DOCUMENT RESUME

ED 368 313 HE 027 338

TITLE	Faculty Work. Briefing Paper.
INSTITUTION	Washington State Higher Education Coordinating Board, Olympia.
PUB DATE	Mar 94
NOTE	37p.
PUB TYPE	Information Analyses (070) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Academic Freedom; Career Ladders; *College Faculty; Demography; Doctoral Degrees; *Faculty Development; Faculty Promotion; Faculty Workload; Higher Education; Productivity; Quality of Working Life; Stress Variables; *Teacher Attitudes; Teacher Characteristics; Teacher Morale; Teacher Responsibility; *Teacher Salaries; Tenure

ABSTRACT

This review of the literature offers a description of college faculty in the United States: their training, responsibilities, duties, career ladders, demographics, salaries, pressures, and current political issues. The section on training describes the doctoral degree generally, assistantship programs, post-doctoral positions, and the supply of doctoral degrees to the labor force. The section on duties looks at faculty roles in the three areas of teaching, research and service. The section on worklife examines scope, discretion and autonomy, professionalism, and academic freedom and tenure. The description of career paths looks at the early evaluation stages, promotion and tenure, characteristics of evaluation, changes over the course of a career in duties and skills, research productivity, and quantity of research produced. A section on demographics and attitudes among faculty reports national data on faculty age, composition, gender, ethnicity, degree, rank and attitudes to their jobs and institutions. The section on salary offers three tables of data and describes several broad patterns. A section on salary and other differences among faculty touches on gender, minority status, part-time status, and generational differences. A section on pressures describes typical stressors and offers information on faculty attitudes about job pressures. A section on current criticisms describes recent intense criticism of college faculty and offers a compilation of the charges against them. (Contains 35 references.) (JB)

FACULTY WORK

○ *Briefing Paper* ○

WASHINGTON STATE
HIGHER EDUCATION COORDINATING BOARD

MARCH, 1994

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Faculty Work: Background Information

PREPARATION OF FACULTY

Overview

Degrees. The educational preparation for future faculty is different from many other professions in both its length and nature. The standard preparation for faculty teaching at most four-year institutions is the Ph.D. (doctor of philosophy): the degree has been called the "union card" for university teaching. The doctorate is earned in addition to a bachelor's and master's degree (although some doctoral programs do not require a master's degree for admission). Each degree (bachelor's, master's, and doctorate) is normally earned in the same discipline, although each subsequent degree specializes in a narrower area of study. What follows is a general description of the experience and stages of doctoral-level study, although specific terminologies may vary from institution to institution.

Time-to-Degree. The doctorate may take up to 7 or 10 years beyond the bachelor's degree to complete. In that timeframe, many events may cause students to drop from their doctoral programs: lack of funds, family problems, jobs, and faltering interest. During 1972-76, only 56.6% of entrants into doctoral programs actually earned their Ph.D. (Bowen & Rudenstine, 1992). Due to the long number of years of training, financial support of doctoral students (e.g., fellowships, assistantships) is related to completion; relying on personal funds (e.g., savings, part-time employment) increases the student's time-to-degree (see Bowen & Rudenstine for a comprehensive review).

The Ph.D.

The master's degree takes many forms and may have a variety of goals: subject matter knowledge, advanced professional training, or general introduction to a new area of study. On the other hand, the Ph.D. is almost always considered a research degree. At first, coursework is usually taken in subject matter areas, which is followed by courses in research methods appropriate to the discipline (e.g., statistics, qualitative methodology). After completing these courses, students normally take a comprehensive examination, which is the faculty's opportunity to test the student on his/her range and depth of knowledge about the chosen subject matter. Comprehensive exams generally require from one to two days of intense writing from the student on questions chosen by the examining faculty.

After passing the comprehensive exam, the student usually proceeds to an oral exam on his/her proposed dissertation research by the dissertation committee. This committee,

comprised of faculty from within the department and other areas of the institution, is chaired by a faculty person who has prime responsibility for guiding the student through his/her first major research project. Once the committee approves the project, the student proceeds with the research.

During this phase of the Ph.D. program, the student may work alone to construct, research, test, and write the dissertation. Many months can pass in the library, or collecting data, or writing numerous drafts of the dissertation that typically consists of five chapters. Students may also need to locate funds to pay for data collection, mailing of surveys, trained interviewers, or computer time. Students in the sciences often work as part of a research team under the direction of the chair of the committee. Although the chair and committee members can and will assist the student with advice, the process is often largely self-directed. Many students fail to complete the dissertation and become an A.B.D., or "All But Dissertation," or Ph.C., "Candidate in Philosophy" (someone who has finished their doctoral coursework but not the dissertation).

Those who complete the dissertation face another oral examination or "defense" of the dissertation. Any faculty member at the institution can attend the dissertation defense and ask questions of the candidate. With all questions adequately answered, revisions completed, and signatures on the final approval sheets, the dissertation is prepared for publication (normally this is on microfiche).

Assistantships

Some students will have had one or two additional experiences during their doctoral program. Working as a Teaching Assistant (TA) is practically the only opportunity for a doctoral student to learn or practice teaching; few doctoral programs require coursework in instructional design, teaching methods, or adult learning styles. Therefore, training programs for TAs have been added at institutions not only to improve TA teaching skills for the benefit of undergraduates but also to improve their preparation for a lifetime career of teaching. In Washington State, the number, length of appointment, and salaries of TAs are dependent upon state funding and the allocation decisions of individual institutions.

Being a Research Assistant (RA) is dependent upon a faculty member's ability and willingness to write research grants and pursue federal, state, or independent funding. For the future professor and researcher, the RA position is valuable job training in grants writing, research design, and day-to-day laboratory or research operations. The RA also may participate in the preparation of research reports and journal publications. RA salaries, benefits, and terms of appointment are more likely to be dictated by the funding agency's regulations than university policies. However, several federal agencies currently require that

students in RA positions have their tuition "waived" by the institution.

Given the scarcity of TA and RA positions, many doctoral students graduate without these opportunities to develop essential professional skills in teaching and research. Assistantships are the only apprentice-style positions for future faculty and are thus important to the student's development as a teacher and researcher. Depending on their future plans, this lack of experience may affect their employment possibilities.

Post-Doctoral Positions

After the dissertation is completed, the new Ph.D. may become employed as a faculty person. However, it has increasingly become the norm for new Ph.D.s in the sciences and health sciences to serve in one or two post-doctoral positions in research laboratories. Only after completing the "post-doc" are they ready to apply for their first faculty position.

