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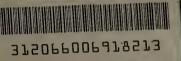
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# UNIVERSITY TEACHING: A STUDY OF FACULTY ATTITUDES

A Dissertation Presented

Ву

LUANN WILKERSON

Submitted to the Graduate School of the University of Massachusetts in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

May

1977

Education

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A Dissertation Presented

Ву

LUANN WILKERSON

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#### **ACKNOWLEDGEMENTS**

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Appreciation is also due to Dr. Mary R. Quilling for her unfailing support and guidance in the design, implementation, and reporting of the present study. The enthusiasm for and continual feedback on the progress of the study provided by Drs. Jack Hruska and Fern Johnson were also greatly appreciated. Finally, the encouragement and assistance provided by members of the staffs of the Clinic to Improve University Teaching and the Center for Instructional Resources and Improvement were essential to the completion of the interviews and their subsequent analysis.

#### AESTRACT

University Teaching: A Study of Faculty Attitudes
(May 1977)

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Massachusetts/Amherst

Directed by: Professor Mary R. Quilling

Knowledge about the behaviors and attitudes of members of the academic profession acquires educational and practical importance as higher education is threatened from without and within by changes in financial supports, societal demands, and student populations. The present study of university teaching was designed to answer the following questions about the academic profession: (a) what are the attitudes of full-time university faculty members, particularly at the University of Massachusetts/Amherst, toward their own teaching-their interests in the activities involved, their perceptions of the rewards received and the improvement needed?; (b) are there any major differences in these attitudes and perceptions between tenured and nontenured faculty members or across major subject matter divisions?

In order to explore these attitudes, the author conducted structured depth interviews with 40 faculty members drawn from among the population of full-time raculty at the University of Massachusetts/Amherst using a stratified, proportionate random sample. Responses to the interview questions were reviewed and organized into five major

topics for analysis and presentation: (a) career choice and preparation,

(b) philosophy of teaching, (c) self-assessment of teaching

effectiveness, (d) rormal and informal rewards for teaching, and (e)

career satisfactions.

Results showed that although faculty members were interested in teaching, that interest was substantially lower than that indicated by other empirical studies in the field. Several factors described by faculty respondents serve to restrict the active expression of the interest that does exist. Chief among these factors is the lack of institutional support for teaching effectiveness. This particular problem was consistently noted in both nonempirical and empirical studies dating back to the 1940's. In addition, the majority of those faculty members sampled had not consciously selected the academic career nor formally prepared themselves for its teaching function. A failure to systematically assess their own strengths as teachers or to consider goals for student learning other than the increase in knowledge also limits their active involvement with teaching and teaching improvement activities offered through faculty development programs on campus. Until institutional reward structures are changed to actively support teaching effectiveness, faculty interest in and skill at teaching will remain a largely underdeveloped resource at the University of Massachusetts/ Amherst.

## TABLE OF CONTENTS

ACKNO	VLEDGEMENTS	iv
Chapte		
I.	BACKGROUND OF THE STUDY	1
	Purpose of the Study	4
	Definition of Terms	7 8
	Overview of Related Literature	10
II.	REVIEW OF THE LITERATURE	14
	A Historical Perspective	15
	Faculty Opinions: A research Field	23
	The National Demographic Survey	50
	Faculty Attitudes: The University of Massachusetts	56
	Generation of the Present Study	59
III.	METHODOLOGY	62
	Advantages and Disadvantages of the Depth Interview	
	Approach	62
	Sample Selection	69
	Data Collection and Instrumentation	7.2
	A Pilot Test of Materials and Methods	76
	Data Analysis	78
IV.	DATA ANALYSIS	87
	Career Choice and Preparation	91
	Philosophy and Teaching Approach	1.03
	Self-Assessment of Teaching Effectiveness	118
	The Status of Teaching: Formal and Informal Rewards	134
		152
	Career Satisfaction	170
	Direct Statements of Attitude	174
	Summary	11.

٧.	SUMMA	ARY	,	COI	NCL	US	IOI	ıs,	A	NE	) R	REC	OM	ME	ND	AT	IC	NS	,	•	•	•	٠	٠	٠		٠	175
	Sur	nma	ıry	7 0:	f F	'in	dir	ıgs	3		•		•	•														175
	Dis	scι	155	sion	ns	an	d (	Cor	ic1	us	sic	ns	3		•	•	•	•	•	•		•	٠	•	٠	٠		189
	Red	con	nm e	enda	ati	.on	s :	101	r i	iur	rt i	ier	ī	les	sea	irc	'n	•	•	٠	•	•		•	۰	٠	٠	191
	Imp	pli	ica	ati	ons	f	or	Fa	acı	ı1t	У	De	200	210	pn	ner	ıt	•	•	•	•	•	•	•	•	٠	•	193
		•	•	•	• (	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	
APPENI	DICES	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	203
BTBLT(	GRAPH	Y																										226

## LIST OF TABLES

1.	Average Actual and Ideal Distributions of Time Among Academic Role Components by SID	28
2.	"Do Your Interests Lie Primarily in Teaching or Research?," by Type and Quality of Institution	
3.	(U.S.A.)	32
4.	by Percentage	40
4.	Distributions of Faculty by Age in Three National Studies	52
5.	Percentage of Respondents in Three National Studies "Strongly Agree" or "Agree with Reservations"	,,,
6.	with Specific Statements Concerning Teaching Professors' Choice of Most and Least Accurate Role	54
0.	Descriptors by Percentage	55
7.	Comparative Statistics for the Population and Sample of Full Time Faculty Members at the University of	
	Massachusetts/Amherst	71
<ol> <li>8.</li> <li>9.</li> </ol>	Scheduled Interview Questions Categorized According to Topical Areas	75
	Inter-Coder Reliability as Measured by Scott's Pi $(\pi)$ for Each of the 15 Coded Interview Questions	83
10.	Preference for Teaching or Research Compared by Percentage for Faculty Subgroups	90
11.	Reasons Cited by Faculty in Various Disciplines for Choosing an Academic Career by Percentage	94
12.	Percentage of Faculty Having Various Levels of Pedagogical Training as Graduate Students	96
13.	Instructional Philosophies Compared by Percentage for	
14.	Faculty Subgroups	103
14.	Philosophies to their Primary Instructional	114
15.	Goals by Percentage	
	Various Disciplines Compared by Percentage	116
16.	Percentage of Faculty Utilizing Various Methods for	
	Assessing Personal Teaching Effectiveness by Disciplinary Affiliation	122
17.	Relationship of Methods for Assessing Teaching Effectiveness to Stated Preference for	100
18.	Teaching or Research by Percentage	123
	Involvement for Effective Teaching Compared by Percentage for Various Subgroups	130

Comparative Importance by Percentage of Research and	
Teaching in Departmental Personnel Decision-Making	
Processes as Perceived by Faculty	137
Departmental Utilization of Teaching Evaluation Procedures	
Rated by Faculty According to Frequency of Use	145
Faculty Perceptions of Rewards Received for Effective	
Teaching by Percentage	149
Satisfactions of an Academic Career as Reported by	
Faculty Compared by Percentage for Various	
Subgroups	154
	Processes as Perceived by Faculty

## LIST OF ILLUSTRATIONS

1.	Percentage	of faculty describing lack of student	
	ability	and/or interest as a major instructional	
	problem		165

#### CHAPTERI

#### BACKGROUND OF THE STUDY

Perhaps even more important than the actual characteristics of a college are the ways individuals conceive of their surroundings. For all practical purposes the environment perceived is the real environment because people act on the basis of their perceptions. Thus, if a faculty member believes his colleagues are not interested in teaching, that is an important fact for him, even if they are actually very much interested. Teachers, students, and administrators are all "hemmed in" by their views of their environments. (Gaff & Wilson, 1971, p. 475).

Faced with ever increasing economic pressures and a decline in the traditional student-aged population, universities and colleges around the United States are being forced to review their goals and organizational priorities. The uncontrolled growth of higher education witnessed in the sixties has come to a halt. Applications for college admissions are down. The economic value of a college degree has slipped with rising complaints of grade inflation and an "overabundance" of degreed people in many professions. Research funds from government and private foundations are drying up. The rising cost of funding a university mandates belt-tightening policies and programs of reduced spending for staff, supplies, and essential equipment.

The faculty member in higher education is caught in the center of the vise. Due to shrinking job mobility and the glut of the market

place with Ph.D.'s, few faculty members may look forward to escaping such pressures by changing jobs. Instead, in order to procure job security, salary increases, and a larger voice in institutional affairs, professors are turning to unionization.

The professor, occasionally described by legislators and authors as underworked and overpaid, finds him or herself caught as well in a re-examination of priorities and professional goals. Administrative and departmental reward structures encourage quantities of publication and the acquisition of outside research funds. Students, older, on the average, demand new teaching styles, relevant content, and more shared responsibility, while traditional mores and a restrictive reward structure encourage the orthodox selection of curricular materials, textbooks, and teaching methods. Thus, the university teacher is faced at the University of Massachusetts and other institutions with a host of conflicting demands, and s/he is struggling to reconcile what s/he would like to do, what s/he has to do, and what s/he interprets to be rewarding.

In 1966, Cartter predicted a change in priorities:

For the next decade, as can be predicted from the evolving policies of federal agencies, private foundations, and the universities themselves, as is underlined by the current spasms of student unrest, the primary concern of college educators will be with teaching. (p. 239)

Although the research literature of higher education suggests that there is indeed a growing interest on the part of faculty members and administrators in teaching, it clearly indicates that merit and tenure decisions continue to focus on the research function. A 1969 National Survey of Higher Education sponsored by the Carnegie Commission and

a similar study conducted in 1973 by the American Council of Education indicated little change, in spite of Cartter's prediction, in the primacy of research and publication for the granting of tenure and promotion.

Administrators, faced with the prospect of a stable faculty body and increasing competition for student enrollment, talk of the need for improving the quality of instruction by supporting and rewarding teaching. Many programs for instructional and faculty development are actually underway around the country (Gaff, 1975), offering a variety of services from seminars and workshops to individualized consulting on curriculum design, alternative careers, or the technical skills of teaching. However, as at the University of Massachusetts, such programs are consistently threatened by economic cutbacks and frustrated in their efforts by the lack of university reward for effective teaching. Since reward structures continue to favor research activities, the number of faculty members who take the time to participate in any of these services tends to be but a small percentage of the entire faculty.

evaluate and disagreements abound on just what it is that the

"effective" teacher does or does not do. In a 1966 study of personnel

practices by Astin and Lee, 95.5 percent of the deans sampled at all

levels of higher education listed teaching as a major consideration in

personnel decisions. However, systematic student ratings were

utilized by only 12.4 percent of the same sample. Where systematic

student evaluations are solicited or even required, the poor quality

of the questionnaires used, the frequent misinterpretation of data summaries provided for personnel committees, and the questionable ability of students to observe closely and to evaluate honestly the person by whom they are themselves being judged, make the use of such data, for other than personal teaching improvement, a complex, often stressful matter.

All of the preceding issues are under discussion in the literature of higher education. However, there appears to be little empirical data available concerning university faculty as teachers. Those major systematic studies which have been done of the professional lives of professors will be reviewed in the second chapter of the present paper.

#### Purpose of the Study

Before further experimental or correlational research can be successfully carried out in any area related to teaching in higher education, clear operational definitions of relevant terms as well as descriptions of the attitudes and environments within which faculty members operate are necessary. For example, before researchers can ask which teaching activities should be labeled as effective and which as ineffective, they need from faculty members and various subgroups in that faculty, as well as from administrators, a clearer description of those activities in which these populations are most actively interested and involved. Before investigators can answer how and for what reasons faculty development programs should be set up on a particular campus, they need descriptive information on attitudes of faculty members about their own teaching and about their

instructional concerns. Before investigators can determine the effects of a particular reward structure on the quality of faculty teaching, they need to explore how the faculty perceives and acts on the perceptions of that system. Such research "might at last provide the foundation of knowledge on which to erect policies for the appraisal and improvement of college teaching" (1961, p. 22) for which Gage called in 1961.

In designing the study at hand, the author sought to answer the following questions: What are the attitudes of full-time faculty members on the University of massachusetts/Amherst campus toward their own teaching-their interests in the activities involved, their perceptions of the rewards received and the improvement needed? Are there any major differences in these attitudes and perceptions between tenured and nontenured faculty members or across major subject matter divisions?

The study was limited to the University of Massachusetts/Amherst for more than reasons of manageability. A role perception survey previously conducted at the University of Massachusetts/Amherst by Hruska (1975) showed that the faculty members who comprised her sample identified teaching as "extremely important" to their professional roles. She reported that when asked how important they viewed each of the three dimensions of their roles as university faculty members (research, service, and teaching) "only 68 out of the 254 respondents did not respond in the highest category of 'extremely important' for the teaching dimension" (p. 109). Research, on the other hand, was rated "extremely important" by only 91 out of the 254 respondents.

This is evidence, she summarizes, "that among professorial duties, faculty ranked teaching before research in importance" (p. 142). Just what this response meant in terms of behavior and attitudes was explored in the present study.

Finally, because two faculty development services have been in operation at the University for several years—the Clinic to Improve University Teaching, 1972 to present (Melnik and Sheehan, 1974), and the Center for Instructional Resources and Improvement, 1974 to present—opportunities for instructional improvement have been available to professors who sought it. At present, economic cutbacks have made the survival of these services precarious. Information gathered during the course of the study may prove beneficial in the expansion, development, or even survival of programs of instructional improvement on this campus. In addition, the effect that these programs have had, the visibility that these programs have attained during their years of operation, and the amount of interest that they have generated among the faculty members sampled provided particularly useful information for the generation of new services as part of the ongoing work of the offices of the Center and the Clinic.

In summary, the purpose of this study was to determine and describe the attitudes toward teaching held by full-time faculty members at the University of Massachusetts/Amherst. Faculty respondents were asked to describe their instructional behaviors and beliefs as well as their perceptions of institutional reward structures and the need for faculty development services. In addition, by assisting faculty participants in exploring and clarifying their own attitudes, the

investigator hoped in some small way to promote the change of teaching practices within the institution. "Faculty attitudes represent one of the greatest barriers to change, causing faculty members to hide under the protective umbrella of academic freedom, to wall themselves from change" (Manzano, 1973, p. 208).

#### Definition of Terms

For the purpose of clarification, three key terms need to be defined. "Full-time faculty members" are persons with state monied, full-time academic appointments having teaching responsibilities on the University of Massachusetts/Amherst campus. Those faculty members who are considered adjunct, part-time, or on sabbatical are not to be included in this population; neither are graduate teaching assistants nor associates.

"Attitude" is defined as that combination of individual beliefs about a specific object or situation resulting in a pattern of personal and interactive behavior (Rokeach, 1968). A belief is a simple proposition consisting of cognitive, affective, and behavioral components. Attitude is determined by how a person behaves either verbally (opinion) or non-verbally (action) toward the attitude-object or in an attitude-situation. If no behavior occurs, no attitude can be detected. Because an attitude consists of several beliefs (a majority of which must be changed in order to significantly change the attitude), attitudes are relatively enduring rather than momentary predispositions. The description of an attitude involves the study, then, of verbal or non-verbal response "to the attitude-object or

situation, or toward others who take a position with respect to the attitude-object or situation, or toward the maintenance or preservation of the attitude itself" (Rokeach, 1968, p. 132).

Although attitude can be inferred from expressed opinion or non-verbal behavior, it cannot be simply equated with a single operational measurement on an opinion questionnaire. In the present study, attitude was not measured directly but inferred instead from a variety of stated opinions concerning those beliefs of which the attitude was composed.

Third, "teaching" is defined as those activities engaged in by
the faculty member in preparation for an entire course or a particular
class session as well as those activities engaged in during class
sessions, and those activities undertaken as a direct result of class
sessions which might include reviewing lecture notes, talking with
students or advising students on class-related topics. Degree-program
advising carried out as an administrative responsibility within a
particular department and membership on master's and doctoral committees
are not here considered as teaching activities.

# Design of the Study

The exploration of attitudes, according to Katz and Kahn (1966) in The Social Psychology of Organizations, is not facilitated through large survey and questionnaire methods but rather through the "systematic depth interviewing of appropriate population samples within the organization" (p. 66). Therefore, in the present study, the investigator conducted in-depth interviews with 40 faculty members

drawn from among the University of Massachusetts/Amherst faculty using a stratified, proportionate random sample. Sample size was held at 40 due to the nature of the in-depth interview as a data collection technique, the advantages of which will be discussed in Chapter III.

The interview approach to data collection presented a particular problem in summarizing and reporting the data. Based on a codification system generated by Banaka (1971) for the analysis of the "manifest content" and the "process content" of an interview, a system for coding and analyzing the content of the interviews was devised. The data collection and analysis techniques were piloted on a sample of four. Changes in the instruments were thus made possible as was the establishment of inter-rater agreement for the coding system.

Findings reported from a sample of 40 provided only estimates of the range and dominance of possible attitudes existing on campus concerning teaching. By restricting the study to one campus, the investigator further limited the generalizability of the findings. The reported severity of the financial crisis of the University of massachusetts campus (Bromery, 1976) during the course of this study may have also biased responses or impeded the discussion of opinions, as job security may have occasionally been perceived by a faculty member to be threatened. And finally, the restriction of the study to one brief period of time, especially in an era of rapid flux in higher education, did not provide for the sampling of attitudinal change across time. These limitations, however, do not invalidate the study but merely serve as constraints on the interpretation of the findings.

#### Overview of Related Literature

Publications in the field of university and college teaching are voluminous. However, many of the publications are non-research based treatises in which the author expounds on his/her current explanation for the state of university teaching or encourages the adoption of some new and innovative methodology. This same situation exists when publications concerning university and college faculty are considered. Aside from a few pioneer studies of the academic profession (Caplow & McGee, 1958; L. Wilson, 1942), three national demographic surveys of the characteristics of faculty members (Bayer, 1972, 1975; Ladd & Lipset, 1975), and the recent interview-based studies of individual faculty members conducted by Eble (1972) and Sanford (1971), the literature about faculty is "far from fertile enough to support even reasonable assertions as to who faculty are, what they do and with what impact" (Mayhew, 1973, p. 161).

According to the 1975-1976 Yearbook of Higher Education, there were over 250,000 full-time instructional faculty on nine or ten month contracts in the 3,000 colleges and universities in the United States. Professors comprised five percent of the professional and technical sector of the entire United States labor force and were the central workers in the national system of higher education (Bidwell, 1971). However, in an introduction to a collection of recent studies of several aspects of the academic profession, Bidwell concluded that "to almost any question that the curious sociologist might ask about an occupation, the answer for the professoriate has been more often

than not the conventional wisdom shared by academic people" (p. 1).

Other researchers have humorously suggested that in the future it will be easier to reconstruct the occupational history of ditchdiggers and garbage collectors from existing documents than to reconstruct the historical development of the professoriate (Blackburn & King, 1974). In a definitive review of research on college and university teaching prior to 1963, McKeachie concluded with a section on faculty attitudes and values in which he discussed the satisfactions found in teaching (McKeachie, 1963). He described impressions only; he could cite no research on the topic, whereas his bibliography for the chapter as a whole was massive.

In the later sixties, the pressures created by growing student dissatisfaction, improved technology, and a changing student population generated a proliferation of research and theoretical formulations in the field of higher education. This time the professoriate received somewhat more attention; however, Trent and Cohen (1973), in reviewing the research in higher education teaching during the sixties, concluded that:

Little has been determined beyond what was reported in the late 1950's regarding faculty members' personal characteristics and the meaning of these for their teaching. Research is needed that not only describes the characteristics of the college and its population, but also tests strategies for the improvement of the college climate. (Trent & Cohen, 1973, p. 1055)

There is a need, it would seem, if a culture is to know itself, to look at individuals as they function in a special context, and, in particular, a need to study individuals who specialize in teaching at the college and university level.

