty spend too little time teaching and too much time participating in research or consulting, some states have turned to faculty workload studies to determine how faculty spend their time. A recent national study (see Table 2.1) corroborated the widely shared belief among faculty that faculty devote a considerable amount of time to their work, between fifty-two and fifty-seven hours per week. Other studies have had similar findings (Blackburn and Lawrence, 1988; Serpe, Newton, and Vandewater, 1990; State Council of Higher Education for Virginia, 1991; Arizona Joint Legislative Budget Committee, 1993). Furthermore, these studies clearly demonstrate that the distribution of faculty effort among the traditional elements of instruction, research, and service is affected by the role and mission of the institution. That is, in each study, faculty in research universities spent less time on instruction and more time on research than did faculty in doctoral or comprehensive universities (see Table 2.2). The inverse is obviously true for faculty at comprehensive and doctoral universities, with faculty spending more time on instruction and less time on research than did their colleagues in research universities. The proportion of time spent on administrative activities is generally consistent across all types of institutions.

Methodologies. Two predominant methodologies have been used in recent studies of faculty workload. The first is activity reporting. A work period is specified (one day or one week, for example) and faculty report the amount of time they spend on each of the activities for which there is a standard definition in the report. Activity reporting was the methodology used in the previously cited studies. These types of studies attempt to answer two questions: How much time do faculty work? and How do faculty allocate their time? Interestingly, although workload studies that use activity reporting have received widespread attention, very few have been conducted on a statewide basis.

The second methodology is the equivalency report. In this method, faculty relate their activity to a credit-hour standard for the institution. Each faculty activity is converted to the standard. For example, teaching a credit hour course is equivalent to at least three credit hours, but may be worth more if the class is large. Supervising an independent student is equivalent to a fraction of the credit earned by the student. The sum of each faculty member's credits should be at least equal to the institutional standard.

Table 2.1. Faculty Workload: Full-Time Faculty at Public Institutions, Fall 1987

Type of Institution	*Average Hours Worked Per Week*
Public research	57
Public doctoral	55
Public comprehensive	52
All institutions (public and private)	53

Source: National Center for Education Statistics, 1991.

Table 2.2. Percent of Faculty Effort Allocated to Activities

Type of Institution	*Teaching*	*Research*	*Administration*	*All Other*
Public research	43	29	14	16
Public doctoral	47	22	14	17
Public comprehensive	62	11	13	13
All institutions (public and private)	56	16	13	16

Source: National Center for Education Statistics, 1991.

Common Elements in Activity Reporting. Faculty workload studies based on activity reporting with an identified work period have received the most attention because they typically share several elements in common. The most basic of these elements is the quantification of faculty workload within the traditional tripartite mission of instruction, research, and service. These three general categories of faculty effort form the common thread that permits some statistical comparison to be made among the various workload studies. However, the discrete definitions that make up each major category often vary among the studies. For example, within the category of instruction, classroom contact will most likely include direct instructional contact with both undergraduate and graduate students in a regularly scheduled class, lab, workshop, ensemble, or production, but it may not include individualized instruction. Clinical patient care and student-directed activity are also likely to be accounted for in different ways. Class preparation, grading, office hours, and advising may be categorized as instruction in recognition of the fact that they may occur simultaneously or overlap. Within the category of research, separation of externally sponsored research, state-funded organized research, departmentally or institutionally funded research, and other research or creative activity including creation of works in the visual arts or music is often not consistently defined.

The consequence of definitional differences is that only limited analysis primarily related to mission and comparisons of workload can be made among

the various workload studies. However, these cross-study limitations do not necessarily defeat the policy purposes for which workload studies may be used, nor do they negate the ability of individual states, systems, or institutions to have a consistent analysis of the distribution of faculty effort, as long as they are careful to define the workload activities consistently.

The second common element of faculty workload studies is an analysis based on a typical faculty work week. There are two principal reasons for choosing a work week as the preferred measurement. First, it is long enough to capture all of the activities a faculty member might engage in during a finite period of time. Second, most people can relate to the concept of a work week, so for the purposes of public policy and informing individuals not normally associated with higher education, it is an acceptable, if not preferred, measurement.

The third common element is the use of self-reported data through surveys. Most states, and indeed most institutions, do not have ongoing faculty time and effort reports; faculty workload studies typically have to create a data set. Consequently, faculty workload studies are subject to all of the methodological concerns associated with survey work, including survey method and follow-up, whether to survey all faculty or a sample, and issues of individual faculty member confidentiality, to name just a few. Analysis at the departmental level may be limited due to small sample sizes and care must be taken not to draw conclusions on data that are not statistically significant. Finally, critics of self-report studies suggest that the use of self-reported data leads to inflated workload results. Supporters of self-reported data believe that consistency of responses over long periods of time lends validity to the typical findings that faculty work fifty-two to fifty-seven hours per week.