Supply

Three factors seem to affect the supply of Ph.D.s into the faculty marketplace. First, enrollments in doctoral programs correspond to the perception that an increased number of job opportunities exists. Second, the number of women and minorities graduating with Ph.D.s has increased, although some groups (i.e., African-Americans) have declined. Third, non-U.S. citizens have increased their share of Ph.D.s earned, especially in the sciences. Therefore, the future supply of Ph.D.s should increase in response to increased faculty retirements, increased efforts to diversify faculty representation, and other countries' continuing high regard for American higher education.

FACULTY RESPONSIBILITIES

Faculty Roles

All faculty have basically the same job, although emphases change depending on faculty rank, institutional mission, academic discipline, or personal preferences. Teaching, research, and service describe the three main roles of faculty.

Teaching

The faculty's responsibility for instruction goes beyond teaching in the classroom. Faculty are responsible for designing, revising, and continually evaluating the current curriculum, which may include adding, deleting, or revising courses. Usually, program design is the responsibility of a group of faculty, although individuals are responsible for accomplishing the department's or program's goals within separate courses.

Thus, each term, faculty must update their courses, revise reading lists, and prepare new lectures or instructional activities. The professor with the yellowed lecture notes is, or should be, apocryphal. Good teachers must keep up with the rapidly-evolving research literature and current thinking of their discipline and regularly read professional journals and books produced by others in the field. They must also evaluate these readings and determine the essential or relevant content to be included in their courses.

However, the most important instructional role for faculty is interaction with students. This happens not only in the structured setting of the classroom, but in conferences, telephone calls, and hallway chats. Some faculty spend substantial time with students in other settings: (a) supervising projects, especially art shows, musical concerts, and theater presentations, (b) taking students on field trips to archaeological digs or museums, or (c) supervising student interns in K-12 classrooms, nursing wards, or social service agencies. If Astin (1993) is correct, interaction with faculty is one of the student's most valuable experiences. However, interaction need not always occur in the classroom, but may be more influential for occurring within a more informal context, such as a small group or one-to-one conversation.

Another instructional role is evaluation, both of the student and the curriculum. Grading papers, if done well, can be educational for the student, although anyone who has graded papers knows they take time to read, evaluate, and grade. Evaluating the curriculum should occur frequently, and current assessment efforts are one means to encourage self-reflection on the success of students and the factors (e.g., curriculum, faculty teaching) that contribute to (or impede) students' educational achievement.

Research

At minimum, all faculty are expected to do the kind of research that will keep them current in their fields. However, the amount and type of research is related to institutional mission (see January 1994 Briefing Paper) and the norms of the discipline.

Boyer (1990) wrote convincingly of replacing research with the "familiar and

honorable term 'scholarship'" and giving it a "broader, more capacious meaning." To that end, Boyer describes four types of scholarship which faculty could and should pursue. The ***scholarship of discovery*** is closest to what most persons mean by "research:" the discovery of new knowledge. The ***scholarship of integration*** connects the seemingly disconnected, places specialties in larger contexts, and is often synonymous with interdisciplinary pursuits. The ***scholarship of application*** attempts to apply knowledge to the solution of problems. The ***scholarship of teaching*** is the active pursuit of understanding how learning occurs in the discipline. Thus, these additional types of scholarship would allow faculty more flexibility than the Ph.D. dissertation model, which tends to emphasize the "scholarship of discovery."

However, to pursue any type of scholarship, faculty need to identify an area of scholarship that is both personally interesting and professionally rewarding. They must then design an appropriate research program utilizing the methods, tools, and theories that will produce worthwhile results. For many faculty (especially those in the sciences), the choice of research topic cannot be independent from considerations of availability for external funding. Scientists are expected to write grants to buy equipment for their labs, buy supplies, support graduate students to work in the labs, and fund their time to do or supervise the actual research. And it is growing more difficult to find adequate external funds to support scientific research. In the past, a researcher might write two or three grant proposals and have one funded; today, the average is eight to ten proposals. This is especially difficult for young science faculty, as federal restrictions on research funds (and growing competition for the funds that exist) has meant that only 14% of young physicists applying for research funds received money (Atkinson & Tuzin, 1992). The reality of not receiving a grant in the sciences may mean that the research cannot be done, and that a faculty career may be short.

Currently, faculty, especially those at research institutions, are expected to publish the results of their scholarship in appropriate professional journals. Several authors (Smith, 1990; Sykes, 1988; D'Souza, 1992) hotly debate the merits of requiring publication for tenure and promotion decisions; however, at least for now, publication is a firm requirement. Therefore, articles, book chapters, monographs, and books must be researched, written, and rewritten and then submitted to journals or publishers to be reviewed by a panel of experts who judge its worth. It can be rejected (and resubmitted to another journal) or accepted (and then revised per reviewers' comments). Months pass, and the crucial publication may finally appear in print 2-3 years after the original work was done.

For a few faculty, the scholarship may lead to consulting opportunities or a patent application. However, the patent that pays off handsomely for the inventor is an infrequent occurrence, and most universities require the faculty person to share profits with the employing institution. Working with business and industry offers some faculty an opportunity to take their basic or applied research and apply it to an industrial process, new

manufacture, or improved product. This is what is called "technology transfer."

Service

Generally, faculty are expected to provide service within the institution and outside the university. Internal service obligations include serving on committees that guide the program, department, college, or university. These can be curriculum committees, admissions committees, search committees, or task forces to study an internal issue. External service obligations vary by discipline. For example, an education faculty may help in a local K-12 school, business faculty may donate their time to a non-profit organization, engineering faculty may offer their expertise to solve a company's technical problem, or a faculty person in the arts or humanities may serve on a board for an arts organization. Service obligations of this nature are not compensated but are considered to be included in the faculty's obligations to his/her institution, profession, or society.

NATURE OF JOB

Scope

Certain characteristics of the faculty role are unique to being a professor, and others are similar to other professions. One characteristic which may be unique to the professorial role is the professor's enormous scope. Professors are to pursue truth, teach students, and serve society, but all of these tasks are essentially endless in scope. When does one know when the job is finished? Is it ever finished?

> "Faculty tasks are almost limitless. There is no end to the amount of time and effort that can usefully be devoted to them. All competent faculty members live with the sense that they are dealing with infinity -- that they never fully catch up." (Bowen & Schuster, 1986)

Discretion and Autonomy

Compared to many other professions and occupations, most faculty have unparalleled discretion over the use of their time, the tasks they choose to address, and the methods used to accomplish each task, especially in the case of research and public service activities. Unlike many employees, faculty are not directly supervised in the traditional sense, but may pursue goals and projects which may -- or may not -- have been discussed and mutually

agreed upon with the department chair. This autonomy has undoubtedly led to some abuses, and the lack of supervision has led some to believe that professors are not held accountable for their time. However, there are clearly some basic expectations for teaching regular assigned courses. But this level of autonomy can also allow an individual to pursue a personal agenda which may -- or may not -- coincide with institution's goals.