Those researchers who have undertaken this sociological task have commented on the disorganized and fragmented nature of the body of knowledge possessed about the professor and his/her profession:

Eckhert and Neale, 1965: Recent studies of prospective and current faculty members have yielded illuminating knowledge regarding their backgrounds and current status, though much less has been learned about their interests, outlooks and satisfactions. (p. 307)

Brawer, 1968: Comparatively few in-depth reports have been made about people who specialize in teaching at the college and university level. (p. xv)

Freedman & Sanford, 1973: Faculty opposition to significant study of themselves, their societies, their culture, is powerful and almost universal. (p. 14)

Light, 1974: The actual life of professors has not been studied since Logan Wilson except by Sanford and his associates who have explored the concerns and development of faculty at a range of institutions. . . . This fragmented quality forces one to read a number of studies asking different questions in order to gain an overview of even one area. (p. 2)

Lewis, 1975: In spite of a growing list of publications about university professors, little is known about "the world of work of professors." Extensive studies have begun to accumulate a body of data on academic men. (p. ix)

Livesay, 1975: Considering the tons of paper consumed every day to record their observations in essays, textbooks, monographs, lectures, magazines, trade books, newspapers, and the reports of foundations and governmental commissions, remarkably little is understood about the impact they have on our lives and just what kinds of people they are. . . . Few really probing studies of the professoriate are available. (p. 32)

In summary, a review of research focused on the faculty of higher education suggests a continuing need for the rigorous study of the professor, his/her attitudes, and his/her world of work. For three major reasons the present study will provide an important contribution to the field of descriptive research in instruction and instructional

development at the university level. First, the data obtained provides a base of empirical observations necessary for the formulation of testable propositions. Second, the methodological approach suggests a systematic format for gathering information about faculty interests and needs in the area of instruction. And third, the results of the study provide data for the expansion and improvement of the existing faculty development services on the University of Massachusetts/

#### CHAPTER II

#### REVIEW OF THE LITERATURE

Reliable information about faculty members' activities, attitudes, and values is surprisingly limited. Relatively few empirical studies of faculty have been conducted. Of the studies that have been made, only a few have obtained data directly from faculty members themselves, and only a handful have included more than one institution. (Wilson & Gaff, 1975, p. 4)

Although publications that deal with the academic man or woman have proliferated since 1968, Wilson and Gaff's description continues to protray accurately the state of the literature concerning the American professoriate. The majority of the publications in this field are filled with assertions based on general and personal observations, as well as with board generalizations drawn from the literature of the field rather than from survey or experimental.data. In order to compare the perspective of this nonempirical literature with the results of those few studies directly concerned with the attitudes of university faculty members, the researcher has reviewed four types of literature: (a) major historical commentaries on the professor and his/her teaching, largely observational in nature and including treatises by and about "the new professor"; (b) empirical studies of college and university faculty members which include some attitudinal data and in which faculty members themselves serve as major data sources; (c) three census-type national surveys of demographic and attitudinal data on members of the professoriate; and (d) two recent surveys of the faculty on the University of Massachusetts/Amherst campus.

#### A Historical Perspective

Those attitudes, values, and professional roles shared by men and women within the academic community did not come under scrutiny in the empirical literature of higher education until late in the 1960's. Prior to that time (and continuing into the present), publications concerning college teaching and college teachers were largely nonempirical in nature, filled with commentaries based on personal experience and opinion. Whether academic men and women have accepted the assertions of these publications as role models for the academic culture or whether they are accurate portrayals of the faculty in higher education, statements from this body of literature continue to influence university policy setting and faculty attitudes toward teaching even today (Clark, 1971; Sanford, 1971).

#### Logan Wilson, 1942

Logan Wilson (1942) was one of the first to make the college teacher an object of study. His portrait of the academician, based on retrospection, life experience, literature review, and observation in a variety of institutions depicted the typological "man" or "ideal-type" in terms of his function as a conserver, disseminator, and innovator in the field of knowledge. The professor was a man caught in a continual battle between these functions.

Teaching, Wilson concluded, although claimed by the university to be of major importance, was neither inculcated nor extolled, with the natural result that it was neglected. On the other hand, the majority of faculty time was taken up in teaching while tenure, recognition, and advancement continued to be rewarded for involvement in investigative, publishable research. As a result, only a modicum of efficiency was demanded in teaching. Outstanding performance rarely brought rewards equal to those of outstanding research. The academic man was, in the long run, a teacher who had to pursue research; who, unclear about the criteria by which he was to be judged, did not know how to allocate his time. In individual cases, both the teaching and research functions were mutually beneficial, but that was the exception rather than the rule.

In updating this picture, Wilson (1971) concluded that the publish-or-perish syndrome had become a fiction. (Of 2000 faculty members polled, 32 percent had not published any articles and 71 percent had not published any books.) However, Wilson went on to suggest the existence of an increasing interest in research by pointing out various trends in the academic system between 1942 and 1965: lowered teaching loads. larger classes, greater reliance on "substitute" faculty to teach lower level courses, and a greater frequency of hiring for research accomplishment as opposed to instructional ability.

# Theodore Caplow and Reece McGee, 1961

A study conducted by Caplow and McGee (1961) from 1954 to 1956 provided the data base for Wilson's update. In order to "develop a

systematic body of knowledge about the academic labor market" (p. 26), in particular, the prevailing cycle of vacancy and replacement.

Caplow and McGee interviewed presidents, provosts, deans, chairpersons, and faculty members in the liberal arts departments of ten major universities.

Individual scholars identified as one of their most pressing concerns the conflicting demands of teaching and research. Productivity, as defined by those faculty members interviewed, excluded teaching in all but 14 out of the 371 cases. Teaching duties were instead described as obstacles to the performance of the essential research tasks. In a pattern discernible within every major university included in the study, faculty attitudes toward teaching were seen to be more negative than they had been in the previous years. In addition to those trends noted by Wilson (1971), Caplow and McGee mentioned several additional trends as proof of this assertion: (a) a shift in professed faculty interest away from teaching and towards public service; (b) a shift in activity away from undergraduate teaching and towards graduate teaching; (c) the failure of professors to prepare lectures and lessons; (d) a growing indifference toward teaching duties and the results of instruction; (e) an increased use of computerized examinations; (f) the public expression of conventionalized complaints about student ability; (g) the establishment of the research professorship; (h) the growing gap between junior and senior staff responsibilities; and (i) the growing number of consultantships, fellowships, grants, administrative responsibilities, and government assignments for professors.

The leading problem in all of this, concluded Caplow and McGee, was the incongruity between job assignment and the promotion system which encouraged faculty to disdain teaching in favor of research and publication. Faculty were "paid to do one job, whereas the worth of their services is evaluated on how well they do another" (p. 82).

## Nevitt Sanford, 1962

In an attempt to review the trends listed by Caplow and McGee as well as to determine just what had been done in the field of higher educational research and what still needed to be done, Sanford collected and edited The American College (1962). The result was a compilation of essays, research reports, case observations, analyses and critiques of then-current teaching and learning practices, and literature reviews linked together by theories of student development and social organization.

Information about faculty attitudes, values, behaviors, and characteristics was limited to one article in the massive volume. In "The Changing Function of the College Professor," Knapp reviewed the study by Caplow and McGee as well as several earlier studies on teaching methods. From these studies and his own observations on the growing number of conflicts involved in college teaching as a profession, Knapp concluded that the activities of the professor were "characterized by a progressive decline in character-developing functions along with a strong tendency for the research and the informational functions to part company and form two separate callings" (p. 292).

#### Calvin B. T. Lee, 1967

B. T. Lee's tome on Improving College Teaching (1967) best exemplified the range of material concerning the professor and his/her world of work published during the middle sixties. Lee attempted to provide a definitive review of the literature of his time, both empirical and theoretical. The resulting volume highlighted a common theme: faculty members at large universities were (a) primarily oriented toward research and scholarly publication and (b) primarily rewarded for the same. Teaching was evaluated, if at all, through opinion and other non-systematic data sources.

Strongly supportive of this conclusion was a 1966 study by Astin and Lee of "Current Practices in the Evaluation and Training of College Teachers" included in the volume. In a survey of academic deans of those institutions of higher education listed in the Office of Education Directory, 1965, Astin and Lee attempted to determine the frequency with which various sources were used to evaluate teaching and the relative importance of teaching in overall evaluation systems. Teaching was reported to be a major consideration in personnel decisions by 96 percent of all institutions sampled and by 90 percent of the universities. However, systematic student ratings of teaching were utilized by only 12 percent of all institutions sampled. In most cases, the chairperson served as the primary information source on teaching effectiveness.

Research was considered of major importance by 47 percent of the entire sample and by 79 percent to 92 percent of each of the universities. Publication was rated as a separate and major item by

40 percent of the respondents. In conclusion, Astin and Lee assessed the effect of these practices on classroom teaching:

Citing "classroom teaching" as a "major" factor in personnel decisions does not encourage improved teaching as long as teaching ability is more likely to be evaluated on the basis of scholarly research and publication rather than information more directly relevant to effective performance in the classroom. (p. 304)

The middle sixties saw a proliferation of nonempirical publications as both faculty and other experts in the field of education began to examine their functions and values. Commentaries appeared on teaching tips for classroom performance, the teaching versus research debate, trends in teaching evaluation, and the changing institutional setting. Such articles were significant, in the most part, for their impact on the image of the college and university teacher of the sixties. The common belief emerged that faculty members were minimally devoted to their teaching, preferring instead to pursue their individual research and publication for which they received advancement and promotion.

# The "New Professors," Late 1960's

As the late 1960's exploded with students' demands for a relevant education, for a greater voice in academic affairs, for more control over their classroom experiences, and for open admissions for minority groups, the quality of university teaching came under close scrutiny. The image of the university professor locked away in "his" laboratory designing weapons for the government, emerging only to lecture from yellowed notes to a group of sleeping and faceless students, angered both students and taxpayers. Individual faculy members, caught up by

the demonstrations and demands of their students, began to re-examine the purposes of higher education and their own roles as teachers.

These were the "new professors."

Collections of personal essays, commentaries on the teaching profession, and descriptions of new methods and approaches to college teaching proliferated. Interested in sharing their own frustrations and satisfactions, as well as in prompting changes within the profession of college teaching, faculty members began to narrate their own stories, telling of their initiation into and rise within the professoriate or elaborating on their own experiences with innovative approaches or ideas. This body of literature was interesting not so much for what it did or did not add to the empirical body of knowledge concerning faculty attitudes toward university teaching, but for the insights it provided into the recurring frustrations of and rewards for individuals as professors in an academic system perceived as hostile.

(See the work of Flournoy, 1972; Kolstoe, 1974; Kriegal, 1972; Skilling, 1969.)

## Herbert Livesay, 1975

In a 1975 publication, The Professors, Herbert Livesay tolled the demise of the reform evoked by the student activism of the 1960's.

Livesay attempted through a mix of personal experience, published data, and interviews with "famous" professors across the United States to dispel the myth that professors were a dissatisfied, underpaid, overworked, and generally unrewarded group: "The inescapable conclusion remains that college professors are usually underworked and frequently

overpaid" (p. 27). What Livesay's typical professor really wanted was to be left alone in his (more often than her) inviolate classroom with his power of authority, grades, and presumed acuity, with substantial time off to pursue his own individual research, or more probably, his other interests.

Of the professors interviewed by Livesay, the most successful ones had achieved distinction and remuneration from activities outside of their professorial duties, e.g., film criticism, art, law, labor union organization. The few professors included in the collection who were truly devoted to the dynamics of teaching/learning were judged less successful by academic and monetary standards (as well as by Livesay). Being committed to teaching, as Livesay's interviews demonstrated, was injurious to advancement within the career.

#### Summary

The assertion that teaching was generally held in disregard by both faculty and their institutions has been supported by the literature reviewed thus far. With the rapid expansion of the university after World War II (Kerr, 1962), teaching became a less central activity to both the faculty and the institution while research became more important. This shift was attributable, for the most part, to the growing number of federal research grants coming into the university via its professors. The faculty member, as a result of these rapid changes, became a "cosmopolitan," dedicated professionally to a discipline and its advancement rather than to an institution and its students (Gouldner, 1957, 1958; Warriner, 1970).

However, in the late sixties and early seventies, student demands generated a renewal of interest in the teaching function of the university. The "new professor" emerged, working with students to restructure classroom experiences to include non-traditional formats and relevant educational content. Once students slipped back into silence, the image of the "new professor," according to Livesay, fell from vogue.

The foregoing are the trends concerning the attitudes of the American professor toward teaching suggested by a review of the nonempirical literature in the field. One landmark study of the "academic marketplace" provided some empirical data for the assertion that research, not teaching, was a major preoccupation of college and university faculty members. The larger portion of the literature here reviewed, however, was based on personal observations and broad generalizations extrapolated from experience. Much remained to be done empirically in studying the attitudes and roles of the university teacher.

# Faculty Opinions: A Research Field

Taken as a whole, the nonempirical literature published prior to 1969 concerning the faculty in higher education supported the existence of a single, distinct faculty culture characterized by a body of shared assumptions concerning the academic profession. The academic culture, as defined by Sanford (1971), consisted of that body of shared ways and views which were created by faculty and administrators to make "the ills that they have more bearable (e.g., to contain their

anxieties and uncertainties about their competence as teachers) and to prevent any flight to 'others they know not of!'" (p. 359). The pressures of academic culture over the years encouraged the professor to identify with a discipline rather than with his/her role as a teacher, to respect norms for the amount of time properly spent on teaching activities or with students, to express cynicism about and unhappiness with the low state of student ability, to mistrust the administration, and to complain of excessive teaching loads. These cultural norms were nurtured and reinforced by that nonempirical literature which concerned the work and life of university professors.

The results of the empirical studies reviewed in this section suggest that a change has occurred and is continuing to occur in the hold exerted by traditional faculty culture on faculty attitudes and actions. Faculty, as revealed in the following studies, appear to be more willing to express an interest in teaching, to pursue student/ faculty interactions, to seek personal satisfaction in their careers, and to identify with their roles as teachers. The body of shared assumptions which previously controlled the faculty member and his/ her role appears to be in the process of being replaced by individual statements of personal values, the pursuance of self-fulfilling activities, and, at least, the verbal expression of a new set of attitudes toward teaching, attitudes reflecting personal as opposed to culturally-imposed beliefs. It is these expressions of personal opinion concerning teaching that are reviewed in this survey of the literature.

Only those studies that deal with four-year college and/or university level faculty on more than one campus and that draw on faculty opinion as a major data source are included. For details of related studies of smaller populations not included in the present review, the reader is invited to consider the work of Warriner (1970); dind, Dornbusch and Scott (1974); Garrison (1970); and McGee (1971).

In the empirical studies reviewed, the faculty members reported that they were interested in teaching, that they did not wish to spend less time teaching and that, in some cases, they wished to spend more. They supported, in general, the systematic evaluation of teaching effectiveness by students. They believed that teaching was important and should be given more weight in personnel decisions of promotion and tenure. They expressed a satisfaction with teaching and their career decisions.

These conclusions, supported in studies by Parsons and Platt (1969), Fulton and Trow (1974), Eckert (1959, 1972), Wilson and Gaff (1975), Eble (1972), and Sanford, et al. (1971), run counter to the assertions made in the nonempirical literature that faculty members neglect their teaching, concentrating instead on their research and publication for which they are rewarded by their institutions. Timing and sampling procedures are responsible for the discrepant conclusions. The majority of empirical studies conducted on faculty attitudes has taken place since 1969, whereas the most influential nonempirical studies were published prior to or during the 1960's. Furthermore, the conclusions reported by the empirical researchers demonstrate—through their clarity or lack of clarity—the importance of careful

sampling from well defined populations necessary for the drawing of accurate conclusions about the academic profession.

The present section summarizes the work of six major groups of researchers in the area of faculty as teachers. Primary results are reviewed and areas of agreement and disagreement among reported results, pointed out. Those few studies dealing exclusively with faculty attitudes, opinions, and values are discussed in greater detail. Of particular note in these latter are those attitudes directly related to teaching. Finally, some attempt is made to explain the conflicting images of the university teacher as presented in the non empirical and empirical literature.

#### Talcott Parsons and Gerald Platt, 1968

In 1968, Parsons and Platt surveyed eight four-year colleges and universities in order to support their theory that "cognitive rationality" which "mandates rational action in the comprehension and solution of intellectual problems" (Platt, 1976, p. 14) was the academic core which tied together the entire system of higher education. Although cognitive rationality best described the research and scholarship function of the academic profession, institutional demands had forced the integration of the teaching function with these research activities, thus forming a research/teaching core for the academic profession which was realized most fully at the university level. As a pilot for a larger study of the academic profession, the authors surveyed 420 faculty members. To explain trends in the data, Parsons and Platt generated a Scale of Institutional Differentiation

(SID) to divide the institutions into categories of "high" (strongly research oriented), "medium" (research and general education oriented), or "low" (education of citizenry and professional training oriented).

Of significance to the determination of faculty attitudes toward teaching was one particular question included in the study, the question of actual versus ideal (not restricted by present institutional circumstances) distributions of time among the various professional responsibilities. Table 1 shows the average actual and ideal distributions of time spent on undergraduate teaching, graduate teaching, research, and administration at each type of institution.

By comparing the actual and ideal times for both levels of teaching with that of research, the authors concluded that teaching and research did indeed form an integrated core of activity for the academic profession. Institutions rating high on the SID, where faculty spent an equal amount of time on teaching and research, were identified by Parsons and Platt as the ideal-type (in the Weberian sense) of institution. Faculty at "high" institutions had the most positive attitudes toward research yet desired to maintain a substantial time commitment to teaching. In fact, the total amount of time that faculty members wished to devote to undergraduate and graduate teaching, when summed, did not significantly decrease for any group, although ideal times for graduate teaching tended to shift upwards while undergraduate shifted down. Actual time allotted to all teaching (both undergraduate and graduate) was higher for all groups than actual time spent on research. Therefore, concluded the authors, "There is little evidence here to support the often-heard popular

Table 1

Average Actual and Ideal Distribution of Time
Among Academic Role Components by SID<sup>a</sup>

Level of institutional differentiation

Role activity		High	Medium	·Low	All Institutions
		( <u>n</u> =198)	( <u>n</u> =186)	( <u>n</u> =36)	( <u>n</u> =420)
		%	%	%	%
Undergraduate teaching	Actual	29	46	64	46
	Ideal	25	34	43	34
Graduate teaching	Actual	18	13	0	·10
	Ideal	22	23	19	21
Research	Actual	32	22	15	23
	Ideal	43	35	28	35
Administration	Actual	21	19	21	20
	Ideal	10	8	10	9

<sup>a</sup>SID is the Scale of Institutional Differentiation developed to measure institutional orientation toward teaching and research by Parsons and Platt (1968).

Note. From Parsons and Platt (1968).

contention that modern academic men would de-emphasize or eliminate .

teaching if they could" (1968, p. VI-6).

Donald Light (1974) pointed out, however, that the data presented in Table 1 could be read in another way. If one added graduate teaching to research and left undergraduate teaching as a separate function, a new conclusion emerged: every group wanted to reduce the time spent on undergraduate teaching and to increase the time spent in research and the training of future researchers with the greatest discrepancies between the real and the ideal at the lower tier institutions (15 percent actual to 47 percent ideal). The authors acknowledged this interpretation of the data but concluded that although "American academics generally want to spend a greater proportion of their time in research and graduate teaching . . . there is no strong desire for a separation of these functions" (1967, p. 521).

On the basis of supplementary interview data with a portion of the sample, Parsons and Platt explained reported conflicts among these functions in terms of the ideal type. "High" institutions, which provided for graduate teaching, research, and undergraduate teaching, served as models for the rest of the academic system. Faculty interviewed at the institutions rating "low" on the SID were less disturbed by their failure to work in the model situation because they had accepted the demands of their institution for teaching.

Faculty interviewed at "medium" SID institutions, however, reported a high degree of conflict between teaching and research activities explained by heavy institutional demands for both teaching and productive research activity.

Thus, although the authors reported that faculty desired no separation of research and teaching functions, they limited their conclusion to the ideal-type institution, the research university. A failure to take into account the limited nature of the institutions sampled (all were described as "prestigious"), also, served to reduce the generalizability of their conclusion that the academic profession did not wish to specialize in research but instead to fully integrate teaching and research functions.

In 1968, Platt used the results of his pilot study to design and implement a full scale study of the academic profession including 3025 faculty members in 115 four-year colleges and universities. Although the results of this later survey were never released, the author recently published selected findings in an exploration of faculty teaching goals from 1968 to 1973. By comparing results from the 1968 survey with those data collected by Bayer (1975) for ACE in 1973, Platt concluded that "there has been no change in degree of emphasis upon and content of teaching among faculty during this period despite pressures upon them to change their attitudes toward undergraduate teaching" (Platt & Kirshstein, 1976, p. i). Mastery of the subject matter, clear thinking, creativity, and preparation for employment were the top-ranked goals in both studies. Consistent with his view on "cognitive rationality," Platt insisted that such goals could be explained as a compromise by faculty between their commitment to the core academic values of research and scholarship and institutional demands to produce intellectually autonomous and cognitively competent students. Changes in the content and goals of

teaching from 1968 to 1973 had taken place at the periphery of the academic system, e.g., open university, modular scheduling, and so on. Few central changes had occurred due to the pervasiveness of the faculty's commitment to core academic values. "In the end, innovative educational experiments gave way to the values of cognitive learning" (Platt & Kirshstein, 1976, p. 17).