Analytical Concerns. As noted previously, the genesis of faculty workload studies is the widely held belief that faculty spend too much time doing research and too little time in the classroom. This belief is so strongly held by some that it can lead to biased analysis.

The strength of a faculty workload study lies in its ability to convey the entirety of the faculty effort. It does this by mirroring the tripartite mission of instruction, research, and public service and by displaying faculty effort in each of these important categories. As noted earlier, most studies collect information based on definitions or subcategories of each major category and then sum the information to the categories of instruction, research, and service for comparison with other studies and for simplification of analysis and reporting.

Sometimes staff members to state policy makers disaggregate instructional activity into its subcomponents (direct classroom instruction, direct individual instruction, clinical activity, and classroom preparation) and compare each against the total for another category, such as research. This procedure is particularly common if staff are unfamiliar with the way faculty accomplish their work and with the joint products associated with much of the faculty's efforts.

The implications are obvious. For example, if faculty spend 47 percent of their time on instruction, of which 14 percent is direct classroom instruction, and the direct classroom instruction is compared with the 33 percent of total time spent on research, state policy makers might conclude that faculty do not care about teaching.

Another analytical concern is the potential for researchers to draw conclusions on the basis of comparisons of simple averages rather than conducting tests of significance. Conclusions in workload studies can imply a significance or certainty that cannot be supported by the survey data. Tests of significance must be conducted to determine whether the groups being compared are actually different, particularly when the size of a group or the difference between groups is small.

Policy Implications

Recent faculty workload studies have had a profound effect on higher education. Most observers would acknowledge that faculty workload studies have been initiated for one purpose, namely to increase teaching productivity, either through increased class size, more scheduled courses per faculty member, or increased total workload. Judged against those objectives, faculty workload studies have been a failure. Judged against other objectives, however, they have been a success.

Reevaluating the Value of Teaching. It is difficult to believe that there can be any further improvement in the productivity of faculty as measured by hours worked in a week. Clearly, fifty-two to fifty-seven hours per week is a major commitment by faculty to their jobs. Many observers of higher education have noted that faculty are working harder than ever before. This view is corroborated by earlier studies that showed average work weeks ranging from forty-two to forty-six hours per week, approximately ten hours per week less than studies conducted only eleven years later. However, even though total workload has risen, many observers believe that instructional loads, particularly at the more prestigious research universities, have declined to embarrassingly low levels.

A changing faculty workload has significant implications for the quality of the undergraduate experience. Several of the faculty workload studies found that when asked how faculty would like to allocate their time, faculty responded that they would like to reduce the amount of time spent on class preparation and advising and increase the amount of time spent on research. Contrast these findings with those of Pascarella and Terenzini (1991), who suggest that individualized and small-group interactions between students and faculty outside of the classroom have significant positive effects on a wide variety of educational outcomes. One would expect that the opportunity for those kinds of interactions would be greatest in institutions where faculty spend more time on instruction and in preparation and advising.

Despite this trend, a number of surveys show that faculty believe that teaching is very important. Buoyed by these findings, some universities are engaging in a redefinition of teaching that incorporates classroom performance, assessment of student work, supervision of graduate students, and course preparation and advising. Clearly, there is a trend toward a more inclusive definition of teaching.

Enhancing Student Productivity. There is little or no documented evidence that faculty workload studies have resulted in a change in the distribution of an institution's total faculty effort. There are however, indications that faculty workload studies are contributing to a shift in focus from the inputs of faculty effort to the outputs of enhancing learning and educational quality. For example, one state that completed a faculty workload study opted not to implement teaching or workload requirements, but rather adopted the following set of objectives to link faculty teaching effort to the improvement of the quality of undergraduate education (Arizona Joint Legislative Budget Committee, 1993):

Students will be able to register for the classes necessary for meeting their general education and major requirements when they need them.
Students will receive adequate advising for their program and career needs.
Classrooms will be adequately equipped for instruction, using modern instructional technology.
The number of lower-division courses taught by ranked faculty will be increased.
Graduates will be properly trained and educated to compete in their chosen fields.
There will be an increase in student contact with ranked faculty in the many aspects of the students' educational experience.
Undergraduates will be more completely integrated into research-related activities.

These objectives coincide with one senior higher education executive's observation that higher education must focus more on student learning and less on faculty productivity (Johnstone, 1993). Student productivity enhancement is viewed as more substantial and sustainable than increasing faculty workload to affect student outcomes.

Providing further evidence of the shift in emphasis away from workload enhancement and toward student productivity is a recent report (Russell, 1992) that found that only a quarter of the respondents cited faculty workload and productivity as an important state issue and priority, whereas undergraduate education and effectiveness and accountability in higher education were both identified by half the respondents as important state issues.