This public perception of autonomy does not mean that faculty personally experience a great sense of autonomy in their work. Some do, of course, but others experience pressures that constrain the individual's independence. These pressures will be discussed at greater length in a later section.

Professionalism

Professionals are individuals who -- through long years of training, socialization to a professional ethic, and specialized knowledge -- are trusted to take their responsibilities seriously and to act in the public good. Their training and certification indicate to society that they are qualified and competent to perform to the profession's established standards. Therefore, professionals are given wide latitude by society to determine what job needs to be done and how to do it. This definition fits the historic perception of faculty.

In fact, one distinguishing characteristic of many professionals is compensation by a salary. The salary is provided to an individual who is "selling" his/her ability to perform a certain job or to get certain tasks done; conversely, the wage-earner is "selling" his/her time, as in an "hourly wage." The professional is paid the same salary whether the task takes more time or less; thus, the employer or customer has little incentive to question how long it takes to complete a task. The hourly worker, however, is selling time and thus both employer and customer are motivated to ensure the time is used productively (see Schorr, 1991).

Academic Freedom and Tenure

Traditionally, academic freedom was intended to protect the faculty's freedom of inquiry, their freedom to pursue research or thinking wherever it may lead, and/or their freedom to exchange ideas, however unpopular at the time. There was a time when faculty could and would be fired from their employment if they expressed views unacceptable to powerful constituents. Although more infrequent today, faculty can still be dismissed for holding unpopular views (see p. A24, *The Chronicle of Higher Education*, February 16, 1994). The Supreme Court has generally upheld the role of academic freedom as an essential protection of free expression.

Tenure, the granting of permanent employment at an institution, was intended to protect faculty from unwarranted or capricious firings. Tenure has been determined as a "property right," protected by the Constitution, which also requires due-process rights under the 14th Amendment. In addition, academic freedom is based upon constitutional rights and particularly First Amendment protections of free speech. Because public institutions are under the purview of constitutional law, constitutional protections generally apply to public institutions and not to independent institutions. Independent institutions, on the other hand, rely on contractual law for protection of academic freedom. Case law is extensive in both of these areas.

Although closely connected, academic freedom and tenure are not synonymous principles. Both principles are deeply important to faculty. (See Poch, 1993, for a review of legal opinions and current status of academic freedom and tenure law.) An institution with a large proportion of its faculty tenured also experiences certain constraints in terms of responding to changes in student interests, hiring new faculty, and maintaining a higher proportion of its costs in faculty salaries.

FACULTY CAREERS

Early Evaluation Stages

Several stages of evaluation are likely as faculty proceed from assistant professor (normally an untenured position), associate professor (usually tenured faculty), and full professor. For example, many institutions require annual reviews of faculty. This process involves, but may not be limited to, discussions with the department chair about progress made in designing and proceeding with a research plan, a written self-evaluation report, reviews of student evaluations of teaching and courses, or peer consultations. On some campuses, annual or less frequent reviews continue after tenure and promotion are granted.

Assistant professors are often reviewed at the close of three years to ensure they are making appropriate progress toward receiving promotion and tenure. This review is intended to help the new faculty understand and plan to meet the institution's and department's expectations for granting promotion and tenure.

Promotion and Tenure

At the close of approximately six years, the assistant professor is reviewed in anticipation of granting promotion (to associate professor) or tenure, or more often, both. A committee of his/her peers in the department and university is formed, and a detailed portfolio of publications, teaching evaluations, and other accomplishments is evaluated. The process normally takes the entire academic year, with a decision forthcoming sometime in the spring. First the department in which the faculty member teaches makes its recommendations, the college, the provost or chief academic officer, with final action by the Governing Board. The two rites -- promotion and tenure -- are different and a variety of outcomes are possible.

Promotion to associate professor implies a certain level of accomplishments which may be standard for that discipline or institution. Tenure is the offering of permanent employment at the institution. Although tenure is dependent upon an assessment of the candidate's ability to make contributions to the field and institution, it can also be influenced by institutional decisions. Institutions may decide not to tenure additional persons in a field or department if it has a high proportion of tenured faculty or if budget cuts are looming in the near future. Thus, while not being granted tenure at one institution has waylaid many professional careers, it may be earned at a different institution with different expectations or financial situation.

The reliance on research publications for the granting of tenure has been widely studied and discussed. Research has not always been the most important criterion, although its importance has grown. From 1975 to 1984, Boyer (1987) found that the percent of faculty stating that it was difficult to get tenure at their institution without publications grew from 54% to 69%. It is common to hear that new assistant professors have been told that publications are the only criterion for tenure and promotion. Faculty do not necessarily agree with this emphasis, as will be discussed in a later section.

Within another approximate six-year period, the associate professor may request to be considered for promotion to full professor. This promotion is frequently dependent upon exceptional contributions to the field (e.g., publications, grants) and is not typically granted for normal levels of performance and/or a certain number of years of service.

Upon retirement, some faculty may be granted a status called "emeritus," which allows them to continue using university facilities and services and receive recognition for making a special contribution to the institution. Emeritus status is not automatic and is often conferred by a vote of current faculty.

Characteristics of Evaluation

These rites of passage for faculty are characterized by periods of evaluation. These evaluations have four characteristics. First, the review of faculty for promotions and tenure is conducted by peers, colleagues within the department, the same individuals with which one may have socialized or argued. This can be an uncomfortable period of intense scrutiny. Second, failure at any stage has severe (although reparable) consequences on whether the individual can find another faculty position and at what kind of institution. Smith (1990) calls the tenure process a "ritual comparable to ancient rites of human sacrifice." (p. 122)

Third, the criteria and/or standards for these decisions may be both subjective ("I don't want him as a colleague" "I don't like her research") and/or relatively objective ("Not enough publications"). Courts generally have not become involved in negative tenure decisions, although some tenure decisions have been overturned in the courts when standards are unclear, due process has not been followed, the decision has been based on subjective criteria, and standards have been applied differently for individuals from different groups.

Fourth, tenure decisions tend to duplicate current preferences for producing research and for pursuing a particular kind of research. In this way, tenure is a conservative force, one which tends to mirror existing rewards for research and reproduce the existing preferences of the discipline. Given the importance of tenure to faculty, the rules for granting tenure strongly influence the activities that faculty pursue in their first six years.