## Oliver Fulton and Martin Trow, 1974

A similar desire to integrate the teaching and research functions was noted by Fulton and Trow in a 1969 study of the research activity of American academics (1974). In Lee's <u>Improving College Teaching</u> (1967), Trow had postulated that:

The majority of university teachers are certainly not interested primarily in teaching. . . . In the matter of research, university teachers make more severe demands on themselves than their institutions do, and that interest in research and their graduate students is their central motivation in academic life. The big university does not whip or seduce an unwilling body of teachers into research and publication; it recruits research minded men, and then rewards them for doing what it hired them to do, thus reinforcing their inclinations toward research. (p. 168)

In order to test these assertions, Fulton and Trow utilized extensive national survey data collected by Bayer in 1969 from 303 institutions at all levels of higher education. Quality ranking of "High," "Medium," and "Low" were assigned to those universities and four-year colleges included in the sample based on several factors: the highest degree awarded, the characteristics of faculty and student bodies, and the expansiveness of institutional resources.

Table 2 demonstrates the relationship between research and teaching in terms of expressed interest on the part of those faculty

Table 2

"Do Your Interests Lie Primarily in Teaching or Research?," by Type and Quality of Institution (U.S.A.) (Percent)

Type of institution

Four-year colleges Junior All Colleges Institutions		ım Low All	VI VII	1 1 4	9 4 23	34 1.8 34	56 77 43 100% 101%
r-year	Qual	Medium	Δ	175	11	37	51
Four		High	IV	7 / 26	22	39	35
es		Low	III	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	24	39	33
Universities	Quality	Medium	II	7 / 40	33	37	23
Un		High	Н	9 / 50	41	35	15 100%
		Primary	Interest	Very heavily in research	Both, but leaning to research	Both, but leaning to teaching	Very heavily in teaching

Sample: all respondents (N=60,028)

Note. From Fulton and M. Trow (1974).

members sampled at the various quality and institutional levels. One-half of the faculty members at high quality universities (I) were primarily interested in research whereas, overall, slightly less than one-fourth of all the faculty members sampled expressed this same preference. However, fifty percent of those faculty members in the highest quality level described their interests as "leaning to" or "very heavily" in teaching. The authors concluded, as did Parsons and Platt, that "the normative climate in the USA, as reflected in academics' personal preferences, is far more favorable to teaching than most observers would have predicted" (p. 35). By comparing the number of hours spent in class per week with the faculty member's expressed orientation, Fulton and Trow further concluded that the fit between orientation and activity was moderately close in the majority of cases; in other words, that faculty members defined themselves the way an observer would, as teachers or researchers.

Results from this study carried the added force that comes from the careful organization of the data according to institutional characteristics. The finding that 50 percent or more of those sampled in the "high," "medium," and "low" universities and colleges described their interests as teaching-oriented strongly contradicted the reported assertions of the nonempirical literature. In addition, the clear definition of populations by Fulton and Trow corroborated the conclusions of Parsons and Platt that faculty members in higher education generally supported teaching and did not wish to reduce the amount of time that they spent in that activity.

#### Ruth Eckert, 1958 to 1968

While there was only a single item concerning faculty attitudes toward teaching in the studies discussed thus far, the four studies which follow include as a major component the investigation of faculty attitudes and values.

The work of Eckert (1959;1972), Eble (1972), Wilson and Gaff (1975), and Sanford (1970) is characterized by the direct elication of faculty opinions concerning various aspects of the academic profession.

According to Kenneth Eble, former director of the Project to Improve College Teaching, two studies conducted by Eckert on the career satisfactions of college and university teachers in Minnesota are "our best source of information about how faculty members spend their time in different kinds of institutions and about what kinds of changes have been taking place in disposition of time and in the attitudes of faculty members towards their work" (Eble, 1972, p. 157). In 1953, Eckert sent questionnaires concerning career choice and career satisfactions to faculty members in Minnesota's 33 colleges and universities. Reported results were based on a 94 percent return rate (706 respondents) and interviews with 87 randomly selected members of the sample.

One-third of those responding reported that they had seriously considered college teaching as a career during their undergraduate years. The majority, however, reported that the decision had come during early years of graduate study or after several years spent in other jobs. Strong allegiance to a discipline was cited as the major reason for their choice of the academic career by one-third of the respondents.

Teaching was viewed as a method for financing scholarship and research

in the chosen subject matter field. On the other end of the spectrum, 18 percent reported that a desire to teach in college had motivated their career choice. Highly influenced by their own teachers and their experiences as graduate teaching assistants, they reported that their prime function was to arouse interest in the knowledge at hand. By far the largest group of respondents happened into college teaching after preparation for public school teaching or professional experience in another field.

Respondents were further asked to list two or three major satisfactions experienced in their faculty responsibilities. The following categories indicate the dominance of teaching-related over research-related satisfactions as mentioned by four-year college and university faculty members:

- 1. Association with college age students (31%)
- 2. Intellectually stimulating conditions (29%)
- 3. Observation of students' growth and success (20%)
- 4. Working and studying in own field (18%)
- 5. Transmitting knowledge (9%)
- 6. Opportunities for research (9%)
- 7. Enjoyment of teaching (7%)

The dissatisfaction mentioned most often was poor salary. Only two other dissatisfactions were mentioned by over 10 percent of the respondents: too much red tape and routine duties, poor or unmotivated students. In 1958, faculty members, in Minnesota at least, were highly satisfied with their careers, citing teaching as a major source of satisfaction.

On sampling the same population ten years later, Eckert (1972) concluded that changes in attitudes since 1958 were smaller than had been expected "attesting probably to the fact that the academic world has well established traditions and attitudes which tend to attract certain types of individuals and to repel others. And once a member of academia, there are further pressures toward conforming to its special rites and rituals" (Eckert, 1972, p. 37). Only one result indicated that teaching had lost some ground as a major concern of those faculty sampled. Ten percent less time was reported as being given to teaching in 1968 than in 1958.

Although less time was being spent on teaching, faculty continued to report a high interest in and satisfaction with college teaching as a career. This type of general conclusion concerning all levels of institutions in higher education may have been somewhat unrepresentative of the existing attitude toward teaching at the university level, as suggested by variations among institutional levels in the data reported by Fulton and Trow in Table 2. When percentages of agreement were examined in Eckert's 1958 data for the University of Minnesota faculty alone, a striking discrepancy appeared. Approximately 50 percent of the university faculty members sampled reported that opportunities for research were a major source of career satisfaction; whereas, less than 10 percent of all faculty members sampled reported that such opportunities for research were equally satisfying. Furthermore, intellectual stimulation cited by one-fourth of the entire sample was listed by 50 percent of the university sample.

Second, when the same responses were examined according to the sex of the respondent, women appeared to devote substantially more time to teaching and other student services than did men. Such large discrepancies in responses between the university and the entire sample as well as between male and female faculty members suggested that populations sampled should be carefully described before generalizations about attitudes toward teaching could be accurately drawn from reported results.

## Kenneth Eble, 1969 to 1972

As Director of the Project to Improve College Teaching, Kenneth Eble visited the campuses of 70 schools in 40 states for three years, observing classes and talking with hundreds of faculty members, students, and administrators. His goal was to observe teaching as it was going on in college classrooms across the country and to record those observations for the purposes of defining and working toward effective college teaching. Three publications presented his observations and recommendations: The Recognition and Evaluation of Teaching (1970), The Career Development of the Effective College Teacher (1971), and Professors as Teachers (1972). Also funded in part by the Project was an empirical study of the teaching environment, to be discussed later in this chapter.

Although the conclusions and recommendations made by Eble in these publications were not based on systematic research, they did carry the weight of numerous observations across a wide range of institutions. For this reason, a brief review of his observations

which concern faculty attitudes toward teaching and teaching-related issues is relevant to the study at hand.

In direct conversations with faculty members across the forty campuses, Eble did not find enthusiasm or overpowering support for teaching. However, neither did he find disinterest. Instead, he concluded, "I have observed that faculty members respect teaching and are somewhat interested in it, but comparatively few incline toward developing teaching as an art or themselves primarily as teachers" (1972, p. 24).

The lack of common student/faculty perceptions of what was relevant, of what was necessary to be learned, of the need for intimacy, caring, and freedom, and of the purposes of education was mentioned by Eble as cause for concern within American institutions of higher education. In addition, Eble found that the direct support of teaching was weak at the institutional level. The most frequent suggestion made by teachers was to change the reward system in order to more directly support teaching and to reduce the amount of tension between research and teaching activities. Although the primary mission of higher education was communicated by institutional administrators to be the discovery of knowledge, faculty members reported that the majority of their time was taken up in teaching and related activities. Contrary to the integrated nature of teaching and research posited by Parsons and Platt, faculty in Eble's study complained of the tension produced by the demands for research and for teaching.

## Robert Wilson and Jerry Gaff, 1968 to 1975

A major study of faculty attitudes, values, and characteristics was conducted by Wilson and Gaff in 1968 and 1969. Utilizing a Faculty Characteristics Questionnaire, the authors sought to provide answers to several key questions, two of which were central to the present study: first, "How important is teaching in the lives of faculty members?"; and second, "Does the academic reward structure make adequate provision for effectiveness in teaching, or is research emphasized at the expense of teaching?" (1975, p. 5).

The study sample was drawn from six diverse institutions: two comprehensive universities, two denominational institutions, one community college, and one state university. The 10,069 respondents from these six institutions closely approximated the national population of faculty members on several demographic variables as reported by Bayer (1970).

Wilson and Gaff (1975) concluded their investigation by noting that "most of the faculty members in our survey consider teaching a central activity as well as a major source of personal satisfaction" (p. 10). Eighty-eight percent of those sampled reported that teaching was their major source of life satisfaction. Below this fell, in differing order for various disciplines—family relationships, scholarly pursuits, leisure time activities, and literature, art, or music. The high percentage of respondents selecting teaching might have been partially a function of the respondents' perceptions of research and teaching as integrated activities. The majority of those sampled said

that "involvement in research makes for more exciting teaching" and that "teachers involved in research are more likely to keep up in their fields" (Wilson & Gaff, 1971, p. 40).

Wilson and Gaff found, as had Eble, that faculty members desired that teaching carry more weight in personnel decisions than was the case (see Table 3). The lack of weight carried by teaching was further emphasized by the fact that one-third of the respondents reported that teaching was "not" or only "somewhat" important in personnel decisions (Wilson & Gaff, 1971). However, most respondents favored a formal process of assessment of their teaching with 82 percent agreeing that students should be involved. Further, over half agreed with the statement that "students are the best judges of how effectively their professors, teach."

Table 3

Faculty Perceptions of the Actual and Ideal
Importance of Professional Activities
for Promotion Decisions by Percentage

Activity		% Responding "quite" or "very" important
Teaching	Actual	39
	Ideal	92
Research	Actual	53
	Ideal	63
Service	Actual	. 41
	Ideal	24

Wilson and Gaff (1971) concluded that "our data have mainly shown that many of the common assertions about college professors are not true of a majority of faculty members" (p. 40). Whereas only one-third of the respondents reported that teaching was a major variable in the decision-making process, a striking 92 percent reported that, ideally, they would like to be advanced on the basis of their teaching effectiveness.

Data for the Wilson and Caff studies were collected during that same era, the late sixties, which witnessed the rise of the "new professor." By eliciting additional information on the amounts and types of contact faculty members had with students outside of class, and correlating this information with reported faculty characteristics, the authors attempted to portray the faculty member who favored academic change. Results showed that the majority of respondents in the study favored academic change. Such faculty taught differently, as did the "new professors," encouraging discursive, analytic, integrative approaches to classroom instruction. They elicited student participation and made use of loosely structured evaluation procedures. In addition, they had extensive out-of-class contacts with students. As did the "new professors," many believed that the purpose of a college was to help the whole student to develop, and thus, they encouraged self-motivation on the part of their students.

In contrast, those faculty who opposed change stressed the mastery of technical or vocational competency and factual understanding. Student relationships, both in and out of class, were discouraged and

students were viewed as in need of external motivators for learning. Such faculty members tended to be in the senior ranks of natural and applied sciences.

The authors summed up the results of their study of faculty characteristics in one vague sentence: "The results of the study indicate the diversity of faculty teaching styles and practices" (Wilson & Gaff, 1975, p. 77). However, they were able to present several trends evidenced in a "substantial proportion of faculty."

These trends agreed with those cited by Eble but went further in describing the faculty attitudes than did those results produced by Parsons and Platt (1968) as well as by Fulton and Trow (1974). Wilson and Gaff found that the majority of faculty in their study "favor a more central role for teaching in the reward system, favor formal procedures for evaluating teaching, and favor innovation and change in teaching" (p. 79).

Before these results are accepted as representative of the attitude toward teaching held by faculty members today, the reader should consider the time frame in which the study was conducted. The late sixties was a period of unrest in higher education. To view faculty responses solicited in a time of conflict and crisis as "typical" could result in a misreading of the true attitudes of the American faculty then, as well as now. Wilson and Gaff themselves reported that the majority of their respondents favored academic change and supported the innovative, student-centered approach to teaching touted by the "new professors" who were never more than at the fringe of academia, according to Platt (1976).

Furthermore, the question of expressed opinion versus felt belief, as always, is inherent in any study of attitudes. To what extent were faculty respondents pressured by the times to respond favorably toward teaching? On the other hand, the conclusion that teaching was a primary satisfaction in the lives of faculty members sampled had also been supported by the work of Parsons and Platt (1968) and Fulton and Trow (1974) during that same period—a conclusion contrary to those few studies and treatises published in the field prior to 1965. Wilson and Gaff, it would appear, provided an accurate reading on the sentiments of the late sixties, but the applicability of their conclusions to the academic professionals of the mid-seventies is uncertain.

In conjunction with Eble's Project to Improve College Teaching and the Center for Research and Development in Higher Education, Berkeley, Wilson and Gaff (1971) attempted, one year later, to "analyze college environments from a teacher's point of view in order to learn what can be done to capitalize on faculty members' positive feelings about teaching, students, and academic change" (p. 42). Utilizing the same Faculty Characteristics Questionnaire and the results of a four-year study of student development, the authors compared data from eight campuses, considering the teaching environment in terms of the nature of the student body, the character of faculty colleagues, and the institutional policies and practices related to teaching.

Institutional environments across a wide variety of campuses were found to be not sufficiently supportive of teaching. Reward systems were not providing incentives for excellence in teaching. Teaching

was not being systematically and reliably evaluated. Colleague support for teaching and its improvement was low. Finally, course assignments were being made without consideration for the abilities and interests of faculty members. These conditions were not different from those found by Astin and Lee (1967) in their survey of academic deans five years earlier.

Gaff and Wilson (1971) concluded, in accordance with their first study, that:

Faculty members, by and large, have not turned away from teaching. The vast majority of professors in the vast majority of colleges are concerned about undergraduate instruction and devote a great deal of effort to it. However, many college environments are not as supportive of teaching as they could be. To the extent that faculty members have found teaching unrewarding, it is because they have not found institutional support and have not derived personal satisfaction from such activities. (p. 490)

A major difficulty with both of the studies conducted by Wilson and Gaff is their reporting of results for both colleges and universities as a single population. The two are different institutions established for different reasons and performing different jobs.

Colleges are charged with the education of the undergraduate and are primarily teaching institutions. Universities, on the other hand, are concerned with the teaching of undergraduates, the training of graduate students, and the conducting of research. The role of the teaching function in each institutional type is directly related to the purpose(s) of that institution. Data collected from several types of institutions can be used to draw conclusions about all of those levels taken together, but those conclusions may or may not represent the true

state of affairs within each institutional type when considered by itself.

## Nevitt Sanford, 1968 to 1970

Between 1968 and 1970, Nevitt Sanford and his associates at the Wright Institute conducted over 300 interviews with faculty members in a variety of institutions of higher education in order to explore the attitudes, beliefs, and activities of college and university teachers. The interview format as generated and utilized by Sanford and his associates provided for the discussion of personal and intellectual histories, education, attitudes toward teaching and students, feelings about home institutions, and opinions on the state of home disciplines. The interviews were in-depth, systematic, and guided by a comprehensive interview schedule. On the average each interview lasted three hours. Institutions sampled included four colleges, three universities, and one innovative graduate seminary. On the basis of these interviews, Sanford (1971) concluded:

The idea that college and university professors do not like to teach and that they neglect their teaching duties in favor of research is largely wrong. Most of those we have interviewed worked hard at their teaching; very few regarded themselves as poor teachers, and almost all wanted to be seen as effective. (p. 358)

Brown and Shukraft (1971), working with the Wright Institute team, had originally postulated that a direct statement of a philosophy of education by a faculty member when correlated with a statement concerning his/her perception of students would produce a measure of faculty commitment to teaching. However, very few of those faculty members interviewed were able to articulate a philosophy of education

or to offer a rationale for what they were doing. The authors concluded that faculty members were teaching as they had been taught or at least were giving very little thought to the basis for their teaching behaviors.

In the area of attitudes toward students, Brown and Shukraft found that faculty members often denied themselves the recognition of their effects on their students, even in the realm of content mastery.

Many expressed concern over the growing emphasis on open admissions which was producing a wide range of student abilities in the classroom. For some, relations with students had degenerated in recent years and had made teaching difficult, if not unpleasant. These faculty members expressed a desire to change professions or to retire early.

Very few faculty members could define the basis on which they evaluated their own teaching or explain just how their work was evaluated by others for promotion purposes. Most of those interviewed resisted the idea of students as evaluators of teaching, especially in cases where those evaluations were to be made public. The general perception of promotion policies was that no rational system of rewards existed for good teaching.

One explanation for these attitudes was advanced by Sanford and Freedman (1973) in terms of professionalism. Teaching, they concluded, was not viewed as a profession.

We found among academic men and women a pervasive unease and confusion and, most strikingly, a lack of professional identify. They do not seem to have a sense of belonging to a body of professionals with shared goals, shared procedures for attaining them, and agreed ways of estimating their realization. (p. 3)

As evidence for this conclusion, Sanford cited the following trends:

- 1. Faculty members tended to identify with their disciplines or specialities rather than with their roles as teachers.
- 2. Faculty members tended to respect unstated norms concerning the amount of time properly spent with students or the amount of interest shown in students.
- 3. Most faculty members expressed only the vaguest idea of the organizational workings of their home institutions and as a result, felt themselves victims of organizational policy.
- 4. Many faculty members experienced a sense of unhappiness with or cynicism about their jobs due to conflicts of interest between knowledge generation and the transmission of that knowledge to others who could not be expected to understand it completely.
- 5. The majority of faculty members, however, did not publish or do scholarly research.

Sanford concluded that certain common pressures existed on faculty members that heavily influenced their attitudes toward teaching as well as their teaching itself. These pressures included demands by students to take teaching more seriously, to make courses relevant, to teach more than content, to abandon lecture for discussion formats, and to understand students. Administrators demanded that faculty teach larger classes, take larger loads, and accept student evaluations of their teaching. As the result of these pressures, faculty members tended to treat teaching as a "highly personal matter" and to experience criticism of their teaching as a direct attack on themselves (Freedman & Sanford, 1973).

In order to point up some of the differences in results between the various types of institutions sampled in their interviews, Brown and Shukraft (1971) provided a case study of one college, one university, and one graduate institution. Of particular importance to this study was their report on faculty attitudes at Stanford University where 50 faculty members were interviewed, approximately one-sixth of the entire Wright Institute study sample. The majority of those interviewed defined effective teaching in terms of the worth of the subject matter, its explication, and its transmission. When asked to describe their philosophy of teaching, the responses ranged from shock to evasiveness.

Other questions indicated that the Stanford respondents sensed a lack of teaching ability in themselves with 51 percent describing themselves as below average teachers. Most, however, did not think of themselves as teachers but as members of a particular discipline. Personally, faculty members reported that they admired competence as a researcher and scholar most in their colleagues. Only nine percent reported that ability as a teacher was admired most in a colleague.