Role and Mission. On a statewide basis, faculty workload studies have had the positive effect of reinforcing the importance of role and mission. There is not much doubt that many higher education institutions participated in mission drift between 1975 and 1990. One study documented this drift (State Council of Higher Education for Virginia, 1991), finding that faculty at both doctoral and comprehensive universities increased the proportion of time spent on research while decreasing the proportion of time spent on service. The study also documented that faculty at doctoral institutions had decreased time spent on instructional activities.

As a consequence of the recent faculty workload studies, state policy makers appear to have a renewed interest in wanting to make conscious decisions about the balance between research and teaching in research universities, as contrasted with other institutions whose missions place greater emphasis on teaching. This is not to suggest that all institutions should have the same distribution of effort across the various workload categories. It does suggest, however, that each state should ensure that faculty effort is going toward teaching, research, and public service in a balance that meets state needs, not simply institutional aspirations (Jordan and Layzell, 1992).

Indeed, at least one state (Arizona Joint Legislative Budget Committee, 1993) is using its faculty workload study to help it plan for enrollment growth. State higher education officials have examined the implications of starting new campuses, using the research institutions' standard instructional load of five courses per year; they then evaluated the effects of adding one additional course and three additional courses per faculty member. The results are startling. If one course is added to the workload, the number of tenure-track faculty required for a campus of 10,000 FTE students is reduced by 72 FTE faculty, a savings of $4.5 million. If the course load is increased to eight courses per year, an increase of three courses per faculty member, the tenure-track faculty requirements are reduced by 162 FTE faculty, a savings of $10.1 million per year. This state is planning for three campuses of 10,000 FTE students each.

Other Workload Models. Perhaps as important as changing the total distribution of faculty effort within an institution, faculty workload studies play an important role in examining the individual contributions that faculty make to the instruction, research, and service priorities of departments and colleges. They provide an opportunity to examine how faculty within an academic unit accomplish the collective responsibilities of the unit; in so doing, they raise fundamental questions concerning how faculty accomplish their work. For example, is the individual fulfillment of the tripartite mission of instruction, research, and service still a valid model? Or should alternatives be examined that better recognize that individuals do not necessarily contribute equally to teaching, research, and service? By considering faculty workload in total, academic units can begin recognizing and planning for differences in faculty development needs and can better determine how individual faculty members might better contribute in any given year toward the academic unit's mission.

Faculty workload studies have also contributed to more frank discussions about faculty reward systems, particularly rewards for teaching and how they

relate to the achievement of an academic unit's mission. The evidence seems clear that the reward structure benefits those who have strong credentials in peer-reviewed research, regardless of that faculty member's contribution to the other facets of the academic unit's mission. The rewards take several forms, including higher salaries, better laboratory space and equipment, and more support by graduate research assistants. The debate about faculty workload and the stated desire of public policy makers to place greater focus on teaching and the quality of the educational experience has encouraged faculty to question the reward systems and to demand changes if policy makers truly want faculty to spend more time on instruction. Governing boards and institutional executives are now stating their agreement and intent that faculty should establish an annual work plan with their departmental chair in which they agree on the faculty member's stated contributions for the next year to instruction, research, and service and then provide merit salary increases to reflect fulfillment of that work plan.

Conclusion

Faculty workload studies are a response to perceptions that faculty spend too little time in the classroom and too much time conducting research. The results of faculty workload studies have to some extent moderated these perceptions because the studies have consistently shown that faculty work hard, fifty-two to fifty-seven hours per week, and they spend the greatest proportion of their time, approximately 50 percent, on instruction-related activities.

Although faculty workload studies have not resulted in demonstrable changes in the allocation of faculty effort, they have helped contribute to a change in the focus of higher education accountability from the inputs of faculty effort to the outputs of enhanced learning and educational quality. It is in this arena, enhancing learning and quality, that many believe the greatest productivity improvements can be made. If this is true, does it also mean that interest in faculty workload studies will wane and eventually die out? Probably not. Faculty workload studies seem to have a cycle that closely mirrors the capacity of states to fund ongoing operations. As state resources tighten and competition among competing programs becomes greater, interest in faculty productivity increases.

More importantly though, interest in enhancing student productivity, like faculty workload studies themselves, has yet to provide empirical evidence of a change in outcome. The empirical evidence in faculty workload studies would be a demonstrated shift in the allocation of time from one category of effort to another. Though difficult to accomplish, such a shift is at least verifiable. The empirical evidence in student productivity would be a demonstrated change in mastery by students of curricular content and improvement in technological capacities. Here, little agreement exists even on how to measure or demonstrate a change in student outcomes. Absent consensus

measures, there will always be a tendency to fall back on examining the method of production, which means continued examinations of faculty workload in the future.

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