Development and Change Over Time

Although the duties of faculty may be consistent over time (teaching, research, and service), individuals experience changes among duties and/or a maturation of skills over time. Therefore, one might expect to see changes in the balance between teaching and research from one year to the next, or a growth in confidence with teaching that might lead to more time spent in instruction, or a waxing (then waning) of success in getting grants that might mean more time (then less) spent in research. These changes may be affected by adjustments in student enrollments, the needs of the discipline, and/or individual preferences.

Normally, individuals mature and improve their skills and increase their expertise within the discipline. They earn the respect of their peers and are asked to take on other responsibilities (e.g., chairing a committee, redesigning a curriculum, serving in a professional organization). However, the growing demands on their time must compete with family and personal obligations. Ultimately, health concerns and aging may bring about an understandable diminishment of productivity, although many faculty work well into their later years with continued physical and intellectual vigor.

Research Productivity

There is a large body of research on the productivity of faculty; however, it is entirely focused on their ***research*** productivity as defined by numbers of articles produced, books published, and/or citations in other researchers' work. Clearly, the predilection to do research is determined by a variety of factors, the most important being the intrinsic motivation of the individual -- some people greatly enjoy the search for new knowledge and devote many hours during the weekend and evenings to doing research. However, other factors that encourage a greater focus on research are institutional mission, a departmental culture that emphasizes research, and the existence of doctoral programs in the department.

There are two theories of when faculty produce their best research. The "young maverick" theory attests to the novel insights offered by the individual not yet socialized to the expectations of the discipline. On the other hand, some highly productive researchers find success later in their careers as the cumulative effect of years of study and thought lead to important insights and/or reformulations of a body of knowledge.

Quantity of Research Produced

The perception that faculty spend too much time on research and produce too much research may not be borne out by the data. On average, however, full-time faculty at four-year institutions surveyed during Fall 1987 produced two refereed journal articles and one-half of a book, chapter, textbook, or monograph **every two years**. Faculty in research institutions produced twice this number of articles, etc. (Mooney, 1991).

DEMOGRAPHICS AND ATTITUDES OF FACULTY

Demographics

This section provides demographic data on faculty surveyed in Fall 1987 (the most recent nationwide data available). Table 1 provides information on the faculty's age composition, gender, ethnicity, degree, and rank.

These data appear to confirm three known trends. First, the majority of faculty in 1987 were male and/or white. Second, the faculty are aging and large numbers of professors are expected to retire within 10-15 years. Third, there is a high percentage of tenured faculty (from 50% to 75% of the faculty) which leaves fewer openings for the hiring of new and/or young professors. However, it is also clear from these data that not all current

faculty hold the Ph.D.; faculty in some fields (e.g., performing arts) hold other "terminal" degrees (M.F.A.). Thus, these faculty are less likely to be pursuing an active research program and may not be teaching in a research institution.

Table 1
Demographic Data on Full-Time College Professors (Fall 1987)

	Public Research	Public Doctoral	Public Comprehensive	Liberal Arts
Age				
Under 30	1.1%	1.8%	1.6%	2.2%
30-34	7.1%	10.2%	7.9%	8.5%
35-39	16.5%	14.8%	12.5%	14.4%
40-44	15.2%	14.0%	15.7%	19.8%
45-49	18.5%	18.7%	21.2%	19.9%
50-54	14.8%	15.9%	15.3%	9.9%
55-59	12.1%	13.2%	13.2%	13.6%
60+	14.7%	11.5%	12.6%	11.7%
Gender				
Women	20.7%	25.5%	28.9%	29.1%
Men	79.3%	74.5%	71.1%	70.9%
Ethnic group				
American Indian	0.7%	0.6%	0.6%	1.2%
Asian	4.8%	4.5%	5.8%	2.7%
African American	1.6%	1.8%	3.5%	8.0%
Hispanic	2.4%	1.1%	2.1%	1.2%
White	90.4%	92.0%	88.0%	86.9%
% With Doctorate	72.1%	73.0%	62.7%	60.3%
Academic Rank				
Professor	45.3%	35.6%	37.2%	29.4%
Assoc. Prof.	28.1%	30.1%	26.5%	23.0%
Asst. Prof.	21.2%	25.9%	23.4%	31.2%

SOURCE: *U.S. Dept. of Education (1988).*
NOTES: *Institution types (e.g., Public Research, Public Comprehensive) are derived from Carnegie classifications.*

Attitudes

Table 2 extracts information from a 1989-90 survey (Astin et al., 1991) of faculty attitudes as they pertain to their jobs or their institutions. These data provide the following insights into the attitudes of faculty:

1. Between 20-40% of these faculty (varying by institutional mission) had no publications in the last 2 years, although the modal response was 1-2 publications.

2. Faculty goals vary by institutional mission:

    a. More faculty in universities have research as an essential goal than faculty in colleges;

    b. More faculty in colleges participate in service activities than faculty in universities; and

    c. However, there is near unanimity (98%) among faculty in their emphasis on being a good teacher.

3. More faculty in universities find satisfaction in scholarship.

4. The autonomy and security of faculty jobs are satisfying to a majority of faculty and two-thirds of the faculty indicate satisfaction with their jobs.

5. Faculty think that student advising and good teaching are not rewarded.

6. Faculty believe their institutions are in the "business" of

    a. intellectual development of students and

    b. enhancing the institution's prestige.

7. Institutions place a higher priority on either undergraduate education or research depending on their mission.

8. More faculty are liberal than conservative, although 35-40% of the faculty think of themselves as "moderate."

Table 2
Attitudes of Full-Time Faculty Members (1989-90)

	Public Universities	Public 4-Yr Colleges
Professional writings accepted for publication or published in last 2 years		
None	21.6%	42.8%
1-2	27.6%	31.2%
3-4	25.1%	15.8%
5-10	21.0%	8.5%
11-20	3.8%	1.4%
21-50	0.9%	0.2%
50 or more	0.1%	0.1%
Professional goals noted as essential or very important		
Engage in research	78.6%	61.%
Provide services to the community	35.8%	45.75
Participate in committee or other administrative work	23.0%	30.7%
Be a good teacher	97.6%	98.3%
Aspects of job noted as very satisfactory or satisfactory		
Salary and fringe benefits	44.3%	39.0%
Opportunity for scholarly pursuits	53.3%	38.1%
Teaching load	58.3%	42.2%
Autonomy & independence	85.0%	80.0%
Job security	73.5%	75.4%
Overall job satisfaction	65.6%	64.9%
Attributes noted as being very descriptive of institution		
It is easy for students to see faculty outside of regular office hours	20.6%	30.5%
Faculty are rewarded for their advising skills	1.3%	1.6%
Intercollegiate sports are overemphasized	33.0%	15.6%
Faculty are rewarded for being good teachers	6.2%	8.1%
Issues of highest or high priority at institution		
Promoting the intellectual development of students	70.6%	72.4%
Conducting basic & applied research	80.5%	41.9%
Helping solve major social & environmental problems	26.4%	25.1%
Increasing or maintaining institutional prestige	80.4%	71.0%
Economizing & cutting costs	58.9%	53.9%
Creating a positive undergraduate experience	52.3%	69.1%
Political orientation		
Far left	6.5%	4.3%
Liberal	42.1%	35.7%
Moderate	37.9%	42.1%
Conservative	13.1%	17.5%
Far right	0.3%	0.4%

SOURCE: Astin et al. (1991).