In addition, professional rewards were seen as directly linked to research and as opposed to teaching activities. Pressures to publish were felt by three-quarters of the sample. This pressure was attributed to a conflict among personal values and institutional values, and to a lack of time to fulfill all responsibilities. Fifty-two percent responded that they experienced institutional pressures to be a certain type of professor—a publishing scholar.

These results, according to Sanford (1971), added up to the assertion that "undergraduate teaching is not, for professors at four-

year colleges and universities, a true profession" (p. 359). The data from Stanford suggested that this was caused by the way in which a person was trained, or not trained, to be a professor, the existence of informal but strong constraints against sharing teaching concerns, and the general acceptance of "a well formalized understanding that professional advancement requires a man to speak well of teaching but to work at research and writing" (Brown & Shukraft, 1971, p. 175). In general, Brown and Shukraft concluded that:

Teachers don't talk about teaching, don't know what happens in other classes (except as they hear information from students). They have often not clarified their own definitions of a good class, and are seemingly unwilling to test their perceptions with a colleague, particularly a dissident one. (p. 223)

These conclusions based on the data collected at Stanford alone did not differ significantly from those based on a consideration of the interview data collected from the total sample of 300 faculty members at eight institutions.

#### Summary

The survey and interview data concerning faculty opinions about teaching reviewed in this section of Chapter II suggested that faculty members had a more favorable attitude toward teaching than might have been predicted from a reading of the nonempirical literature in the field. Empirical studies conducted by the six research teams reviewed supported the assertion that members of the academic profession were interested in teaching, its effectiveness, and its systematic evaluation. The range of this interest, however, was as broad as the populations sampled. Some respondents were found merely to "respect"

teaching while others reported it to be a major source of life satisfaction.

This interest in teaching runs contrary to the conclusions drawn in the nonempirical literature reviewed earlier in the chapter which reported that faculty members neglected their teaching, concentrating instead on their research and publication for which they were rewarded by their institutions. Although faculty in the empirical studies agreed that institutional reward systems focused on research, they also expressed an interest in changing those reward systems to support effective teaching. The conflicting reports of the nonempirical and empirical literature may be the result of one or more of three issues: (a) the failure of the authors of both types of studies to sample for and/or report conclusions carefully correlated with population variables such as level of the institution, or faculty sex, discipline, and rank: (b) specific methodological problems encountered in the empirical studies -- sampling procedures, timing, bias of the researchers; and (c) a change in faculty attitudes toward teaching since the late 1960's. Until conclusions are more carefully collected and reported for specifically defined populations and subgroups within populations, the assertion that faculty members are interested in teaching cannot be further clarified.

# The National Demographic Survey

In order to explore further the empirical finding that faculty
in higher education are interested in teaching, a consideration of
national statistical data is relevant. Descriptive statistical studies

of college and university faculty are neither new nor uncommon. example, the College Faculty Survey conducted by Dunham, Wright, and Chandler (1966) in 1962-1963 included census-type data on 10 percent of the faculty in universities and four-year colleges across the United States. More recently, three studies were conducted sampling a large number of faculty members and taking into account a broad range of both demographic and attitudinal variables. The 1969 Carnegie Commission study of college and university faculties, conducted by Alan Bayer (1970) and his associates, sampled those faculty teaching at least one degree-credit course during the 1968-1969 academic year at 303 institutions at all levels of higher education (including the University of Massachusetts/Amherst). A return rate of 60 percent resulted in a census-sized n of 60,028. A second sample was drawn from the same population by Bayer (1975) in 1972-1973 for the American Council of Education with a resulting n of 53,029. Sampling a similar population, Laid and Lipset (1975) recently completed a study of 3,536 respondents.

The following tables were designed to depict similarities among these three studies of responses relating to various aspects of attitude toward teaching. If similarities were found to exist among these three studies. one might argue that "reality" had been discovered. This assertion gains credibility as one considers the following.

- 1. Both the Carnegie (Bayer, 1970) and the ACE (Bayer, 1975) studies included populations in excess of 50,000.
- 2. All three surveys were conducted by different institutions, employing different sampling procedures, at different points in time.

3. The data collected indicated that the demographic make-up of the professoriate had remained unchanged since 1968 with the exception that the median age of respondents had increased slightly (see Table 4). This latter is a trend that current demographic data indicates will continue until the median age of faculty members reaches 48 by 1990, a sharp increase over the median age of 39 in 1979 (Cartter, 1966).

Table 4

Distributions of Faculty by Age
in Three National Studies

Age	1969 Carnegie	1973 ACE	1975 Ladd-Lipset
	%	%	%
Under 30	15	10	6
30-39	34	33	. 35
40-49	28	30	30
50-59	16	18	21
60 or older	7	9	8

Note. From Ladd and Lipset (1975).

Faculty respondents across the three studies indicated that they were interested in and involved with teaching to a somewhat greater degree than they were with research. As junior colleges, whose sole mission was one of teaching, were included in most of the reported statistics, this result was not particularly astonishing. When the results were considered for particular subgroups within the sample, approximately 65 percent of those university-level teachers sampled in 1969 and 55 percent of those sampled in 1975 reported that they were

more interested in teaching than in research. Approximately threefourths of both the 1969 and 1975 university-level respondents reported
a desire for teaching to be considered as a primary criteria for
promotion. By 1975 the percentage of the respondents expressing the
desire for the use of formal student evaluations of teaching substantially
increased. It would seem from a consideration of these three responses
alone that the majority of university faculty members were committed
to teaching and to its systematic evaluation for inclusion in personnel
decisions.

Additional data to support such a conclusion were tapped in various items of one or more of the studies. Several response patterns indicated that a large percentage of each sample was not only interested in and involved with teaching, but was enjoying it as well. Research demands appeared to be, for a large segment of those sampled, somewhat in conflict with the teaching function as can be observed in responses reported in Table 5. Considering the subgroup "university-level faculty," only 23 percent of the university teachers reported in 1973 that institutional demands for research interfered with effective teaching. However, 37 percent of these same faculty members had not published a single article, monograph, or book in the two years prior to the study (Bayer, 1975).

Faculty sampled in 1973 and 1975 placed a great deal of importance on their teaching function. Eighty percent of those sampled in 1973 reported that teaching was their major activity while 28 percent went even further to cite teaching as the single, most outstanding accomplishment in their careers. Ladd and Lipset, attempting to tap

Percentage of Respondents in Three National Studies
"Strongly Agree" or "Agree with Reservations"
with Specific Statements Concerning Teaching

Statement	1969 Carnegie	1973 ACE	1975 Ladd-Lipset
ىلر	%	%	%
Teaching effectiveness, not publications should be the primary criterion for promotion of faculty.	78	80	74
Faculty promotion should be based in part on formal student evaluation of their teachers.	59	69	73
Institutional demands for research interfere with teaching effectiveness.		81	71
In my department it is very difficult for a man to achieve tenure if he does not publish.	44	42	

this same information, asked faculty members to select the term-intellectual, scholar, scientist, professional, or teacher--that
described them most and least accurately. Table 6 indicates that
teacher was the title chosen more frequently than any other as the
most accurate descriptor as well as the one chosen least often as the
least accurate descriptor.

A general enjoyment of teaching was suggested not only by direct statement of interest, but also by high levels of career satisfaction.

Table 6

Professors' Choice of Most and Least Accurate
Role Descriptors by Percentage

Title	Most accurate descriptor	Least accurate descriptor
	<b>&gt;</b>	%
Intellectual	11	40
Scholar	12	15
Scientist	11	37
Professional	32	11
Teacher	44	5

Note. Totals may add to more than 100 percent due to some multiple responses.

Note. From Ladd and Lipset (April 19, 1976).

The vast majority of respondents in 1969 and 1975 indicated that they would choose the same career again given a second chance. Teaching was designated as a primary activity, a major accomplishment, and the title "teacher" was selected as the most accurate role descriptor for the majority of those sampled in the various studies concerned.

In summary, these three studies looked at together suggested that the typical American faculty member was not heavily committed to research and maintained an active interest in teaching in spite of prohibitive reward structures. The personal preferences of those academics sampled indicated that, contrary to the generalizations and nonempirical descriptions in the literature about faculty and their work, the normative attitude toward teaching was far more favorable than most observers would have predicted, a conclusion that was in

agreement with the findings of Parsons and Platt (1968), Fulton and Trow (1974), Wilson and Gaff (1975), and Sanford (1971) as discussed earlier in this chapter.

On the other hand, the three national surveys indicated a conflict between teaching and research functions for a large majority of each sample. However, the 1973 data considered for universities alone indicated that only 23 percent of those responding experienced similar conflicts. This lack of perceived conflict among university functions corresponds with the findings of Parsons and Platt (1968) for their higher institutional groups. The belief among university faculty that teaching and research were complementary activities made the fact that most professed an interest in teaching over research less surprising. In spite of an increasingly precarious financial situation and a tightening up of the job market, the American professoriate, since the student unrest of the late sixties, did not significantly lessen—or increase—its commitment to and interest in teaching.

# Faculty Attitudes: The University of Massachusetts

In 1974, the faculty members of the University of Massachusetts/
Amherst served as populations for two studies of faculty attitudes and roles. The conclusions drawn by the authors of these studies were consistent with the findings of the empirical studies here reviewed but inconsistent with the earlier observational and theoretical commentaries on the status of teaching. The present study was conceived of as a follow up to the 1974 studies. The author of the present study did not

attempt to replicate either of the studies, but instead, to probe several of the reported conclusions.

#### Daniel Sheehan, 1974

In an effort to determine the attitudes of faculty members on campus toward teaching improvement activities and teaching evaluation procedures, Daniel Shechan (1975) sent questionnaires to all full-time faculty members on the University of Massachusetts/Amherst campus. A low return rate resulted in an  $\underline{n}$  of approximately 400 or one-third of the population sampled and posed some problems in interpreting the collected information.

A large majority of those responding (86 percent) reported that they believed that students were qualified to evaluate their teaching and 75 percent agreed that teaching should be ranked above research and service for the purpose of promotion and tenure decisions. Only full professors ranked participation in professional societies as of primary importance in such decisions. Full professors, also, rated research as of secondary importance and placed teaching at the bottom of their lists. Sheehan concluded that "generally the higher the academic rank of the faculty member and the more teaching experience he possesses, the less interested he was in teaching and in the various aspects of teaching improvement" (1975, p. 77).

# Elizabeth Klemer Hruska, 1974

A second study of University of Massachusetts faculty members was conducted by Hruska (1975) during the same academic year in order to investigate the self-perceptions of faculty on a variety of instructional

roles used in the undergraduate classroom. A 52 percent return rate of a lengthy and somewhat complex questionnaire resulted in two findings of interest to the study at hand.

First, the respondents overwhelmingly reported that teaching was "extremely important" to them (73 percent). Only 36 percent reported that research was "extremely important" while 16 percent indicated the service role to be equally important. As these three percentages resulted from responses to three separate questions, no comparative value judgments were requested from the respondents on the relative importance of the three roles. Also, the term "importance" was given no operationalized definition so that the question of important for what reason remained unanswered.

Second, evidence emerged supporting the existence of various subgroups within the university population. Respondents were asked to rate thirteen possible roles of the teacher according to three dimensions: how much emphasis they actually gave to that role in their classroom teaching, how satisfying they found that role to be, and how well trained they felt to handle the role. Rank, discipline affiliation, and sex were all found to affect ratings. Female respondents were generally higher than males on the people-centered roles of "person," "learner," and "facilitator" across the dimensions of emphasis, satisfaction, and training. The role of "guide" was also highly rated across all three dimensions by female faculty members.

Senior and junior faculty members perceived of their roles somewhat differently as well. A large majority of full professors emphasized the role of "taskmaster" while only one-half of the associate and assistant

professors emphasized that same role. Satisfaction was significantly higher for full professors in the role of "example" than it was for others. Faculty of junior rank rated the role of "person" highest on all three dimensions. Emphasis and training dimensions were rated highly on the role of "learner" by these same junior faculty members.

Differences among various roles and role dimensions were also noted for faculty members in various disciplines. Faculty members in the humanities ranked the roles of "learner" higher on <a href="emphasis">emphasis</a> than did their colleagues in other disciplines. Natural science and mathematics faculty members <a href="emphasized">emphasized</a> the role of "information processor" more highly than did their colleagues while professional school faculty members <a href="emphasized">emphasized</a> the roles of "credentialing agent" and "authority figure."

# Generation of the Present Study

Unable to determine clearly the importance of teaching to faculty members at the University of Massachusetts/Amherst from the questionnaire data available in the Hruska study and spurred on by the discrepant conclusions reported in the literature in the field, the present author decided to probe more deeply into the attitudes of faculty members on campus toward teaching. How did they approach their teaching responsibilities? How did they perceive teaching to be rewarded? Did teachers in different disciplines or at different stages in their careers feel differently about the importance of teaching to their professional lives? Was teaching indeed "extremely important"

to a large number of faculty members on campus; and if so, for what reasons?

As suggested by the work of the researchers reviewed in this chapter, the exploration of the responses by various subgroups within the faculty population was of major importance in the definition and description of attitudes toward teaching. The author, therefore, concluded that for the present study, the population to be sampled was to be divided along the lines of discipline orientation and tenured status.

A review of the nonempirical literature suggested that faculty members were heavily interested in their research to the point of neglecting their teaching duties. On the other hand, both empirical studies of faculty and large scale demographic/attitudinal surveys found that faculty members were indeed interested in teaching, often more so than in research, that they did not wish to spend less time in teaching activities, and that they believed teaching should be awarded greater recognition in the making of personnel decisions. reason for the discrepancy in reported attitudes was the time frame of the various studies and reports. Few, if any, empirical studies of the professoriate were published prior to 1969. Of greater importance in affecting the results of empirical studies was a methodological By failing consistently to limit sample parameters and define subgroups within larger academic populations, researchers drew conclusions for multiple levels of higher education which might or might not have been accurate had only one level or one subgroup within a level been considered separately. For these reasons, the present study focused on a specific campus population as well as on subgroups within that population in order to determine, as accurately as possible, existing attitudes toward teaching.

#### CHAPTER III

#### METHODOLOGY

In order to examine more closely the perceptions of faculty members on the University of Massachusetts/Amherst campus concerning the importance of teaching, the author interviewed 40 faculty members randomly selected from among various ranks and departmental groupings. A structured depth interview with a relatively small sample was deemed most useful in an exploratory study such as this. It was hoped that the data collected in this manner would contribute to both a clarification of terminology related to college teaching and the generation of specific, operational hypotheses for future testing. For purposes of manageability and clarity, the study was limited to a single level of higher education—the university—and, furthermore, to a single campus—the University of Massachusetts at Amherst.

## Advantages and Disadvantages of the Depth Interview Approach

In the introduction to his masterful collection of interviews with the working people of America, Terkel (1972) explained his use of the interview method:

The question and answer technique may be of some value in determining detergents, toothpaste and deodorants, but not in the discovery of men and women. There were questions, of course, but they were casual. innate--in the beginning. (p. xxv)

The in-depth, semi-structured interview was selected as the major data collection instrument in the present study for the advantages such an approach offered for the exploration and clarification of attitudes over the traditional large sample, questionnaire survey approach. In the interview situation, according to Cook (1964), the respondent is encouraged to discuss "how he feels about the attitude object, how he behaves or would behave toward it, and how he believes it should be treated" (p. 40). The free-response format of the interview produces a depth and breadth of descriptive, attitudinal information, elicited through the probing of the interviewer, concerning those beliefs, feelings, opinions, and action-orientations on which an attitude is based.

Whereas multiple choice questionnaires presuppose and limit answers, the open-ended form of the interview allows for the elicitation of a full range of anticipated and unanticipated responses (3rown & Shukraft, 1971). In exploratory studies such as this one, the range of possible responses could not have been easily or accurately predetermined. Therefore, the interview format offered the greatest possibility for the discovery of new information on the attitudes of faculty members toward teaching.

The interview process has further advantages over the questionnaire survey in that both questions and responses can be immediately clarified. Questions can be restated and rephrased whenever the meaning is unclear to the respondent. Conversely, the interviewer is able through the use of probing and paraphrasing to assist the respondent in clarifying or expanding on vague or contradictory

responses. In addition, where the respondent is apprehensive, hostile, or initially hesitant to respond, the interviewer, through careful rephrasing, encouragement, and the use of silence, is often able to solicit the statement of full ideas. During the course of the interview, the respondent has recourse to reflection and recollection as well as to the spontaneous flow of ideas. The freedom to explore the respondent's thoughts is limited mainly by relevance, time, and the skill of the interviewer.

The extended interview situation can also be utilized to provide a high quality of collected information. For example, the direct response of the respondent to a specific question may be occasionally revised, altered, or changed during the course of the interview as the respondent offers additional information. By following up on such inconsistencies, the interviewer is able to assist the respondent in exploring and expressing his/her more privately held opinions while increasing the accuracy of the data collected.

A fifth advantage of the interview approach over the questionnaire survey approach is that the former provides for some limited measure of direct observation. The interviewer is able to observe the physical characteristics of both the respondents and their environments. Further, by tape recording the interview session, the interviewer can capture the tone of a response which can assist in the interpretation of the direct verbal response.

The personal nature of the interviewer and respondent's contact allows the researcher to acquire more of the respondent's time than

otherwise might have been possible. In the present study, many of the sample members chose to talk beyond the hour limit suggested by the researcher.

Finally, the interview approach provides two technical advantages over the questionnaire survey. The face-to-face approach guarantees a high participation rate as the only non-respondents are those who initially refuse to participate. In addition, the researcher is assured that the respondent is indeed a member of the chosen sample rather than an agent acting for the sample member.

The interview approach was deemed to be a particularly appropriate method for the study of faculty attitudes based on the experiences of Nevitt Sanford and his associates at the Wright Institute. After interviewing over 300 faculty members in a study of faculty culture, the researchers concluded that "an interview is an excellent procedure--probably the very best procedure--for stimulating faculty members to reflect on their own development and on their institutional situation" (Brown & Shukraft, 1971, p. 105). When asked to examine and clarify their values and attitudes towards teaching, the majority of faculty members interviewed by Sanford and his associates reported that the task was both beneficial and enjoyable. In A Handbook for Faculty Development, Bergquist and Phillips (1975) reported similar experiences with the faculty interview:

Given the self-definition of most faculty as members of specific disciplinary groups, the information that is produced by directing questions to them concerning their teaching and not their discipline can be insightful to both the professor and the interviewer. (p. 203)

Bergquist and Phillips suggested, as did Sanford, that the process of faculty self-discovery initiated in the interview session could be furthered by bringing interviewees into groups to snake experiences and summative results of the study (Bergquist & Phillips, 1975; Sanford, 1970). The researcher plans to offer similar "action research" sessions to those participants in the present study who indicate an interest during the spring semester of 1977.

In summary, the interview approach is a highly appropriate and useful tool for the exploration of faculty attitudes toward teaching. It provides numerous advantages over the questionnaire survey approach while generating data of the breadth and depth desired in exploratory research. In addition, faculty participants may benefit from taking part in the interview through broadened perspectives and expanded self-awareness.

On the other hand, certain problems inherent in the interview situation have the potential to distort or influence the accuracy of the data collected. Most obvious is the effect of the bias of the interviewer, which may or may not be perceived by the respondent, thereby influencing his/her responses. If the purpose of the study is made apparent to the respondent, s/he may control his/her responses in order to impress the listener or preserve his/her own self-image. Likewise, the expressive style of the respondent may lead him/her to agree or disagree out of hand with the interviewer.

Of particular concern to the study at hand was the association of the researcher with both the School of Education and the Center

for Instructional Resources and Improvement/Clinic to Improve University Teaching. Both of these associations could suggest that the interviewer was more than a casual proponent of improved university teaching. It was decided, however, that repressing this information would create difficulties that would be equally problematic. The researcher might not have gained access to the faculty member and might have been perceived more negatively had she misrepresented her situation and status. However, the position of the interviewer as one outside of the faculty member's discipline proved to be a benefit in the interview situation. Sanford (1971), too, found that certain advantages accrued when the interviewer was not perceived as a threatening or competive colleague:

In the conduct of the interviews the professor's confidence in the interviewer is most important. This rests most fundamentally on the latter's actual interest and compassion.