Gray et al. (1992) surveyed faculty and administrators at research universities and found similar results. Although individual faculty placed approximately equal emphasis on research and undergraduate teaching, they felt the university was placing more emphasis on research. Thus, the faculty at research universities appear to view teaching as equal in importance to research.

In fact, the Carnegie Foundation for the Advancement of Teaching(from AAUP, 1994) asked faculty in 1989 whether they agreed that teaching effectiveness, not publications, should be the primary criterion for promotion of faculty. More than 25% of the faculty responding from research institutions, 48% of faculty from doctoral institutions, 75% of faculty in comprehensive institutions, and 83% of faculty in liberal arts institutions agreed with that statement. This information appears to describe faculty who are more interested in teaching, and in having teaching rewarded in the promotion process, than some critics might expect.

SALARIES

Not surprisingly, there is a wealth of information available on faculty salaries, compared from year to year (Table 3) and among disciplines (Table 4). Table 5 provides a lengthy profile of faculty salaries by gender, racial/ethnic minority, years in current position, and effort expended on teaching, research, or service.

Table 3 indicates that faculty salaries:

1. Have decreased their rate of growth;

2. Vary by institutional mission; and

3. Vary by professorial rank.

Table 3
Average Salaries of Full-Time Faculty, Institutional Mission and Rank (1990-1993)

	1990-91		1991-92		1992-93	
	Ave. Salary	1-Yr Change	Ave. Salary	1-Yr Change	Ave. Salary	1-Yr Change
Doctoral						
Professor	$60,450	5.2%	$61,950	2.5%	$63,250	2.2%
Assoc. Prof.	$44,000	4.9%	$45,090	2.4%	$45,840	1.7%
Asst. Prof.	$36,980	4.8%	$38,030	2.8%	$38,880	2.4%
Instructor	$25,910	5.3%	$26,610	2.7%	$27,170	2.3%
Comprehensive						
Professor	$52,190	5.3%	$53,750	3.2%	$54,240	3.2%
Assoc. Prof.	$41,570	5.2%	$43,020	3.6%	$43,430	2.0%
Asst. Prof.	$34,460	5.4%	$35,730	3.9%	$36,160	2.3%
Instructor	$26,170	4.6%	$26,390	2.8%	$27,600	2.1%
Baccalaureate						
Professor	$44,900	5.5%	$47,480	2.8%	$48,600	2.2%
Assoc. Prof.	$37,550	5.6%	$39,150	2.8%	$40,180	1.8%
Asst. Prof.	$31,390	5.7%	$32,580	3.1%	$33,430	2.0%
Instructor	$26,510	6.1%	$26,390	2.8%	$26,440	2.4%

SOURCE: American Association of University Professors.

Bok (1993) documented the relatively flat growth in faculty salaries compared to CEOs, Wall Street lawyers, and surgeons. Figure 1 duplicates a comparison of salaries normalized to 1972 (p. 66, Bok, 1993). However, Bok does not conclude that faculty salaries are necessarily inequitable vis-à-vis other occupations; faculty have traditionally traded higher salaries for greater freedom and the satisfaction to be gained from pursuing such preferred activities as research or teaching.

Figure 1
Trends in Relative Salaries (1972 = 100)

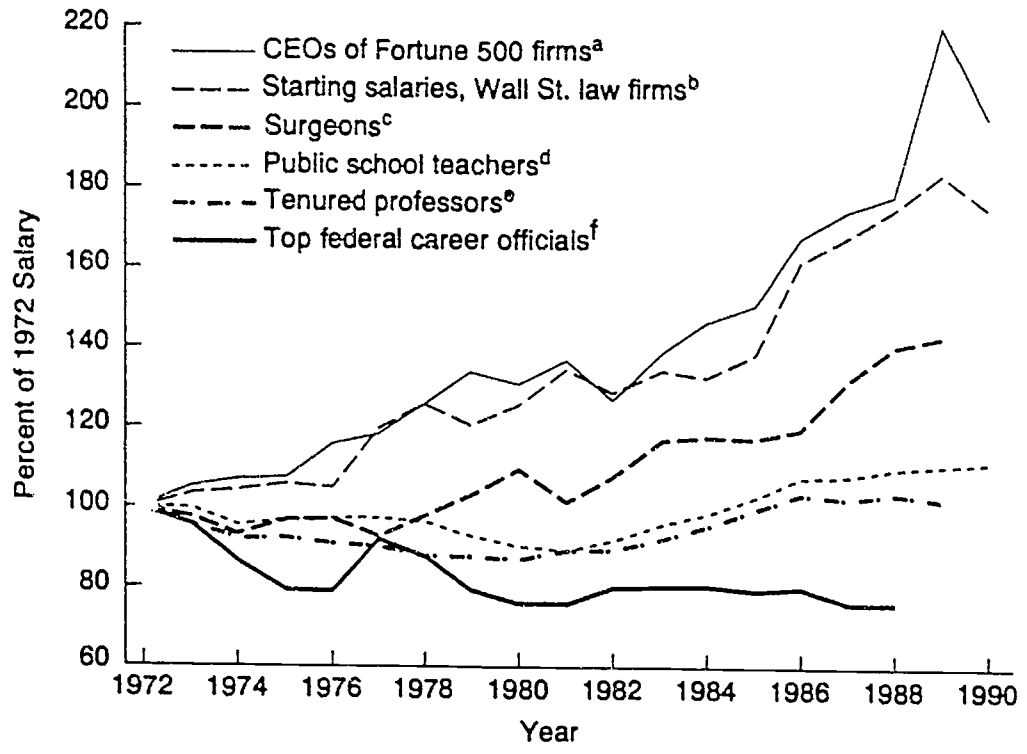

Figure 4–1 Trends in Relative Salaries (1972 = 100)

Sources: (a) *Forbes*; (b) Harvard Law School Placement Office; (c) American Medical Association, *Socioeconomic Characteristics of Medical Practice*; (d) American Federation of Teachers, *Survey and Analysis of Salary Trends*; (e) *Bulletin* of the American Association of University Professors (category I schools); (f) U.S. Office of Personnel Management, *Pay Structure of the Federal Civil Service*.

Table 4 leads to the following conclusions:

1. Faculty in the sciences are generally paid higher salaries than faculty in the social sciences, who are generally paid higher salaries than faculty in the arts and humanities;

2. Faculty salaries in professional fields appear to vary depending upon the profession's reliance on the sciences (which seems to mean higher salaries) or social sciences (which corresponds to lower salaries); and

3. Faculty in the arts and teacher education receive the lowest salaries.

Table 4
Average Faculty Salaries by Rank and Select Disciplines (1992-93)

	Professor	Assoc. Prof.	Asst. Prof.	Instructor
Arts & Humanities				
English	$51,918	$41,032	$32,344	$24,053
Visual & performing arts	$49,635	$39,429	$32,111	$26,555
Social Sciences				
Psychology	$53,783	$42,430	$33,676	$28,395
Sociology	$51,810	$41,336	$33,279	$29,331
Sciences				
Chemistry	$55,674	$42,356	$34,613	$27,212
Computer Science	$61,069	$49,858	$43,019	$29,217
Professional				
Engineering	$65,171	$51,745	$44,797	$34,707
Business	$61,296	$51,166	$46,587	$30,637
Nursing	$51,876	$41,051	$34,297	$28,644
Social Work	$56,572	$45,060	$35,473	$30,052
Teacher Education	$49,635	$40,841	$34,232	$26,752

SOURCE: American Association of University Professors.

Table 5
Mean Income of Tenure-Track, Full-Time Faculty (Fall 1987)

By Gender	Male Female	$44,819 $33,639
By Race/Ethnic Minority	Non-Minority Minority	$42,573 $41,527
By Years in Current Position	Greater than 20 15-19 8-14 4-7 Less than 4	$46,200 $44,923 $44,127 $41,116 $35,964
By Percent of Time Spent on Teaching & Instruction	Less than 35% 35-52% 53-71% Greater than 72%	$56,181 $42,935 $37,244 $34,307
By Number of Hours Spent Teaching	Less than 6 6-8 9-11 Greater than 12	$50,927 $43,191 $38,060 $36,793
By Whether Taught Undergraduate, Graduate, or Both Course Levels	Only graduate Undergrad. & Grad. Only undergraduate	$56,661 $41,478 $44,176
By Percent of Time Spent on Research & Scholarship	Greater than 34% 16-33% 5-15% Less than 5%	$48,711 $44,062 $39,638 $36,963
By Number of Refereed Publications	Greater than 30 11-29 2-10 Less than 2	$56,183 $42,869 $37,401 $33,198
By Principal Investigator (PI) on a Funded Research Project	PI Not PI	$51,517 $39,567
By Percent of Time Spent on Administration	Greater than 20% 10-19% 5-9% Less than 5%	$48,546 $41,720 $40,410 $38,491
By Percent of Time Spent on Public Service	Less than 5% Greater than 5%	$42,738 $40,174

SOURCE: Fairweather (1992).

These data paint a picture of a professoriate that appears to be paid differently based on the following characteristics:

1. Males are paid more than females;

2. Non-minorities are paid more than minorities;

3. Faculty who spend more time on instruction-related activities and/or spend more hours in classroom teaching are paid less than faculty who spend less time on these activities;

4. Faculty with more years at an institution are paid more than faculty with fewer years; however, the figures in Table 5 also document the phenomenon known as "salary compression," where salaries of new professors grow faster than salaries of continuing faculty, allowing salaries to become more equal (or "compressed") over time;

5. Faculty who spend more time on research, produce more publications, or get a funded research project are paid more than faculty who spend less time or are less successful at these activities;

6. Faculty who move into administration (or add administrative duties) are paid more than faculty without administrative responsibilities; and

7. Faculty who devote more time to public service are paid less than faculty who devote less time to this activity.

SALARY AND OTHER DIFFERENCES AMONG FACULTY

Gender

Table 5 revealed that, on average, female professors earn less than their male colleagues. Konrad (1991) reported that women are less likely to be employed in research and doctoral-granting universities and more likely to be employed in liberal arts and community colleges. Women are more likely to be in education or the arts and humanities; men are more likely to be employed in the physical sciences or engineering. Women are more likely to be found in the lower professorial ranks (e.g., assistant and adjunct); men predominate at the full and associate professor levels. Women publish less than men and

spend less time on research per week; in addition, women were less likely to be receiving internal or external grant funds even when institutional mission, faculty rank, experience, and education were controlled. On the other hand, women spend more time teaching undergraduate courses, less time teaching graduate courses, and more time providing office and advising hours to students. In addition, women often have greater demands on their time due to family, child care, and housework obligations, also known as the "second shift." Perhaps due to these demands women are overrepresented among part-time faculty. (See Tack & Patitu, 1992, for a complete discussion of issues affecting women and minority faculty.)

Given the differences in salary (review Tables 3 through 5) by institutional mission, by faculty rank, by discipline, by years in position, by number of publications, by time spent on teaching, it is not surprising that women earn less than men. Women tend to be found in institutions and positions that are predominately instructional, which is valued less (and paid accordingly) by the institution.

Racial/Ethnic Minority

Although the difference in salaries between non-minority and minority faculty is not as great as the difference between the genders (see Table 5), the issues for minority faculty may be more complex and/or challenging. Minority faculty are called upon to serve as mentors to students (as are women professors), but also to represent minorities in a myriad of activities. If there are few minorities at an institution, then the drain on the individual's time can be substantial and the potential of isolation higher.

Konrad (1991) found that faculty of different racial\ethnic origins had different types of employment. Asian faculty were overrepresented in research universities and underrepresented in liberal arts and community colleges. African-American faculty experienced the reverse. Asians were more likely to be employed in engineering and the physical sciences; African-Americans in business, humanities, and education; Hispanics in foreign languages, humanities, and psychology. Each group was overrepresented in the assistant professor rank, but the three groups were slightly different in their representation at professor, associate professor, and adjunct ranks.

In terms of significant differences from white men, African-Americans publish less, spend less time on research, and were less likely to have a grant; they also spent more time teaching undergraduates and offering office and advising hours. Asians spent more time on research, were more likely to have an external grant, and spent less time teaching undergraduates. Hispanics did not have significant differences to white men except in offering more advising hours.