. . . Apart from these considerations, the interviewer who comes to the professor from outside the latter's department or school has certain distinct advantages: he is not a competitor, nor an authority; unlike the professor's colleagues and professional associates this interviewer is in no position, nor has he the inclination, to hold what the professor says against him. Moreover, the interviewer is there to talk about subjects in which the professor has deep interest but which he never has a chance to talk about, except possibly when he is at home with his spouse. (p. 367-8)

Also affected by the bias of the investigator is the analysis of the collected data, a task which often requires more time and preparation than the interviews themselves. Analysis of free response data has the potential to be heavily influenced or confused by the conscious or unconscious inferences made by the researcher during the coding of the interview.

Additional problems associated with the interview approach are related to the number of interviews conducted. Repetition of the key questions and answers may rapidly lead to some degree or boredom, fatigue, and inattention on the part of the interviewer when several interviews are conducted in close temporal proximity. Continual alertness is necessary in order to follow up on the leads, allusions, or hazy information offered by the respondent.

In addition, interviews demand both a considerable personal knowledge of the topic under discussion and an ability to refrain from offering too much information to the faculty member. McGee (1971) reported that in his interview experiences, the volunteering of personal information by the respondent invited reciprocity on the part of the interviewer—a temptation which, if succumbed to, could destroy the attained objectivity of the method.

These considerations strongly influenced both the author's planning of the interview schedule and the designing of a coding system. To offset some of the difficulties inherent in the interview technique as a data collection method, several steps suggested by Cook (1964) were taken. First, items not central to the attitudinal object were included in the interview schedule in order to encourage the faculty member to talk about him/herself and to expand the scope of the interview beyond the impersonal collection of data. Second, the interviewer attempted to make it easier for the faculty member to give "undesirable" answers: anonymity was assured; statements such as "people differ in their views" and "that is an opinion I have heard quite frequently" were utilized by the interviewer; efforts

were made to build rapport between the researcher and the respondent and to create the impression that the researcher would not disapprove of opinions expressed. At no point during the interview session did the researcher allude to her association with the Center for Instructional Resources and Improvement/Clinic to Improve University Teaching unless directly questioned. Third, some questions were phrased positively, others, negatively. Finally, whenever possible, interviews were scheduled in such a way as to reduce the possibility of fatique and inattention on the part of the interviewer.

# Sample Selection

The nature of the depth interview limited the size of the sample which could be surveyed. From among the 1242 full-time equivalent (FTE) faculty members on the University of Massachusetts/Amherst campus in the fall of 1975, the researcher randomly selected 40 participants according to two independent variables: disciplinary affiliation and tenured status.

Results of several studies reviewed in the preceding chapter (Brown & Shukraft, 1971; Caplow & McGee, 1961; Hruska, 1975; Wilson, L., 1971; Wilson, R. & Gaff, 1975) suggested the existence of fundamental differences among faculty members in various disciplines which extended beyond subject matter into values and ideologies. In updating his landmark study of <a href="The Academic Man">The Academic Man</a> (1942), Logan Wilson (1971) reported that "there are noticeable attitudinal differences between individuals in the humanistic studies and the physical sciences, the fine arts and engineering, education and medical fields,

and so on" (p. 199). Major studies on college and university faculties have thus stratified their samples on the basis of subject matter disciplines. For instance, four divisions of disciplinary affiliation were used by Wilson and Gaff (1975) in their two studies of the university professor and his/her impact on students. The author categorized departments on the Massachusetts campus into four divisions: humanities and fine arts, natural sciences and mathematics, social and behavioral sciences, and applied or professional studies.

Since tenured or nontenured status was also known to produce distinct subgroups within the population (Hruska, 1975; Sheehan, 1975), faculty members were further divided on the basis of their tenured status. For purposes of the present study, faculty members were considered to be tenured upon receipt of notification of such from the University's Board of Trustees.

A four-by-two sampling matrix and a chart of random numbers were used to draw a proportional random sample of 40 faculty members from a numbered and coded AAUP personnel list for the fall of 1975. Sixteen additional persons were drawn and designated as replacements.

Table 7 displays the frequencies associated with various levels of the independent variables in both the population and the sample.

Although sample selection was not made on the basis of sex, inspection of the resulting members indicates that the percentage of female faculty members in the sample closely approximated their percentage in the population as a whole.

Table 7

Comparative Statistics for the Population and Sample of Full Time Faculty Members at the University of Massachusetts/Amherst

Variable	Population		Sample	
	N	%	<u>n</u>	%
Total full time Faculty, fall 1975	1242		40	3
Tenured Status				
Tenured	846	68	27 '	68.5
Nontenured	396	32	13	32.5
Sex				
Male	1050	84.5	33	82.5
Female	192	15.5	7	17.5
Disciplinary affiliation				
Humanities	334	28	11	27.5
Natural Sciences and Mathematics	243.5	21	8	20
Social and Behavioral Sciences	156.5	13	6	15
Professional Studies	453.5	38	15	27.5

Note. Frequencies are taken from fall 1975 report by AAUP on average faculty workloads.

Note. No AAUP data was available from the Official Bureau of Institutional Statistics. The unpublished Faculty Activity Analysis: Trends and Recommendations, August, 1976, provided figures for discipline affiliation (N=1187.5) for the fiscal year, 1976.

# Data Collection and Instrumentation

Data for the study were collected in two major ways. After being initially contacted by telephone, sample members completed a brief background questionnaire and then later participated in an hour-long interview with the researcher.

#### Initial Contact

Faculty members randomly selected from the University of Massachusetts population were initially contacted by telephone in March and early April of 1976 concerning their willingness to participate in a study of teaching on the University campus. The author identified herself as a doctoral candidate in the School of Education and briefly explained the purposes and processes of the proposed study. A maximum time commitment of two hours per respondent over the course of the remainder of the semester or summer session was requested for the completing of the questionnaire and the interview. Faculty members were assured that all data would be treated confidentially and reported anonymously for the purposes of the dissertation. Of the original 40 faculty members contacted, only three refused categorically to participate due to a lack of time or interest. These persons were replaced with alternates drawn from the appropriate sample cells. Replacements were also used in those nine cases where initial calls indicated that professors were on sabbatical.

Telephone contact proved to be the greatest hurdle in the data collection process. Many faculty members in the humanities and social sciences had no personal telephones and no access to departmental

phones. Some calls were eventually made to home phones in order to expedite this phase of the process.

#### Questionnaire

Following his or her initial agreement to participate, the faculty member received a questionnaire designed to solicit background information, to collect specific descriptors of personal perceptions concerning teaching evaluation and improvement, and to establish an environment for the ensuing interview by prompting the respondent to consider some of the issues to be discussed in the session. In addition to responding to specific items concerning educational training, teaching experience, and teaching evaluation, faculty members were asked to describe briefly those teaching-related issues on campus which gave them the greatest cause for concern. A final item on the questionnaire asked the respondent to set a place, date, and time for the interview. See Appendix A for a copy of the questionnaire.

In addition to the eleven-item questionnaire, each participant received a letter outlining the purposes and plan of the study (Appendix B) and a stamped, addressed envelope for the return of the questionnaire. Nine of the original 40 who had agreed to participate did not return the questionnaires by the end of the spring semester, 1976. These nine were again contacted by telephone during the summer and all but one (who was interviewed anyway) finally returned the questionnaire by late August, 1976.

#### The Depth Interview

The interview schedule consisted of thirty open-ended questions in six topical areas--career choice, teaching approach, teaching effectiveness, teaching evaluation, career satisfaction, and teaching improvement--designed to elicit extensive rather than simple responses.

These questions are listed in Appendix C. Some questions called for reports of behavior; others, for the direct expression of opinion.

All were carefully focused on the individual, as opposed to the general, case. Questions were planned but wording and sequence flowed from the exchange itself. Banaka's (1971) processes for the planning, conducting, and coding of interview situations contributed to the formulation of the interview schedule. Other questions were suggested by the work of Nevitt Sanford at the Wright Institute (Brown & Shukraft 1971), a national survey conducted by Ladd and Lipset (1971a), and the author's own experiences in working with faculty through the Clinic to Improve University Teaching.

In many cases, respondents needed no prompting. They answered questions in the normal flow of conversation or before they were asked, during the elaboration of another answer. The result was that although answers were almost always elicited to those fifteen questions designated as central to a determination of attitude (see Table 8), all questions were not asked in all interviews. It was felt that the free flow of opinion guided by the interviewer was more productive for the purposes of the present study than a rigorous adherence to an inflexible schedule of questions.

#### Table 8

# Scheduled Interview Questions Categorized According to Topical Areas

- I. Career choice and preparation
  - 1. When did you decide to pursue an academic career?
  - 2. How did you come to choose an academic career?
- II. Philosophy and teaching approach
  - 3. What is your philosophy of teaching?
  - 4. What do you most hope that students accomplish in your courses?
- III. Self-perception of teaching effectiveness
  - 5. What do you consider to be your greatest strength as a teacher?
  - 6. How do you determine when your teaching is most effective?
  - 7. Do you agree with the statement that "No one can be a good teacher unless s/he is actively involved in research"? Answer in terms of your own experience.
  - 8. Are you actively involved in research and/or publication at this point in your career?
- IV. The status of teaching
  - 9. What relative importance do you perceive teaching and research to have as criteria for personnel decisions in your department?
- V. Career satisfaction
  - 10. What do you enjoy most about being a faculty member?
  - 11. What are your frustrations or concerns as a teacher on this campus?
  - 12. On those days when you no longer want to teach, do you consider other careers?
  - 13. For what reasons?
- VI. The improvement of teaching
  - 14. Could you suggest ways in which the university could better support teaching on this campus?
  - 15. When you work to improve a course, what type of changes do you usually make?

Interviewing began on March 30, 1976, and continued during the remainder of the semester. A few interviews were scheduled after the semester ended and during the summer session.

#### A Pilot Test of Materials and Methods

A pilot test of materials and methods was conducted in March, 1976, in order to (1) refine the interview format, (2) test the utility of tape recording the interview sessions, and (3) determine the usefulness of the pre-interview questionnaire. Four faculty members were selected from among the alternates drawn in the original sampling process for participation in the pilot testing. Testing proceeded in three phases; the testing of the questionnaire/interview methodology with two respondents, the revision of the interview schedule and implementation of the questionnaire and interview cycle with two additional respondents, and the further revision of the final questionnaire form.

During the first two stages of the pilot, the questionnaire was held constant. However, the interview schedule was revised after the prince two interviews in order to increase the individual focus of the questions, to eliminate areas better covered in a questionnaire format, and to provide a variety of wordings for each question.

However, major topics included in the schedule remained basically unchanged. Questions were reorganized to reflect more clearly the major objectives of the study and to provide a more natural flow of conversation. The interviews conducted using the revised interview schedule were found to prompt more personal and specific responses on the part of the respondents.

In three out of four pilot interviews, the tape recorder proved to be an invaluable aid. Faculty members agreed to be recorded and demonstrated no apparent awareness of the device. The interviewer found herself freer to follow the course of the exchange, to probe allusions and unclear responses, and to interact with the respondent than she had in the one interview which had not been taped and which had therefore required extensive notetaking.

As a result of the four completed interviews, major changes were made in the questionnaire. More personal and specific items were added to generate interest and forethought on the part of the faculty participants prior to the interview. Additional items were generated to provide more supplementary background data that would be useful in the interview situation. In a final step of pilot testing, the revised questionnaire was field tested with three faculty members for clarity of statement, format, consistency of response categories, and amount of time required for completion. Further revisions were made based on the feedback thus obtained before the final version was sent to faculty participants.

The design and utilization of an observation sheet and a coding system were explored during the piloting of materials and methods.

The observation sheet was adapted from a form used by Caplow and McGee (1961) for recording both the receptivity of the respondent during the interview session and the yield of the interview in terms of items covered and information offered. This format, as designed for use in the present study, also included a space for the recording of observations concerning the appearance, environment, and mannerisms

of the respondent. Second, a coding system for the content analysis of the interviews was drafted based on a form utilized by Caplow and McGee as well. Trial use of these two forms in the pilot test interviews indicated their workability for the analysis of interview data.

In summary, the pilot of the study involved the interviewing of four faculty members, the revision of the pre-interview questionnaire, and the design of a data collection and a tentative data analysis instrument. Major changes were made in the context of the questionnaire as a result of the four interviews but changes in the interview schedule were organizational only.

#### Data Analysis

The success or failure of any research study, according to Crittenden (1971), rests on how successfully symbolic phenomena can be converted into scientific data that can be treated quantitatively. Raw interview data collected in the present study were codified by categorizing the free response answers into a fixed, alternative-response format for statistical analysis. To compensate for the effect of categorizing free response data into fixed categories, the researcher also analyzed the interview responses thematically and selected extensive examples, specific cases, quotes, or situations to illustrate conclusions suggested by the more formalized coding results.

# Designing the Coding System

The designing of the coding system consisted of five activities as suggested by Crittenden (1971): (1) specification of the size of the coding unit to be used in determining responses; (2) the generation of a set of possible response categories for each question; (3) the assigning of a set of code designations; (4) the designation of a set of rules for assigning data to categories; and (5) the listing of examples for each category to assist in the assigning of data to appropriate categories. These activities were initially undertaken as a part of the pilot study but were expanded on and refined after all 40 interviews had been completed.

After listening to the tapes of the pilot interviews, the researcher decided on the most appropriate coding unit for the type of data collected. Typically, the answer to a specific question is considered as the coding unit. However, due to the free-flow nature of many of the interviews, answers were frequently provided without a question having been asked or during the answering of a different question. Therefore, the researcher decided to consider the entire interview as the coding unit in order to provide for the clarification of specific responses and the inclusion of responses offered to unasked questions. Some objectivity was lost by expanding the coding unit. This loss was offset by the increased accuracy of the data thus obtained.

Those interview questions not directly related to attitude vertical toward teaching were excluded from consideration in the data analysis stage of the study. For the purposes of content analysis, only the

15 key questions listed in Table 10 were coded. (Those questions which had been included to promote rapport, provide general descriptive information, probe proffered responses, and expand the focus of the interview were not coded.) The identification of key questions and their sorting into broader topical areas had been performed based on the suggestion of Rokeach (1969) that individual beliefs combine around a specific object (here, teaching) within a situation (here, the topical area) to form a pattern of personal and interactive behavior designated as an attitude.

For each one of the 15 questions, appropriate alternative response categories were then constructed. By considering the various responses of a randomly selected group of respondents and her own experiences during the interviews themselves, the researcher generated a preliminary list of possible nominal response categories from examples at hand. These categories were then reviewed, evaluated, and improved upon according to the logical criteria for nominal scales offered by Crittenden (1971): (1) a set of categories must be derived from a single principle of classification; (2) a set of categories must consist of mutually exclusive and exhaustive alternatives; (3) each category within a set must be operationalized; and (4) the coding categories must fit the data.

The complete listing of all possible alternatives within a set was impossible given the nature of the data. The researcher, therefore, utilized "other" and "no response" categories in order to cover all possible answers. In so doing, she violated the concept of single-principle classification. The advantages of utilizing residual

categories outweighed the disadvantages of violating the singleprinciple criterion due to the exploratory nature of the study and the nature of the free-response data.

A second difficulty encountered in the design of categories within a set was the problem of mutual exclusiveness. In order to quantitatively analyze the coded data only one response per question could be allowed. Faculty members had occasionally offered more than one response to a given question. The researcher dealt with this problem in two ways. On those questions where it was important to distinguish trivial from significant responses, the coder was instructed to select the "primary," "most important," or "first mentioned" response. By introducing the necessity of inference on the part of the coder, the chance of a coding error being made was increased. Where multiple responses to a given question were of primary interest, the coder was asked merely to indicate whether a particular response category had been mentioned or not. Greater objectivity was thereby retained at the loss of qualitative differentiation.

Before the final testing of the coding instrument, numbers were passigned to the response categories and examples of direct quotations. listed for each category (coding suggestions) to further operationalize response categories within a set. Directions were also written for the use of the system. Appendix D contains a copy of the complete instrument.

### Testing for Inter-Rater Agreement

In order to test the logical and objective nature of the coding instrument, the percentage of inter-rater agreement for each question was calculated on four interviews. The researcher selected a graduate student with experience in working with faculty members using the Clinic to Improve University Teaching process for teaching improvement to serve as an independent coder. To train the coder in using the coding instrument, the researcher first explained the nature of the research, the criteria for coding categories, the coding suggestions, and the coding directions. Ambiguities in categories or coding suggestions were clarified and a few changes made in the instrument. One interview was coded simultaneously by the researcher and the coder and results discussed. The number of judgments  $\vee$ identically made divided by the entire number of judgments made produced an observed agreement of 93 percent. This result was high enough to allow the investigator and coder to proceed with more extensive reliability testing.

researcher and the trained coder in order to determine for each question coded the reliability of the content analysis system.

Scott's pi (") was utilized as a coefficient to provide the ratio of the "actual difference between obtained and chance agreement to the maximum difference between obtained and chance agreement"

(Scott, 1955, p. 323), i.e., the extent to which obtained agreement exceeded chance. Table 9 indicates that for the four interviews coded by the researcher and the coder, Scott's pi ranged from 1.0 to

Table 9 Inter-Coder Reliability as Measured by Scott's pi  $(\tilde{n})$  for Each of the 15 Coded Interview Questions

Question	Observed Agreement	Expected Agreement	Scott's pi (%)
When did you decide to pursue an academic career? (1)	1.00	.26	1.00
What is your philosophy of teaching? (3)	1.00	.37	1.00
What do you most hope that students accomplish in your courses? (4)	1.00	.36	1.00
When you work to improve a course, what type of changes do you make? (15)	1.00	.26	1.00
How do you determine when your teaching is most effective? (6)	.94	.46	.89
Could you suggest ways in which the university could better support teaching? (14)	h .93	. 50	.86
How did you come to choose an academic career? (2)	.88	.21	.85
For what reasons do you consider another career? (13	.88	.27	.84
What do you consider to be you greatest strength as a teacher? (5)		.17	.75
Do you agree with the statemen "No one can be a good teache unless actively involved in research"? (7)		.32	.75
Are you actively involved in	.88	.57	.72
research? (8)  Do you consider other careers?	.80	.28	.72
(12) What do you enjoy most about	.89	.69	.68
being a faculty member? (10) What relative importance do you perceive teaching and resear to have ? (9)	ou .71	.28	.60
What are your frustrations or concerns as a teacher on the campus? (11)	.75 is	.50	.50

Note. Numbers in parentheses indicate the question number as shown in Table 8.

.50 with 12 out of the 15 values falling above .70. Question number 15 achieved a pi of only .50 due to the broad nature of the question, the poor construction of the response categories, and the position of the question in the interview itself, generally last. In addition, information pertinent to this question was located throughout the interview, making the collection and coding of that information more difficult than usual in a question and answer format.

### Summarizing the Interviews

In an attempt to apprehend recurrent themes in the interviews and to provide a check on the accuracy of the initial coding task, a second coding task was performed on 20 of the interviews by Dr. Elizabeth Hruska, Assistant Director for Improvement, Center for Instructional Resources and Improvement. After listening to each interview tape, Dr. Hruska responded to five general questions concerning her perceptions of the respondent's attitude toward teaching:

- (1) A faculty member's time is divided between teaching, research and service. To which of these activities do you perceive that this person is most committed? Why?
- (2) How do you think s/he feels about students, both undergraduates and graduates?
- (3) Could you isolate any obstacles that this person might face in being an effective teacher?
- (4) Do you feel that this person is basically satisfied with his/ her role as a teacher on this campus?

(5) What key concerns about his/her faculty position did this person stress? Is s/he basically satisfied with his/her choice of an academic career?

The results of this summarizing process were used in two ways.

First, the researcher sorted those persons perceived as primarily committed to research and those primarily committed to teaching for a comparison of their responses to specific interview questions. It was postulated that some differences between the two groups would be found. Second, the researcher utilized the summary sheets to identify and locate recurrent themes and the direct statement of attitudes related to teaching.

#### Reporting the Results

After completing the two coding tasks described above, the researcher calculated the frequencies and relative frequencies for each of the response options to the interview and questionnaire items.

Next, contingency tables were prepared in order to examine the relationship between levels of the independent variables and the coded responses. Finally, where associations between pairs of responses were predicted by a review of earlier research or suggested by the experiences of the researcher, pairs of questions were cross-tabulated. The n of the sample was judged to be too small to allow for the statistical analysis beyond the descriptive level. Rather, where the inspection of contingency tables suggested a moderate degree of association between the levels of two variables, the investigator postulated hypotheses for future study.

In summary, preparations for data analysis included the following activities: (a) the tape recording of 40 interviews; (b) the designation of the appropriate coding unit as the entire interview; (c) the formulation of alternative response categories and operational suggestions for the content analysis of the interview questions; (d) the testing of the interview coding instrument for inter-coder agreement with ten percent of the interviews; (e) the item by item coding of the remaining 36 interviews by the researcher alone; (f) the thematic analysis of 50 percent of the interviews by a Center staff member; (g) the development of contingency tables for the examination of coded responses in relation to the independent variables, questionnaire responses, and paired questions; and (h) the transcription of extensive quotations and examples from the interview tapes. Once each task had been performed, the researcher grouped the results, combining statistical and thematic data with directly quoted passages and examples to underline trends and to draw conclusions concerning the attitudes of faculty members on the University of Massachusetts/Amherst campus toward teaching.

#### CHAPTERIV

#### DATA ANALYSIS

For the purposes of the present exploratory study of faculty attitudes toward teaching, personal statements of attitude and opinion on a variety of teaching related issues were collected from the sample members. Although the author made particular note of direct statements of attitude toward teaching throughout the conducting and coding of the interviews, no questions were designed specifically to solicit such statements on the assumption that by examining a number of facets of a single issue, a more exact reading of attitude might be obtained than by directly asking for a single statement of that attitude.

Data generated in the present study provided information on a variety of activities, events, and beliefs determined by the researcher to be central to the teaching function of a university faculty member. Five key areas of focus were suggested by the review of empirical studies in the field and a logical analysis of both questionnaire and interview items: (a) career choice and preparation; (b) philosophy and teaching approach; (c) self-assessment of teaching effectiveness: (d) the status of teaching--informal and formal rewards; and (e) career satisfaction. Although a sixth area, instructional improvement, was explored in both the interview and questionnaire, results are omitted from the present discussion. This limitation was necessary due to the extensiveness of the data collected, the

extraneous nature of some of the responses offered in the open-ended interview situation, and the limited nature of the present study.

Instructional improvement data will be analyzed and reported for decision-making purposes to the Center for Instructional Resources and Improvement at the University of Massachusetts/Amherst.

Data analysis in this chapter begins with an examination of those items related to career choice in which respondents were asked to describe when, how, and with what preparation they had entered the academic profession. Second, responses concerning rationale for and approach to classroom teaching are discussed. The lack of direct observational data with which to corroborate the self-report data obtained in the interviews, however, limits the accuracy of the reported results. Third, faculty perceptions of their own teaching effectiveness are presented. Respondents reported on their strengths as teachers, their methods for assessing their own effectiveness, and their opinions concerning the necessity of active research involvement for effective teaching. The fourth topical area to be analyzed focuses on the status of teaching, how professors perceive teaching to be evaluated and rewarded within the decision-making systems of their own departments. Finally, career satisfaction is considered with a focus on both positive and negative aspects of being a faculty member at the University of Massachusetts/Amherst.

In each of these areas, response frequencies, relative frequencies, direct quotations, and case study vignettes are combined to present trends and variations within the data. Results for the sample as a whole are examined first, followed by comparisons of

results as the various criterion variables are considered. Tenured status and disciplinary affiliation are the independent variables manipulated in these comparisons. However, where possible correlations are suspected due to previous research or experience, the relationships between responses to pairs of questions are also considered.

Of particular interest are those areas in which a strong relationship was found to exist between interview responses and questionnaire item number six which read, "At present, how do you find your interests divided between your responsibilities as a teacher and as a researcher/publisher?" This item was included in order to obtain a reading on the interest/orientation of the respondent as well as to provide data which could be used for comparison with national results on a similar item.

No faculty members in the present sample selected as a response the category "heavily interested in teaching" while only two persons—both scientists—selected the category "heavily interested in research" as the most accurate descriptor of their interests. However, only 20 percent of the sample expressed an interest in teaching greater than that in research. Of those university faculty sampled by Bayer (1970) and Ladd and Lipset (1976), well over half rated their interests as leaning toward teaching (see Table 6). The interest of University of Massachusetts/Amherst faculty members in teaching fell far below these national figures but a full comparison of results is difficult due to the use of the equal interest category in the present study and the inclusion of all levels of higher education faculty in the national study.

Table 10

Preference for Teaching or Research Compared by Percentage for Faculty Subgroups

Variable	Research	No preference	Teaching
	%	%	%
Total sample	38	40	20
Disciplinary affiliation			
Humanities	36	36	18
Mathematics & Science	38	62	0
Social & Behavioral Sciences	50	33	17
Professional Studies	33	33	33
Tenured status			
Tenured	41	33	22
Nontenured	31	54	15
Sex			
Male	39	33	24
Female	29	71	0

 $\underline{\underline{\text{Note}}}$ . Where row percentages do not add to 100, responses are missing.

To conclude the present chapter, trends within each topical area are compared and contrasted with the results of those empirical studies reviewed in Chapter II. Throughout, the author examines the conflicting profiles of the faculty members and the profession as they emerged from the nonempirical and empirical studies in light of the trends suggested here.

#### Career Choice and Preparation

I chose an academic career the usual way. You get interested in a subject while you're a student. You end up being a graduate student in it. Then you get a Ph.D. Then you want to make a living and so what do you do with a Ph.D. in your subject? You start teaching. You fall into it. (Humanities)

university faculty members in "the usual way," without training, planning, experience in, or preparation for the teaching function of their careers, 75 percent of the present sample did not come so unprepared and unexpectedly into university teaching. Three questions were asked of the respondents in order to determine the manner in which they had chosen an academic career and their preparation for the teaching aspect of that career. In addition, respondents were asked on the questionnaire to delineate those academic, work, or personal experiences which had contributed most to their current effectiveness as teachers.

# When did you decide to pursue an academic career?

Almost half of the sample reported that they had made a conscious decision to pursue an academic career sometime during our

in the humanities were twice as likely as those in the professional fields to have made such a decision. Given the limited nature of possible career choices, it is not surprising that persons in the humanities immediately followed degree completion with the choice of an academic career. One-fourth of the present sample came to the academic career after experience in another field such as journalism, the ministry, or industrial research. These persons tended to be social science or mathematics and science faculty and to express a preference for teaching over research functions. The need for the professional status obtained through publication may be somewhat less for these faculty who come to academia after having gained some measure of professional identity through work in another career.

Less than a fourth of the sample reported that they had decided early in their education, prior to entering graduate school, to seek out an academic career. These persons described themselves as having always wanted to be teachers, although not necessarily at the university level.

I just always thought I would teach school since the time when I was in the sixth grade. I didn't care what I taught.
... I think I was also clear that I didn't particularly want to teach at elementary or secondary schools. I always wanted to teach at the college of university level.

(Social and Behavioral Science)

As an undergraduate I really liked academia. I really liked those people standing up there called teachers and I really liked those people called students. At that time I saw a very definite separation of roles and I decided this is how I want to spend my life. (Social and Behavioral Science)

I was interested in people so I thought perhaps that one way to get the best of both worlds was to pursue science and yet teach it so that I might meet people. To be just a scientist might be sort of esoteric and not too satisfying. (Mathematics and Science)

Other faculty members who had made the decision to enter university teaching early in their lives had pursued the career with no real interest in its teaching aspects.

I always thought I would like the academic career. I enjoyed research. I was less familiar with the teaching function. (Professional Studies)

I don't know when the decision manifested itself, I think while I was an undergraduate. I had decided that I would teach in a university mainly because I wanted to go on and get a master's and a Ph.D. and that's the only thing you can do with those degrees. (Social and Behavioral Science)

#### How did you choose the academic career?

Respondents offered four major reasons for selecting an academic career as can be seen in Table 11: (a) happenstance; (b) a desire to continue work in a specific discipline; (c) a desire to work with young people; and (d) the influence of an academic family.

Of those responding to the question, slightly over one-third reported that, like the person quoted earlier, they had fallen into the career serendipitously, by happenstance, without a conscious decision or clear cut rationale.

We don't make the major decisions of our life rationally. (Humanities)

I don't remember making a conscious career decision.
(Humanities)

I got into it as I suspect many people do--semi-consciously. (Humanities)

Table 11

Reasons Cited by Faculty in Various Disciplines for Choosing an Academic Career by Percentage (N=34)

	Humanities	Mathematics & Science	Social & Behavioral Studies	Professional Studies	Mean
Reasons	%	%	%	%	%
Allegiance to discipline	10	38	50	, 40	32
Desire to work with college age students	20	0	17	0	9
Influence of the family	10	13	0	10	9
Happenstance	60	38	17	30	38
Other <sup>a</sup>	0	13	17	20	12

<sup>a</sup>Other responses included the influence of a particular teacher, a desire for the benefits of an academic life, the development of an "academic frame of mind," and a desire to "find a basis for social action."

Other accidental reasons offered included unsolicted job offers or a "process of elimination."

I happened onto it. There were no other jobs anywhere else in my field. (Professional Studies)

When I finished the Ph.D. there was nothing else to do. (Humanities)

One thing led to another. (Professional Studies)

Faculty in the humanities were most likely to describe their choice as accidental as were those persons describing their interests as teaching oriented.

Slightly under one third of those responding reported that their career choice had been heavily influenced by a strong allegiance to a discipline or a "desire to stay in the forefront of the accumulation and transmission of knowledge" in their particular field. Others more directly reported being influenced by a desire to finance research and scholarly pursuits: "I found that the academic atmosphere was the most unfettered arena for pursuing what I was interested in—research."

Persons in the social sciences were the most likely to have chosen academia for discipline—oriented reasons as were persons who described their interests as leaning toward research. Female faculty members were more prone to give disciplinary reasons than were men for their career choices reflecting, perhaps, the need for women to consciously select and pursue a career that has traditionally been a male—dominated one.

# As a graduate student, did you have any training in instructional methods or skills?

As Table 12 indicates, 40 percent of those faculty members sampled reported that they had received no training in instructional methods although several of these same persons also mentioned some experience as a graduate teaching assistant. The assumption was made by the researcher that such assistantships did not constitute training for those respondents who also selected the response category of "no training." Faculty members in the humanities were more likely than

Table 12

Percentage of Faculty Having Various Levels of Pedagogical Training as Graduate Students

Level of Pedagogical training

	No training		Formal instruction with or without TA		
Variable	%	%	%		
Total sample	40	38	20		
Disciplinary affiliati	on				
Humanities	55	27	9		
Mathematics & Science	38	63	0		
Social & Behavioral Science	17	33	50		
Professional Studies	3 40	33	. 27		
Sex					
Male	39	39	18		
Female	43	29	29		
Interest preference					
Research	67	20	13		
Teaching	25	50	25		
Instructional philosophy <sup>a</sup>					
Content centered	62	19	19		
Instructor centered	39	50	6		
Student centered	0	33	67		

<sup>&</sup>lt;sup>a</sup>Table 13 indicated the percentage of faculty describing their philosophy of teaching in each of these three ways.

those in other fields to respond in the category of "no training" as were those persons who described their interests as leaning toward research. Several comments offered during the interviews underscored the lack of emphasis placed by faculty members on training in the area of teaching.

I never prepped myself to be a teacher, never devoted any attention to developing classroom skills. (Humanities)

I have no theory of pedagogy. I've never been trained as a teacher. My graduate work involved no student teaching whatsoever. I had the opportunity to student teach and I told them that I didn't really want to practice at \$4000 or \$2000 a year. I'd rather try it full time. So really up until the last few years, I'd never really given must thought to pedagogy. Teaching, as far as I was concerned, was a matter of going in, talking about the material at hand, talking about some of the issues that I could see in it, and some of the issues that the students could see in it. (Humanities)

There is no evidence in my experience that training in teaching in my field has been helpful. (Humanities)

The thing that has always struck me funny about college teaching is that if you want to teach in grammar school or secondary level, you have to get all sorts of certification, take all sorts of courses in teaching before you can teach. But if you want to teach at the university level, all you have to have is a degree. (Professional Studies)

I don't particularly believe in pedagogy courses and courses where you talk about how to teach. To me it's a thing that comes naturally and may be completely different with you than with the next person who comes in. Fortunately, I seem to have been able to succeed that way. If someone asked me to write a book about how I teach, I don't think I would be able to do it. I just do whatever I feel needs to be done with that particular student. (Humanities)

On the other hand, 20 percent of the respondents had participated in formal training as graduate students in preparation for their roles as university teachers. An additional 38 percent indicated experience as teaching assistants which they described as supervised. Taken

together, these two groups constituted the majority of those persons sampled.

Of those persons whose philosophy of instruction could best be described as student centered, no one selected the "no training" response. Two-thirds of those using a student centered teaching style had participated in instructional seminars and the remaining third had served as teaching assistants in a supervised setting. Since 100 percent of the student-oriented group had participated in either formal or experiential training, an association is suggested between teaching approach and graduate training in teaching, which may, in turn, suggest an early interest in students or teaching on the part of these faculty members.

#### Have you had any teaching experience in any other educational setting?

Assuming that, in most cases, to teach at the elementary or secondary levels one must complete degree requirements in education, previous experience at these lower levels could be considered tantamount to instructional training. One-third of the sample reported such experience. When those persons who received no training as graduate students but did teach in lower schools were summed, 35 percent of the sample might be presumed to have taken courses or seminars in instructional skills. The applicability to university teaching situations of undergraduate education courses designed to prepare the student to teach at lower educational levels might be called into question. One faculty member, however, reported that she "found it very useful to carry over techniques to college teaching," emphasizing in particular the systematic nature of instruction at all levels.

No teaching experience prior to entering university teaching was reported by 47 percent of the faculty members sampled, although six of these 19 persons had worked as graduate teaching assistants.

Scientists and mathematicians were the most likely to have taught at other levels of education, and social scientists were the least likely. However, one-half of this latter group had received graduate training as teachers. Those with no training and no experience were most frequently found among the humanities faculty.

In all, only 23 percent of those sampled came to university teaching in the "usual way" with no prior teaching experience, no teaching assistantship experience, and no formal training. At the other end of the spectrum, only 20 percent of those sampled came to university teaching with courses or seminars as graduate students to prepare them specifically for the college teaching function. The remaining 57 percent of the sample either served as graduate teaching assistants in supervised settings or taught at other levels of education before coming to the university. The question remains: how adequate is teaching experience alone in preparing faculty members to teach?

## What previous academic, work, or personal experience has contributed most to your current effectiveness as a teacher?

When asked to describe a key influence in their lives on the quality of their teaching, faculty members responded in a wide variety of manners. Thirteen of the 40 respondents mentioned the impact of work experiences in fields other than teaching. The next most frequently mentioned response was the impact of studies undertaken

as undergraduate or graduate students. Other influences listed by
five or more of the respondents included: (a) teachers I have had;
(b) training in instructional skills; (c) continuing research and
study; and (d) years of teaching experience. Five persons indicated
that they had no idea what experiences had most affected their teaching
effectiveness.

It has been postulated that faculty members teach in the manner in which they were taught. If this is so, one would expect a larger percentage of the responses elicited by this question to focus on the teaching experienced during their careers as students. This, however, was not the case. Only seven persons directly mentioned the impact of teachers which they had experienced as students.

In summary, only 23 percent of the faculty members sampled came into teaching at the university level in "the usual way," although approximately one-half made the decision to pursue an academic career during or immediately following the completion of graduate studies, and almost two-thirds reported that they had selected the career by accident or by pursuing graduate studies with no real goal other than interest. Sixty-five percent reported no formal training for teaching at any level, and 47 percent reported no other teaching experience prior to becoming a college or university teacher. However, all of these traits were not reposited in one person as a review of earlier literature concerning the faculty member suggested. Slightly over one-half of the respondents in the present study had experienced some level of teaching experience prior to becoming university teachers, and when supervised experience as a graduate teaching

teaching at the university level with prior teaching experience or graduate level instruction in pedagogy. Presuming that persons who had taught in elementary or secondary schools had been trained as undergraduates to teach, slightly over one-third of the faculty members sampled had received formal training as either graduates and/or undergraduates in instructional methods, skills, or other formal educational issues. This percentage is somewhat higher than might have been expected from a reading of the literature.

#### Philosophy and Teaching Approach

I'm a great devotee of the lecture approach. I grew up with that. Most of my undergraduate training was through lectures and graduate work was often through large lectures. I do like discussions but I am not always convinced that they are the total answer to teaching. (Humanities)

embrace a particular approach to teaching based on "a rather uncritical modeling of their own mentors or as a result of their perception of the criteria by which senior members of the department or college define the appropriateness of specific instructional roles" (p. 9). In order to examine the approaches to teaching described by members of the University of Massachusetts sample and the philosophies behind those approaches, the researcher included two key questions in the interview session with each faculty member: (a) what is your philosophy of teaching, that is to say, how do you believe students learn and what is your role in that learning?; and (b) what do you most hope that students accomplish in your courses?

#### What is your philosophy of teaching?

By asking for details on activities in the classroom, for assumptions about how students learn, and beliefs about necessary roles for the teacher, the researcher was able to categorize the faculty responses offered to this question according to a threefold division synthesized from the work of Axelrod (1973), Mann (1970), and Adelson (1962) by Bergquist and Phillips (1975). The three categories combine information on teaching approach, student activity, and environmental factors to delineate three philosophies of teaching: content centered, instructor centered, and student centered. A full description of each of these approaches can be found in Appendix E. Table 13 depicts the percentage of responses coded into each of these three categories and examines patterns of responses by disciplinary affiliation and sex.

The student-centered mode places the instructor at the periphery of the teaching/learning process where s/he acts as an organizer, facilitator, and resource person. Students are actively involved in setting course objectives, seeking out resources and information on their own, group discussions, role playing, experiential learning, and other cooperative and individual projects. Assessment is based on learning contracts, independent or group projects, and field work.

The student-centered philosophy emphasizes the individual needs of the student and actively involves him/her in both the planning and implementing of course objectives. Only 15 percent of the sample described their basic approach to teaching as student oriented. Two types of comments characterized teachers whose responses were coded in this category. First, such faculty members described a reliance on

Table 13

Instructional Philosophies Compared by Percentage for Faculty Subgroups

Variable	Content centered	Instructor centered	Student Centered
	%	%	%
Total sample	40	45	15
Disciplinary affiliation			
Humanities	0	82	18
Mathematics & Science	50	50	0
Social & Behavioral Sciences	50	33	16
Professional schools	52	26	20
Sex	•		
Male	42	48	9
Female	29	29	43

student contributions to the class, and, second, they reported that they planned their courses in such a way as to encourage the responsibility of the student for his/her own learning.

I work myself out of a job by the end of the semester. (Humanities)

I ask students to look at their lives and make sense of their own experience. (Humanities)

A faculty and student have to be a team and learn to work together all the way through. (Professional Studies)

The student has to make every decision himself, every decision. (Humanities)

At its most simplistic level, the student-centered approach was used to code the faculty member's response if the class approach described was one in which faculty and students worked together, at least in part, to define the curriculum of the course. A faculty member whose response was indicative of the student-centered approach described the sharing process as follows:

I start with the premise, here's what I have in mind for the course. What do you have in mind for the course? We spend some time seeing how we can come together. (Social and Behavioral Science)

The role of the faculty member in this negotiation process was one of adviser and counselor. He was responsible for both communicating the goals of the learning experience and assessing the degree to which those goals were met. In addition, however, the teacher worked to assist students in clarifying their own goals and to provide experiences whereby those goals might be achieved. "Different people need to be approached different ways. Unless you make a variety of approaches, you aren't going to reach them."

Faculty members in the present study who described a student—centered approach to teaching also demonstrated a greater concern than others for the philosophical underpinnings of their approach, describing detailed planning, literature review, and personal self-searching as the processes by which their teaching approaches had been consciously developed. Three brief vignettes may serve to clarify the approach to teaching as planned and implemented by such faculty members.

During the interview, Professor A described his approach to course design. Having just re-entered teaching after an extended time as an administrator, he began by re-examining those courses in which

he believed that he had learned a great deal as a student, attempting to answer the question: "How does a person really learn?" This inquiry led him to formulate a theory about learning in general: "We know you learn a lot by practice. You really learn by handling the material."

He then began to work out a systematic process whereby students could practice using new materials and information:

I worked out what I thought was this very unique system of taking things over again and practicing. I thought, "I don't care. "Ive got tenure. I don't have to prove anything. Where else is there to go but to have fun?"