As with women faculty, the differences in salaries documented in the earlier tables partially explain the differences in salary for minorities. However, this short discussion is not intended as a comprehensive overview of all issues that affect minority faculty.

Part-Time Faculty

Depending upon the point of view, part-time faculty are viewed as part of higher education's solution or problem. As the former, part-timers allow an institution to be more flexible: to contain the cost of personnel, to respond to changes in student interests or enrollment pressures, or to add a course in a specific expertise without adding a full-time faculty person. In times of fiscal crisis, part-timers are the first to be laid off, allowing the institution to protect tenured faculty (Gappa, 1993; Mooney, 1993). Part-timers usually are paid less than full-time staff and do not receive benefits. (Benefits are increasingly a large proportion of an institution's obligations to personnel, and have grown from 17% of total wages in 1955 to 36.2% of total wages in 1987; p. 67, Schorr, 1991). Part-time faculty may provide an essential expertise or professional experience that is not available among full-time staff but may enrich a degree program significantly.

On the other hand, part-time faculty have been accused of diluting the quality of a degree program. It is true that part-time status normally precludes involvement in the full range of faculty activities, including research, service, departmental meetings, and student advising. Furthermore, it is easier for the part-time person to be disconnected from the degree program and institution, unaware of program requirements or institutional procedures.

Why would someone teach part time? The Gappa and Leslie (1993) study identified four broad categories of part-time faculty. The ***career ender*** is someone who turns to teaching after completing another career; the ***specialist*** teaches part-time to share their specialized knowledge; the ***aspiring full-timer*** is teaching part time while looking or waiting for a full-time appointment; and the ***freelancer*** may be someone who prefers (or is limited by circumstance) to seek part-time teaching.

The authors propose that faculty are becoming bifurcated into two castes: the full-time faculty person with his perquisites and benefits and the part-time instructor with her low salary and no benefits. As such, they do not see themselves as members of the same profession with the same goals, standards, or needs. (See Gappa & Leslie, 1993, for a thorough discussion of these and related issues.)

Generations

Another rift is appearing between younger and older faculty members. Horwitz (1994) described several differences in the experiences of the two generations. In contrast to older faculty who became employed during the 1960s when higher education was expanding, new Ph.D.s are finding it difficult to find jobs, with some job openings eliciting 700 applications. Once employed, new assistant professors earn between 50%-60% less than their full professor peers (see Table 3). Younger faculty are finding it difficult to compete for federal grants and win the funds which will allow them to do the research that is essential for promotion and tenure. Furthermore, younger faculty may find tenure and promotion difficult, because of higher standards being applied and/or a lack of institutional resources. This has created a situation where some older faculty may have been promoted and tenured with few publications and younger faculty being expected to produce several times this number of publications. Also, younger faculty may be asked to undertake larger teaching loads, which may not help them receive tenure at the appropriate time.

PRESSURES

Stressors

Table 6 duplicates information from a national study of faculty conducted during 1989-90. From these data it can be concluded that faculty experience stresses in their professional and personal lives, and that the stressors are four-fold:

1. Too much work and too little time;
2. Household, child care, and other family responsibilities;
3. Interactions with others (e.g., faculty meetings); and
4. Performance anxieties.

In other words, faculty are much like the rest of us. Like us, they worry about crime and taxes and whether their children are safe. They have household and family demands, and although many men share in these duties, women faculty tend to feel the burden of these responsibilities to a greater extent. There are elderly parents to care for, illnesses in the family to nurse, and personal problems to deal with.

Table 6
Sources of Stress for College Faculty by Institutional Mission (1989-90)

An "extensive" or "somewhat" source of stress in past year	Public Universities	Public 4-Yr Colleges
Time pressures	85%	83%
Lack of a personal life	80%	79%
Teaching load	59%	69%
Household responsibilities	62%	62%
Committee work	59%	61%
Colleagues	58%	57%
Research or publishing demands	73%	57%
Faculty meetings	51%	52%
Students	48%	49%
Review/promotion process	52%	50%
My physical health	36%	38%
Children's problems	31%	31%
Child care	28%	27%
Subtle discrimination	29%	33%
Care of elderly parent	25%	27%

SOURCE: Astin (1993).

Job Pressures

In a study of faculty at doctoral institutions conducted in 1982, Gmelch et al. (1984) found that 60% of all faculty stress came from their jobs. The top 10 stressors -- those situations identified by one-third or more of the respondents as serious sources of stress -- mirror many of the stressors in Table 6. Table 7 presents the top 10 stressors from the Gmelch study.

Table 7
Serious Sources of Faculty Stress (1982)

Top 10 Stressors	% Indicating Situation Is a "Serious" Source of Work Stress
1. Imposing excessively high self-expectations	53%
2. Securing financial support for my research	50%
3. Having insufficient time to keep abreast with current developments in my field	49%
4. Receiving inadequate salary to meet financial needs	41%
5. Preparing a manuscript for publication	40%
6. Feeling that I have too heavy a workload, one that I cannot possibly finish during the normal work day	40%
7. Having job demands which interfere with other personal activities (recreation, family, and other interests)	35%
8. Believing that the progress in my career is not what it should or could be	34%
9. Being interrupted frequently by telephone calls and drop-in visitors	33%
10. Attending meetings which take up too much time	33%

NOTE: "Serious" stress determined to be a response in the 4 or 5 category response on a five-point, Likert-type scale from 1=slight pressure to 5=excessive pressure.

It appears from these data that many faculty find more to do than can be fit into a "normal" 40-hour work week. This is compounded by an intense set of performance pressures:

1. Competition over scarce resources, scarce number of positions, scarce rewards;

2. Competition over priorities, between teaching and research responsibilities or between state priorities for more teaching and personal needs for professional security which is dependent upon doing more research;

3. Competition among peers, who are both judge and colleague, friend and competitor for scarce professional benefits (promotion, tenure);

4. Competition with the administration, who can be characterized as sometimes at odds with faculty interests;

5. Competition among multiple demands for the individual's time: students and committees, publications and families; and

6. Competition to stay current in one's field, reading a growing number of professional journals and revising course curricula as needed.

There are salary pressures, and pressures from comparing salaries with colleagues in the department, at other institutions, or in private industry. There are the pressures of teaching large classes, and the tension between helping students and being responsible for grading them. There are underprepared students who may slow the progress of an entire class and/or demand remedial help that is time-consuming. There are changes in technology -- computers, videodiscs, and a student population raised on computer games and television -- that challenge a professor trained in the 1960s when one was lucky to have a typewriter in the office. Technology also challenges the professor's ability to find time to learn these new skills and to get access to these new tools.