I said to a friend, "Hey, you know what I'm going to do this fall? If the kids don't like their grade on an exam, I'm going to let them take it over again." She said, "What else are you going to do?" So I told her how else I had it set up. And she said, "Oh, you're using the Keller Plan."

So I was very deflated. I thought I had figured this all out. She had some material on the Keller Plan and I found more. I now teach a modified Keller Plan. I call my program a Grade Improvement Program because, as I said, if you learn anything, you learn by practice. (Professional Studies)

Within this basic format, students were responsible for selecting the content and format of the second half of the course with a focus on individual projects and presentations. Each test or project could be repeated to provide for the mastery of the content or skill.

Professor A acted to direct and coordinate selected activities. In addition, he served to provide feedback on projects, papers, and presentations as they progressed.

 $\Lambda$  second faculty member in another professional discipline described her own development of a student-centered approach to teaching

as a direct result of her recent and continuing classroom studies.

Having enrolled in two graduate education courses, Professor B began

to examine her teachers for clues to the components of effective

teaching. One particular instructor who emphasized prompt and

continuous individualized feedback led her to read Carl Rogers and

eventually, to define herself as a "freedom to learn person, a

facilitator of learning." She then designed activities to encourage

self-direction on the parts of her students, emphasizing continual

feedback and personal grappling with both the content and the

experiences of the course. Her comments on utilizing her new approach

concluded with the statement, "Teaching is tremendously challenging

and I love it."

Professor C, a humanities faculty member, described the previous year for him as one of particular turmoil, a year in which he had begun to question many of his assumptions about the teaching and learning process.

I've changed completely to this idea of teaching for the sake of developing individual creativity. The teacher has no right to impose regulations. You have to be a leader, a strong leader, not an autocrat. Now I'm beginning to wonder about not forcing students to learn anything, not insisting on anything. In terms of poetry, for example, I get a great satisfaction when I can recite a poem that's pertinent to a topic, that says it so much more beautifully than I can say it or when I'm reading and someone makes a quotation that I recognize.

So maybe there are some things that have to be learned, but I'm questioning that. Maybe I learned these things because I was forced to, but maybe it could have been made much more interesting so I would want to have learned a lot more.

You can't (this is John Dewey) . . . only the child determines the curriculum. Only the child decides what he will learn.

Nobody can make him learn. When the child is ready to learn, it's easy. You can, with punishment, make them do it, however.

I'm thinking. I'm questioning my own philosophy. (Humanities)

The remainder of faculty members sampled were split almost evenly between content and instructor-centered approaches. Forty percent described their preferred style as content centered with somewhat more of the nontenured faculty preferring this approach than the tenured. Content-centered teaching is characterized by the need to cover an appropriate body of material. The dominant method of instruction is lecture and/or formal question and answer periods.

Testing is objective and mastery performance is often emphasized as in PSI or audio-tutorial approaches. Students are expected to learn through listening, reading, and out-of-class study. The teacher stands at the center of this mode as information disseminator and authority in the field.

Typical comments utilized to code persons into this approach emphasized the necessity of presenting a certain body of information, organizing it systematically, and making it interesting.

There is just so much factual information to which these students must be exposed, so much straight memorization, much of it is not thinking. (Professional Studies)

You've got to cover all the topics. (Professional Studies)

The students read. You talk about it and try to point what they should be looking at. (Mathematics and Science)

In general, I have a body of knowledge. My role as a teacher is to organize and present it. (Professional Studies)

My role is to provide specific information but to try to make it interesting to the students. (Professional Studies)

I'm responsible to teach them or bring their attention to a certain body of knowledge which I feel or the department feels that they ought to know. It's a very impersonal sort of thing. I'm there to point out what is the information they have to learn, where they can find it, and what they have to do in order to learn it. If a group of students is interested in the topic, I want to motivate them, make the topic interesting. There I would look at myself as someone trying to make things exciting, whet their appetites. (Professional Studies)

I teach toward the hard side. There are just facts. "I'm delighted if people, out of their own personal experience or out of their work institutions, will learn the facts, but if they don't, I have no compunction at all about making them read it. There is a body of knowledge there and they ought to know it. (Social & Behavioral Science)

Lecture was the predominate mode of instruction described by the content-centered instructors. Classroom activities that they described centered around an active teaching style and a passive learning posture for students.

I end up talking a lot and explaining a lot. (Mathematics & Science)

My role is the guy who stands, sits, walks around in front of the class, who uses the blackboard extensively in putting up concepts, relating them, illustrating models, going through the routines to show them how to do solutions. (Professional Studies)

You do typical problems on the board. Then you assign similar problems for homework. They come in and I do the problem before them. Hopefully they've done the problems before. It's more a matter of drill. (Mathematics & Science)

I always seem to have more to say than I have time. (Professional Studies)

Of particular concern to the teacher utilizing a content-centered approach was the general level of student ability and background preparation. Many teachers who fell within this group complained of

the poor quality of the undergraduate students on the Massachusetts campus, of their lack of preparation to deal with their particular subjects, or of their lack of interest and effort. These faculty members tended to deal with students as a group rather than as individuals.

I take people into the class and I assume that they are all ignorant as to what this course is about. So I talk to the lower third at the start of the course. Along about the fourth week, I'm talking to the middle third. Then about the end of the semester, I'm talking to the upper two-thirds. I specifically gear my lectures to different levels. By the end of the semester maybe the middle has not come up, but they are not so ignorant that they cannot grasp it or struggle with it. The product here, if you look at it compared to what they were doing the first week or two or three, is the change from the beginning of the year. (Professional Studies)

I probably set my sights way up here most of the time based on what the prerequisites are. This is a big problem. There's a tremendous range in background. I don't usually drop my standards. I still cover the same amount of material. There's a certain amount of information they should know to go into the spring semester courses. I am afraid some of the students fall by the wayside. (Professional Studies)

Faculty members whose responses were coded as content centered were not apologetic for their approach. Although they expressed some interest in other types of learning experiences, they were not certain that they could translate those other interests and beliefs into classroom action.

If you can possibly bring the dydactic and experiential together you get the best of both worlds. I'm not certain you can always do that. (Social & Behavioral Science)

Students learn through self-discovery. You can explain things ad nauseum. They're scratching away like mad trying to get it down in their notes. They may go away and study it and if they are any good at studying, rediscover it. That's what I believe. It's not necessarily what I practice. I end up talking a lot. (Mathematics & Science)

Instructor-centered teaching is more a blend of the content and student-centered approaches but with a particular emphasis on the role of the teacher as a model of how a particular field, discipline, or problem should be approached. Students are expected to participate in classroom discussion in which the instructor plays a central and controlling role. Testing is generally subjectively structured and graded, e.g., essay examinations, papers.

In the present study, 45 percent of the faculty members sampled described their approach to teaching in such a way as to be classified as instructor centered. Several issues were central to this group of faculty as they described their classroom practices and the assumptions underlying those practices. First, they expressed the belief that learning required the asking of appropriate questions by students.

Such questioning epitomized the inquiring mind at work, the scholar in search of problems as well as answers.

I am interested in their ability to form questions relevant to their field of study. (Professional Studies)

A basic foundation is knowing even what questions to ask. (Humanities)

I want students to raise questions of human responsibility. (Humanities)

I attempt to take the things in my field and relate them to what they can see in their own lives. I don't try to politicize them about it. I try to present both sides in the lecture. They ask a lot of questions if you set up the right environment. (Mathematics & Science)

Second, the faculty member who described an instructor-centered philosophy encouraged classroom interaction between him/herself and the students. Even in the lecture situation, the students were encouraged to interrupt, to question, and to contribute. Discussion

was almost always a planned part of the instructor-centered classroom, but such discussion was most frequently described as occurring between a particular student and the instructor as opposed to among students themselves or in small, student-run groups.

A good balance between lecturing and the participation of the students is much more geared toward arriving at a student's understanding of the period. My courses are fundamentally lecture oriented with adjunctive discussion, providing students are willing. (Humanities)

I always, at any point in my lecture, encourage the students to raise any questions or get into dialogue, or back and forth at any time they feel they want to have discussion with me. I tell them at the outset that I don't believe in highly formal, rigid class structure. "If I hit on some point you don't agree with, raise your hand and sound out. If I hit on some point that you like particularly better than others, sound out." (Professional Studies)

Discussion hones the sensibilities to see the ramifications of certain things, not to see everything in black and white. (Humanities)

In contrast to those persons who placed a primary emphasis on the transmission of a specific body of knowledge, the instructor—centered teacher demonstrated some degree of awareness and concern for the varying levels of student ability represented in his/her classroom, although not to the extent of completely individualizing the instruction.

I take into account the initial interest and ability of the learners. (Professional Studies)

You cannot talk over their heads. (Professional Studies)

Students come to a task at differing stages. (Social & Behavioral Science)

I am a firm believer that there are many different ways to understand a work of literature. Mine is not necessarily the only correct one. I've learned lots from some of the students. It's kind of interesting to get their fresh opinions on things. (Social & Behavioral Science)

Mine is a Socratic role—to get out of the student what is there and by getting it out, increasing it. Every student knows something and there is hardly a student from which one cannot learn something. The teacher has to add to this something, practically without the student's knowing it. That is very pleasant for both of them. The teacher is not domineering and the student can blossom. (Humanities)

I find my views often shaped by the response of students. (Humanities)

Teaching in the instructor-centered classroom occurred through.

the demonstration and modeling of the best approach to a particular

field of inquiry. By asking thought-provoking questions, the instructor hoped to encourage the development of analytical and evaluative thinking processes in students.

Ultimately the objective of most of the courses is to teach people how to analyze, how to see themselves and their own present in terms of past experience of human beings, not just to memorize a certain pattern of human experience. (Humanities)

This is the logic you follow in solving the situation is what I say to them. (Professional Studies)

You've got to ask them questions. Since the material is difficult, they often have a very difficult time answering. You feel a strong temptation to continue lecturing. "Here's what happens in that section," laying it all out for them. There's a danger in that. I might be doing that too much. I'll have to ask more questions next hour! (Humanities)

Common wisdom and the literature prior to the 1970's in the area of faculty work habits predicted a large concentration of faculty members in the content-centered approach given the nature of the university and its focus on the generation and transmission of knowledge. This trend was not born out in the present study where slightly less than one-half of the sample members described their philosophy of

teaching as content centered. This movement away from the sheer transmission of knowledge may be a reaction to the student revolutions of the early seventies.

#### What do you most hope that students accomplish in your courses?

An instructional element, closely related to philosophy of instruction, was the desired outcome of planned classroom activities. Responses offered to the question above were phenomenologically organized into four major types: (a) an increase in technical skill or knowledge; (b) an increase in the ability to think creatively, analytically, or logically; (c) growth as a moral/ethical/social person; and (d) improved artistic performance. The knowledge and critical thinking categories correspond to the lower and higher order of cognitive processes described by Bloom (1956).

The major goal mentioned by 50 percent of the faculty members sampled was an increase in technical skill or content knowledge. Facts, motor skills, and communication skills were mentioned most often by those persons whose responses typified this category. The emphasis on facts and concepts did not include, as a corollary, the development of personal interpretations of this knowledge, but instead focused on the lower-order cognitive processes of memory and comprehension. Most likely to cite content and knowledge goals were those persons whose teaching approach was coded as content centered. Only two of the persons subscribing to the content-centered philosophy emphasized goals other than the increase of knowledge. As would be expected, certain goals lent themselves more readily to certain teaching styles as evidenced in Table 14.

Relationship of Faculty Members' Instructional Philosophies to their Primary Instructional Goals by Percentage

#### Instructional Goal

Instructional Philosophy	Knowledge	Critical Thinking	Personal Growth	Improved Artistic Performance
	%	%	%	%
Content centered	88	13	0	0
Instructor centered	28	33	22	11
Student centered	17	67	17	0

The instructor-centered approach was the most flexible in terms of expected outcome. Content-centered instructors, however, generally focused on knowledge and skill increase while student-centered instructors focused on the development of critical, logical and creative thinking.

Only 30 percent of the entire sample described the development of critical thinking as the most desired outcome of student learning.

Falling within the upper levels of Bloom's (1956) taxonomy of the cognitive domain, such goals emphasized the analysis, synthesis, and evaluation of material. Content was to be utilized by the student in such a way as to encourage the development of such thought processes.

As evidenced in Table 14, both instructor-centered and student-centered teaching included the planning for critical thinking goals more frequently than did content-centered instruction.

A much smaller percentage of the sample reported a primary concern for the social, moral, or artistic growth of the student.

This low percentage is not surprising considering the preponderance of faculty members in the professional and applied fields in the sample and the growing interest nationwide in education for employment. No particular group was more prone than any other to select personal growth goals as a primary focus of instruction.

In general, the relationship appeared strong between teaching approach and expected outcomes of instruction. One is unsure whether desired outcomes dictated pedagogical approaches or vice versa, but further testing of this issue seems in order.

As far as differences among the various disciplinary groupings, a slightly different goal focus was evident for the humanities and scientific fields (see Table 15). Student goals as listed by faculty members in the humanities, varied widely. What is somewhat surprising is that this core of the liberal arts faculty did not tend to emphasize the social or moral growth of students, a focus which has always been central to the argument in favor of a liberal arts education.

The majority of faculty members in science and mathematics described expected outcomes in the area of critical thinking, the development of analytical ability, and the application of the scientific method of inquiry. Two-thirds of the social/behavioral science fields and the professional schools placed primary emphasis on knowledge and technical skill development. Professional Studies faculty members showed less interest than others in personal growth goals. These two groups reported the most similar goal statements. The emphasis on content did not seem unusual for professionally oriented

Table 15

Primary Instructional Goals Selected by Faculty in Various Disciplines Compared by Percentage

Disciplinary Affiliation	Skills/ Knowledge	Critical Thinking	Personal Growth	Artistic Performance
	%	%	%	9/
Total sample	50	30	12	5
Humanities	27	27	18	18
Mathematics & Science	38	50	13	0
Social & Behavioral Science	66	16	16	0
Professional Studies	67 <sup>.</sup>	27	6	0

Note. Where percentages do not add to 100 percent, responses are missing.

educators. The responses of social scientists, however, warrant further investigation.

In summary, faculty members in the present sample were asked to describe their teaching philosophies and expected outcomes of student learning. Those few who fit into the student-centered category were equally likely to come from all disciplines except science and mathematics. Tenured and female faculty members were more likely than nontenured and male faculty members to describe themselves as student centered. Faculty members who professed an interest leaning toward teaching rather than toward research were also more likely to utilize student-centered approaches. The development of critical, analytical

thinking was the primary outcome projected by members of this group for student learning.

Content-centered approaches focusing on the transmission of a specific body of knowledge through the lecture format were described by 40 percent of those sampled. No faculty members in the humanities fell within this category, but no clear distinction was noted among the other three disciplinary areas in the use of this approach. Non-tenured faculty members were more prone to use content-centered approaches than were tenured faculty members and men, more than women. No difference was noted between stated preferences for research or teaching for faculty members who fell within this philosophical approach to teaching.

Finally, instructor-centered approaches to teaching were described by 45 percent of the respondents. Humanities faculty members overwhelmingly described themselves as instructor centered. Learning outcomes selected by members of this philosophical group varied widely but tended to favor the development of personal and artistic growth over other goals. The large number of persons describing instructor-centered approaches to teaching corresponds with the trends reported from empirical studies done in the field during the late sixties and early seventies. The demands of students for active involvement in their learning and for more recognition as partners in the teaching/learning enterprise generated a greater interest in discussion method teaching, a method which emphasizes the involvement of the student in the classroom without the loss of teacher control.

#### Self-Assessment of Teaching Effectiveness

Four questions were asked by the author during the interview sessions that required respondents to examine their own teaching and its effectiveness: (a) what do you consider to be your greatest strength as a teacher?; (b) how do you determine when your teaching is most effective?; (c) do you agree with the statement that "I cannot be a good teacher unless I am actively involved in research?; and (d) are you actively involved in research at this point in your career? Typically, this section of the interview session produced a great deal of thoughtful silence, confusion, some resistance, and even surprise. Such issues, according to the majority of the respondents, were not ones to which they had consciously given a great deal of thought. Rarely had they verbalized their beliefs in these areas and most appeared reluctant or hesitant to do so. Initial comments of "I don't know," followed by silence and the further probing of the interviewer, led, in most cases, to perceptive and thoughtful self-analysis. In some cases, the nature of the interview, the lack of rapport between the interviewer and the respondent, or the emergence of larger concerns led to the omission of one or more of these questions.

### What do you consider to be your greatest strength as a teacher?

Although respondents were encouraged to describe their one most outstanding strength, several were unable to separate related strengths or to pinpoint the most important. For this reason, percentages reported are in terms of multiple responses. Five persons were not asked or did not respond to this particular question. Therefore,

percentages reflect an  $\underline{n}$  of 35. The variety and the individual nature of the responses led to small percentages along a broad spectrum of separate, but interrelated teaching skills. No particular patterns of response were noted when the data were analyzed in relationship to the major variables of the study. Therefore, no table was prepared for this section.

The teaching strength most frequently described concerned the establishment of positive relationships with students. This particular skill was found by Wilson and Gaff (1975) to correlate highly with students' academic success in a long term study of faculty impact. In this area, faculty members emphasized their abilities to learn the names of students and to generate an atmosphere in which students felt relaxed and open. One described an elaborate scheme whereby every student in her large introductory lecture class was given the chance to attend a social at her home!

I like to get to know everybody there and feel they are relaxed. (Mathematics & Science)

I know the name of every student in my class. It's very important that every student knows you know that he or she is in class. (Professional Studies)

The combination of being able to relate well to the student and then know what I'm talking about has worked well. (Humanities)

Other respondents emphasized skills in the counselling and advising of students.

I don't know. That's a hard question . . . probably to direct the student to knowledge which will benefit him not only in his own development but also in terms of where he anticipates going. This to me is probably one of the most important aspects of the whole teaching process. This you cannot get in a straight lecture course. (Professional Studies)

For the students who can handle it, I can let go. This is one of my strengths. (Professional Studies)

Twenty-three percent of those responding mentioned an ability to generate enthusiasm for and interest in a particular subject. Humor and personal involvement with the material were described as methods for increasing student interest.

I really hope, and I do it sometimes, to inspire students to an interest in science—not to make a career out of it—but to have an interest in the way it works, a way of thinking about it and how it affects their lives. I've had kids come up to me a couple of years after they've had the courses and say, "Oh, yeah, I read about something in the New York Times today. I know we talked about it and now I understand what we were talking about." (Mathematics & Science)

That might be a little hard to say. I suppose to provide a milieu in which a student finds himself interested in a topic, perhaps catches some of my own personal enthusiasm in the past and understanding the past. (Humanities)

I don't think you can fake real involvement, being turned on by what you're doing. (Humanities)

I try to inject humor. I like them to feel friendly toward me and me toward them. (Mathematics & Science)

The third most frequently mentioned teaching strength was knowledge of the subject. Closely linked to intellectual command was experience in the field achieved by holding other jobs, consulting, or doing research.

The main thing that I do is to try and keep extending the amount of knowledge that I have, to read as much as possible, and not simply in my field. (Humanities)

Thinking back on the evaluation, I know there are two. I know the material backwards and forwards and I've worked on a ward. I know the stuff and I can tell the kids interesting and exciting things. One is knowing and having the background. Then I try to raise enthusiasm. They know I like to teach undergraduates. They know I choose to teach that class. We just really have a good time. (Social & Behavioral Science)

I use personal examples from consulting and research experience. (Professional Studies)

A difficult teaching skill--generating classroom discussion--was mentioned as a strength by 17 percent of the respondents. In order to promote student participation, faculty members worked on asking appropriate questions, teaching students to ask similarly provocative questions, and probing student responses to increase their participation.

Mentioned by an additional 17 percent of the respondents was the ability to present material in a clear, well-ordered manner. Faculty members described their skills as analytical and creative thinking, verbal facility, logical organization, and quick, reactive behavior.

A number of other teaching strengths were mentioned by one or two of the respondents, including the ability to design instruction for large numbers of students and the possession of a well-defined moral sense. The use of the familiar to teach the unfamiliar, the non-technical to teach the technical, the personal example to teach the impersonal concept were described as strengths by other respondents.

Only three faculty members were unable or unwilling to pinpoint or describe a teaching strength.