There are pressures from the promise of a career graced by autonomy and the realities of autonomy lost to too many demands. And there is the growing disparity between powers imputed to the faculty and those actually experienced. For example, in 1980 the U.S. Supreme Court stated that the faculty's "authority in academic matters is absolute . . . the faculty determines within each school the product to be produced, the terms upon which it will be offered, and the customers who will be served." (p. 7, Sykes, 1988). It is debatable whether all faculty feel as powerful as the Supreme Court implies.

Lastly, there are pressures from accelerating change, the question whether one can learn the new technology, whether one can keep up, and whether the future can be known. The increase in public scrutiny adds to the pressure for change. Were one to ask faculty, they might say that scrutiny is sometimes positive -- uncovering inequities and imbalances that the faculty feel need redressing. On the other hand, some of the scrutiny has been highly negative, and professors feel publicly maligned and vilified. The next section will review some of the charges against faculty that are currently in the press.

CURRENT CRITICISMS

The Cure

A cottage industry arose in the late 1980s and early 1990s specializing in criticizing higher education and its prime villain, the professor. Charles Sykes' Profscam (1988) began by quoting H.L. Mencken, who had

> "a simple plan for reforming American higher education . . . anyone who really wanted to improve the universities should start by burning the buildings and hanging the professors." (p. 3)

If death by hanging weren't sufficient punishment, Sykes charged that "almost single-handedly, the professors have destroyed the university as a center of learning." (p. 4)

The Charges

The following is a compilation of criticisms of faculty currently found in the literature. They are included in this paper because they capture both the climate within which faculty work is sometimes viewed and the change in public perception that faculty increasingly experience. These criticisms should not be construed as HECB opinion.

First, critics charged that professors were too ***conservative***. They were too slow to change or changed at "glacial speed." They were accused of occupying an "ivory tower," being out of touch with society and student needs, and not staying current with happenings in their fields. Faculty were charged with protecting the status quo and protecting their personal hegemony over the curriculum and over the university (Huber, 1992).

Second, critics charged that professors were too ***liberal***. (Consistency in charges appears not to be a requirement.) They were charged with "political correctness," being too trendy, and too willing to change the curriculum to favor the agendas of feminists and minorities and discount the contributions of "dead white european males" (Sykes, 1990; D'Souza, 1991). Professors created courses with titles such as "Rock N Roll Is Here to Stay" (Brown University) and the "Sociology of Sociability" (the study of parties offered at Vassar). They were charged with being "tenured radicals" and destroying the values, methods, and goals of traditional humanities study (Kimball, 1990).

Third, critics charged that professors were ***selfish***. They scheduled courses for faculty convenience, not students. They made salary demands, and consistently sacrificed

the teaching of undergraduates to the personal rewards (i.e., promotion, tenure) resulting from doing research. They preferred specialization in ever narrower fields rather than being concerned about general education (Atkinson & Tuzin, 1992). They sacrificed offering a core curriculum so that they could increase the time they could devote to "discretionary" purposes (Massy & Zemsky, 1992). They taught less and less. By pursuing largely personal ends, they contributed to a loss of community among the university population (Pew Higher Education Research Program, 1992) and a loss of communal ends to the educational enterprise. Both Pew (1991) and Smith (1990) point to the professoriate's pursuit of personal goals and personal rewards as competing with loyalty to an institution and its goals.

Fourth, critics charged that professors were ***lazy***. They didn't work hard, or they didn't work hard at what others thought they should (e.g., teaching). They demanded, and got, increases in support staff to relieve faculty of the onerous tasks of student advising (Nicklin, 1993). Lastly, for some, the "grant of tenure is often an invitation to scale down or even retire." (Sykes, 1988) The faculty person who taught one course, had limited office hours, and a low handicap in golf were living well while the work of the university did not get done.

Fifth, critics charged that professors were ***poor teachers***. Not only did faculty teach badly (if at all), they didn't take responsibility for student learning. It was sufficient for the professor to have taught (usually by means of a lecture), but learning was the student's responsibility. Faculty used multiple choice tests because they were easy to score and rarely assigned the writing of papers because they were too tough to grade. They didn't teach well because they hadn't been taught how to teach (Schaefer, 1990); furthermore, those who taught well were thought to curry favor among the undergraduates or have lower standards than those who made learning difficult. Worse yet, teaching was associated with the colleges of education, who were at best step-children to the real work of the university.

Sixth, critics charged that professors lacked ***intellectual skills***. They wrote and thought badly and sometimes said things which outsiders knew were downright dumb. They practiced "deliberate obscurity" (Kimball, 1990), and packed their writings with obscure jargon, obfuscatory phrases, and opaque meanings. Clarity was not a sign of a good thinker, but of a person concerned with "popularizing" his/her thought by appealing to the masses.

Seventh, critics charged that professors were ***poor researchers***. Critics claimed that only one in ten faculty actually make any contribution to their field (Sykes, 1988) and most research was "worthless." (Smith, 1990) Research projects were insignificant or absurd and pursued for the purpose of building impressive personal resumes (Wingspread, 1993). Research was dictated by current fashion, too specialized, and self-serving (because it leads to tenure). Occasional charges of unethical practices -- from using federal funds for personal purposes to falsifying research results -- continue to haunt the research enterprise. Lastly,

critics assert that much research was politically motivated and promoted feminism, racial/ethnic differences, and cultural relativism at the expense of the classics of western male civilization (Sykes, 1990; D'Souza, 1991).

As the Faculty Workload Study proceeds, staff may be able to return to a few of these criticisms to see if they can be supported by the data collected.

SUMMARY

If discussions about faculty workload are to bear fruit, the simplistic and emotion-laden judgments peppering the reports that are largely either critical or complimentary of faculty must be discarded. We must realize that faculty have difficult jobs with multiple responsibilities, jobs that constantly change (and will change again), and jobs about which everyone has an opinion. Most faculty respond to rewards that influence how to spend their time so they may continue to be employed and receive salary increases. There are individuals who are not very committed to their jobs and others who care deeply about what happens to students.

In fact, some faculty would agree that their current responsibilities do not always serve students or the institution well, but are also anxious that the impending period of change may not serve them (or their careers) well. They see possible changes in workload as ***increases*** in workload, since the requirements of promotion and tenure may not change.

This paper has focused exclusively on describing the current job characteristics of faculty and some of the criticisms leveled against them. It has not suggested what faculty ***ought*** to do, nor how to influence any changes in what they do.

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