## How do you determine when your teaching is most effective?

Faculty members described five major ways in which they determined their own teaching effectiveness for a single class session or an entire course. As the majority of the respondents mentioned more than one approach, percentages for each approach represent the percentage of the entire sample mentioning that approach (see Table 16).

Table 16
Percentage of Faculty Utilizing
Various Methods for Assessing
Personal Teaching Effectiveness
by Disciplinary Affiliation

Disciplinary Affiliation	Systematic Student Ratings	Nonsystematic Student Ratings	Student Activity	Intuition .	Indirect Feedback
	%	%	%	%	%
All discipline	s 72	67	67	37,	20
Humanities	82	55	73	27	27
Mathematics & Science	75	75	63 .	63	25
Social & Behavioral Science	33	66	50	16	16
Professional Studies	80	73	73	40	13

Note. Percentages do not add to 100 percent due to the multiple response nature of the item.

Three-fourths of the sample members reported the use of some form of systematic student rating of teaching as helpful in the determination of teaching effectiveness. Social scientists were the only disciplinary group to fall far below the sample mean, with only one-third of that group mentioning the use of systematic student ratings. Table 17 indicates that faculty who preferred research were more likely to use systematic rating forms, four to three, than were members of the other interest groups.

Table 17

Relationship of Methods for Assessing Teaching Effectiveness to Stated Preference for Teaching or Research by Percentage

Stated Preference	Systematic Student Ratings	Nonsystematic Student Ratings	Student Activity	Intuition .	Indirect Feedback
	%	%	%	%	%
Research	87	73	60	33	20
No preference	63	81	69	25	44
Teaching	63	38	88 .	25	13

Note. Percentages do not add to 100 percent due to multiple response nature of the item.

Although questioning the validity of such ratings for purposes of decision making, the majority of the faculty members sampled reported such ratings were useful in assessing and improving their own teaching.

Student ratings reflect very strongly whether or not you are presenting material in a clear, concise way, and whether you've made an error or not. You can maintain a very keen knowledge of your expertise from just what students relate to you. (Professional Studies)

They remind you that you need to adjust. (Mathematics & Science)

My experience has been that any number of teachers has made remarkable improvement as a result of them. (Humanities)

Others reported using the ratings with some reservation.

Student ratings are useful to an extent. All of the suggestions are not necessarily right. (Social & Behavioral Science)

They are more useful over a long period of time. (Humanities)

They are a guide more than anything else. (Humanities)

I throw out the extremes and consider the middle. (Mathematics & Science)

I feel like I'm a good teacher. I'm used to getting high evaluations. I don't pay much attention unless I've had a bad semester. (Professional Studies)

The question of determining effectiveness evoked some measure of negative reaction from faculty members who immediately equated the question with the use of student ratings of teaching as mandated by the University of Massachusetts/Amherst for the making of personnel decisions. Although 80 percent of those sampled in Professional Studies utilized such ratings, they were also the most likely to complain about the ratings.

I did the ratings for two years and then I didn't do it. I do not believe it sets the right tone for an eighteen year old to be evaluating a fifty year old. (Mathematics & Science)

I think student ratings are totally useless. In many cases, the students don't understand what is good and what is bad anyway. It's a popularity contest. (Professional Studies)

I don't care whether they like the course or not. Life isn't made up of all pleasant things. (Professional Studies)

Similarly, a concern was expressed for the ability of students to

evaluate the teaching in a course which they had just completed.

This is one thing that bothers all of us. How do you measure effectiveness directly after a student has been put through the pressures of a course? (Professional Studies)

Student ratings can be deceiving due to the student's inability to appreciate work at the moment. (Professional Studies)

Finally, several faculty members expressed concern over the appropriate balance of pleasing students and teaching as one believes

one should. The danger of teaching to the evaluations was experienced as a real problem.

I am willing to change my ways of teaching to meet student approval up to a certain point. I can't please everyone. I have to please myself, too. (Social & Behavioral Science)

My approach to teaching has been gradually changing as a result of student evaluations. Everyone wants to get reasonably good evaluations at least. It turns out you start making concessions. (Humanities)

The solicitation of nonsystematic comments from students was mentioned by 67 percent of the sample. Approximately one-half of these twenty-seven persons reported using systematic ratings as well.

Only eight percent of the entire sample utilized neither. No differences in responses among the various disciplinary groups were notable although humanities faculty members were the least likely to consider various forms of nonsystematic feedback. Divisions along lines of status, sex, and years of teaching experience also failed to show noticeable differences. Faculty members, however, who indicated a strong preference for teaching over research utilized student feedback far less often than members of the other preference groups. In fact, one in four of this teaching-oriented group reported no method being utilized whatsoever to assess teaching effectiveness!

Nonsystematic feedback was described as both solicited and unsolicited comments from students. Some faculty members reported including feedback questions on examinations, adding open-ended or essay-type questions to systematic rating instruments, or polling alumni. One faculty member built into her courses a day for assessing class activities and materials through the use of small group critiques

and recommendations. However, most faculty members in this category reported that nonsystematic feedback came through the unsolicited responses of students during the course of the semester or after the completion of a course.

They will write a note and put it in my box. Or they might see me in the hall and say, "Gee, you gave a super lecture." If you don't give a super lecture, they growl! (Mathematics & Science)

I've had kids come to me saying they were happy to learn about something that is usually not taught. (Social & Behavioral Science)

I go out of my way to meet casually with students. (Social & Behavioral Science)

When you get to know certain students, they tell you how you are doing. (Humanities)

Many of the students after the semester ends will say, "This was the best course we've had in our whole career here." (Professional Studies)

I've had several students come back to me later and say, "You made me look around more." (Mathematics & Science)

Closely related to student comments was the use of student activity as a data feedback source. Sixty-seven percent of the sample mentioned an awareness and analysis of student behavior as an indicator of teaching effectiveness. Social and behavioral scientists were somewhat less likely than the average to utilize this source.

Nontenured faculty members were a great deal less likely to mention student activity than were tenured members of the sample. The typical faculty member who based his analysis of teaching on student behavior was most likely to be male and tenured with eleven years or more of teaching experience and an expressed preference for teaching over research.

Frequently mentioned as the student activity most useful in determining teaching effectiveness was the amount and type of questions asked by students both during and after class. Such questions provided feedback on comprehension problems and areas of confusion. Also frequently cited as indicators of teaching effectiveness were levels of classroom participation and apparent student interest. Exam performance was described as useful feedback as well. Several faculty members reported that they judged their teaching effectiveness by considering changes in student behavior reflecting the achievement of the objectives of a particular course.

I judge by the progress the students have made and by judging whether we have reached a certain goal. (Humanities)

I look at the change from the beginning to the end of the course. (Social & Behavioral Science)

I consider their meeting of the objectives. (Professional Studies)

I judge by how interested the student seems to be, whether he is practicing, whether you tell him one thing today and whether next week it seems to have improved. If you have the same problem next week, then, either you are not analyzing it correctly and prescribing the right solution to it, or it's improving and you can see that you are doing the right thing. (Humanities)

Outside of the classroom, student activities also served to provide feedback to some faculty members on their teaching. Reports from employers, telephone calls and visits from former students in industry or education, as well as the extent to which students sought and procured employment in the specific field were outside behaviors regarded by some as measures of teaching effectiveness.

A little over one-third of the sample described their assessment of personal teaching effectiveness as based on intuition. The emphasis here was on years of experience in the classroom and personal honesty.

Any decent teacher knows when he or she is having a desired effect. I never have any doubts. (Humanities).

There's nobody who knows better than the professor how poor or good a job he's doing if he's really honest and objective. (Professional Studies)

You learn a lot from just giving courses. Anyone who is at all honest with himself realizes that there are times when you give a course that flops. (Humanities)

You get sort of a sixth sense. When you feel they are drawn to what you're saying, you're getting it across. (Humanities)

Being a teacher is like the theater. You know when you're laying a bomb and when you're going across. (Mathematics & Science)

The professors who cited intuition as a feedback source were highly concentrated among the scientists and mathematicians. Three times as many tenured and male faculty utilized this process as did nontenured and female faculty. Twice as many of those who had taught eleven years or more mentioned intuition as did those who had taught a lesser number of years.

Although 27 percent relied on intuition alone, eleven out of the fifteen faculty members who mentioned intuition also described other data sources as valuable.

There's an inner sense that tells me and also there's always feedback from students. (Professional Studies)

Student ratings confirm exactly what I already know. (Professional Studies)

No one who has taught for awhile and is at all sensitive and takes his job conscientiously does not know whether he is or is not doing a reasonable job. You know from the questions and how people relate to you after class. You know when they're antagonistic. You know it. Inere's no way not to. (Mathematics & Science)

A small percentage of the sample members described forms of indirect feedback as useful in determining teaching effectiveness. Comments exchanged among faculty members, grapevine comments picked up by professors from student advisees, class attendance, and course enrollments were classified as indirect measures. In addition, one or two persons described various other approaches to examining their own teaching such as self-assessment, team teaching, close work with a teaching assistant, and participation in a teaching improvement program on campus.

In summary, a large majority of the faculty members sampled reported the use of systematic student ratings, informal student comments, and student activity both in and out of class to assess personal teaching effectiveness. Intuition and indirect information were described as data sources by smaller percentages of the sample.

Almost three-fourths of those sampled reported the use of a combination of two or three of these methods in determining when their teaching was most effective.

Do you agree with the statement that "No one can be a good teacher unless s/he is actively involved in research?" Answer in terms of your own experience.

Responses to this question were coded as "strongly agree,"
"agree with reservations," "disagree," and "strongly disagree." Fortythree percent of the respondents strongly agreed with the statement

while an additional 33 percent agreed but cited some reservations or exceptions to their agreement. Only 15 percent doubted the necessary linkage of research and teaching, a percentage which strongly reflects the assertions of Parsons and Platt (1968) as well as Fulton and Trow (1974) that faculty members view the two activities as integrated and complementary (see Table 18).

Table 18

Faculty Perceptions of the Necessity of Active Research Involvement for Effective Teaching Compared by Percentage for Various Subgroups

Variable	Necessary	Unnecessary	No-Response
	%	%	%
Total sample	75	15	10
Disciplinary Affiliation			•
Humanities	82	9	9
Mathematics & Science	76	12	12
Social & Behavioral Sciences	84	17	0
Professional Studies	67	20	13
Tenured Status			
Tenured	81	8	17
Nontenured	62	30	8
Sex			
Male	69	18	13
Female	100	0	0

Note. Where percentages do not add to 100, responses are missing.

Table 18 also indicates that only two variables were found to affect the percentage of agreement. Contrary to what one would expect, 81 percent of the tenured respondents agreed "strongly" or "with reservations" while only 62 percent of the nontenured fell into the same categories. Somewhat more predictable was the overwhelming agreement of female faculty members (100 percent) with the statement. From the fact that many women have only recently entered the academic profession and are, on the average, pushing hard to achieve tenure and to excel in a male-dominated profession, one might predict that they would strongly support research as a vehicle of upward mobility.

Active research involvement was perceived to contribute to good teaching in a variety of ways. Faculty participants reported that it kept one up in one's field, honed one's critical abilities, and provided rewards to regenerate one's lagging interests. Those persons who agreed without reservation did not view research and teaching as mutually exclusive activities or as sources of conflict.

Persons agreeing but citing some reservations mentioned a lesser need for original research in several teaching areas—basic language courses, courses unrelated to the topic of research, or undergraduate introductory courses. Others responding "with reservations" cited the need for keeping up in one's field as an activity separate and apart from the pursuit of original research and publication. The prerequisite for good teaching being the former, research and publication were perceived to be less relevant in and of themselves.

Only two persons "strongly disagreed" with the statement. Both described their experiences in research and publication with a great deal of emotion.

Research really is irrelevant to me. If you're an instructor, you don't have the time to do any research. When you have five to six contact hours a week maybe you can do some research. When you carry thirteen to fifteen contact hours and in turn, these are classes which have a great volume of work to be graded, you have no time for research. (Professional Studies)

There's not one person in one class I've taught at this university who gives a damn what my publication record is. None of them could care. They wouldn't be impressed if I had one. (Humanities)

# Are you actively involved in research and/or publication at this point in your career?

In a 1965 update of the Academic Man, Logan Wilson (1971) pronounced as dead the publish-or-perish syndrome. Of 2000 faculty members polled, 32 percent had not published any articles and 71 percent had not published any books. Faculty members in the present study were asked to describe their current level of research involvement for comparison with responses to the question of research and teaching interdependence. Some degree of involvement with research activities was described by 75 percent of the respondents. These activities included working on a book, writing journal articles, directing the research of graduate students, and working on or administering an outside grant. Artistic performance, consulting, presentations for professional organizations, the collection of episodes of local history on tape, and even in one case, a dissertation, were also described as research activities. Equal percentages of tenured and nontenured faculty members described themselves as involved in research. All female faculty members reported active research involvement.

Only nine percent of the sample reported no current research involvement. Six persons did not directly respond to the question

and failed to mention any research activity during the course of the interview. A follow-up study of these responses through an examination of departmental bibliographies would be extremely useful in clarifying the extent to which University of Massachusetts/Amherst faculty members are currently active in research fields. Given that 70 percent of the sample reported top priority being given to research in personnel decision-making processes, this 75 percent activity figure might be considered reasonably accurate assuming that those six persons who failed to speak of their research were indeed not actively involved in such.

Several persons mentioned issues of personal concern related to active research involvement, emphasizing the push for quantity over quality and the pressures of balancing all professional functions.

I am bothered by the kind of grocery store attitude that people here have toward doing research. Your evaluation as a teacher is done with a set of scales that work in a very mechanical kind of way. If you've got something to put in the pans of each—teaching, publication, service—then you've been a good boy. If not, then not. It's a lousy system. (Humanities)

I will get tenure if I turn out a couple of articles a year, an article a year or a book by the time I'm up for tenure—not worrying so much about the quality of the articles I turn out. I don't think that's as important as the quantity. I'm not too sure about that. I have a feeling with quantity, as long as they're reasonable, that my chances for tenure are alright. (Social & Behavioral Science)

To summarize, faculty members in the present sample found it difficult to describe their greatest strength as teachers initially. When assisted in an exploration of this area, they most frequently mentioned the ability to relate well to students. Less frequently,

they mentioned an ability to generate enthusiasm for and interest in the subject, the possession of a depth of knowledge, and skill in generating classroom discussions.

Most frequently utilized as a method for determining teaching effect was the systematic rating of instruction by students, a method closely followed by the consideration of student activity and non-systematic, more casual student comments. Surprisingly, scientists and mathematicians turned most often to the consideration of intuitive feedback while persons in the humanities relied most often upon cystematic student ratings.

Finally, when questioned about the relationship perceived between personal teaching effectiveness and active research involvement, three-fourths of the sample agreed that active research involvement was necessary for good teaching in most cases. Persons least likely to support this view were nontenured and male faculty members. Responses in this area supported the findings of Parsons and Platt (1968) as well as those of Fulton and Trow (1974) in their earlier studies of teaching and research relationships in the academic profession.

## The Status of Teaching: Formal and Informal Rewards

Since Logan Wilson wrote <u>The Academic Man</u> in 1942. common knowledge, experience, and empirical studies have supported the assertion made by Wilson that in the formal reward structures of most American universities little, if any, recognition is given to teaching. Instead, promotion and tenure decisions are based on research, particularly publishable results. By 1965, Astin and Lee reported that 96 percent of the

colleges and universities sampled in their study claimed teaching to be a major consideration in the making of personal decisions. However, only 12 percent of those same institutions utilized systematic, direct methods for measuring teaching effectiveness. In a later study by Wilson and Gaff (1975), 53 percent of the teachers sampled reported that research was considered equal to or more important than teaching. However, all levels of higher education were included in this percentage.

In general, institutional environments have not been found to be highly supportive of excellence in teaching, particularly at the university level. A lack of colleague support, a lack of tangible evidence for teaching evaluation, and pressures for publication have left teaching at the periphery of the decision-making process. In order to explore faculty perceptions concerning the status of teaching in personnel decision making at the University of Massachusetts/Amherst, the author included three questions in the present study: (a) what relative importance do you perceive teaching and research to have as criteria for personnel decisions in your department?; (b) what do you perceive to be the primary data sources utilized within your department to evaluate teaching effectiveness for personnel decisions?; and (c) do you feel that you are rewarded for your teaching effectiveness? Responses to each of these questions did not contradict the results of earlier studies.

What relative importance do you perceive teaching and research to have as criteria for personnel decisions in your department?

Written criteria for personnel decision making at the University

of Massachusetts/Amherst state that the faculty member has responsibilities in three areas—research, teaching, and service. For the purpose of gaining promotion or achieving tenure, the faculty member must submit evidence that his/her activities are of excellent quality in two of these areas and of good quality in the remaining one. Theoretically, the faculty member is free to select those two areas at his/her discretion.

When asked to compare the perceived importance of research, teaching, and service in their own departments, almost all of the respondents in the present sample agreed that service was never considered to be of primary importance. The rewards received were contingent upon some combination of activities in the areas of research, publication, and teaching. The researcher, therefore, restricted her exploration to the latter functions, realizing that service activities, too, play at least some part in departmental decision-making processes. Table 19 indicates the percentage of respondents who perceived research and teaching to be considered in each of varying combinations. Of particular difficulty in the interpretation of responses was the definition of research. The interviewer often began by attempting to clarify the meaning of the term with the particular respondent. For some, research was publication; for others, performance. Keeping up in one's field, guiding the work of graduate students, and acquiring grants were also defined as research activities.

From among the responses of those persons who perceived research alone to serve as the criteria for personnel decision making, several key themes emerged as justifications for why teaching was not

Table 19

Comparative Importance by Percentage of Research and Teaching in Departmental Personnel Decision—Making Processes as Perceived by Faculty

Comparative Human Importance	nities	Mathematics & Science	Social & Behavioral Science	Professional Studies	All Disciplines
	%	%	%	%	%
Research is primary; teaching is not considered at all.	18	37	33	60	40
Research is primary; teaching is secondary.	27	50	50	13	30
Research and teaching are considered equally important.	9	0	1.7	0	5
Teaching is pri- mary; research is secondary.	18	0	0	13	10
Teaching is primary; research is not considered at all.	0	0		0	0
Other: Flexibil- ity and personal preference set the relationship of research and teaching.	9	0	0		5
No response.	18	13	0	7	10

considered as a criteria for advancement. First, teaching was perceived to be nonquantifiable. Therefore, student ratings of teaching were seen as invalid measures of teaching effectiveness.

Teaching is difficult to evaluate. What do critiques from freshmen mean? (Mathematics & Science)

As the financial crisis gets worse and deepens and broadens, the easist way to fire people is on a lack of publications. I think bureaucracies have a real desire to simplify, to simplify judgments. Quantitative judgments are the easiest to make. Teaching is a non-quantifiable item and publication can be weighed. (Humanities)

Second, teaching was considered a given. It was assumed that all persons were good teachers or they would not have been hired in the first place. Only really terrible teaching was not tolerated.

We have discussed this <u>ad nauseum</u>. What it comes down to is that it is almost impossible to evaluate teaching. . . . We ended up assuming that we were all above average teachers because we've been through the tenure bit and weren't kicked out at that level. (Professional Studies)

So he's doing a good job teaching. We all know that. We expect that. That's the philosophy. We expect that. The excellence comes in what you publish. (Professional Studies)

I don't think that teaching counts at all. If you are interested in teaching you do it because of your own esoteric reasons. There's no direct reward. I would say a reward today is achieving tenure or perhaps if you want to get a promotion. When it comes to tenure, you have the threshold criteria for teaching. If you reach over and above this threshold, then it is alright. Everything is based on your research productivity and, of course, politicking. Now we have the institutional need criteria. You have to be really lousy to be shafted. Given the tenure criteria which will be applied to me, 75 percent of our tenured faculty would not meet the criteria. (Professional Studies)

Several faculty members who reported that research was the single criteria for decision making believed that lip service, at least,

was paid to good teaching. Student ratings were required but not utilized for decision-making purposes.

The department requires course evaluations but does not use them. (Mathematics & Science)

The department does not pay any attention to student ratings. It's publishing. Period. (Professional Studies)

Student ratings are just forms. They are only justification for what's been decided anyway, unless the person is outstandingly good on them or bad. Most people are in the middle anyway. They're probably useless other than as justification. (Social & Behavioral Science)

They pay lip service to teaching. Nobody really knows. (Professional Studies)

On the other hand, three research activities were described as key criteria for promotion and tenure. Mentioned most frequently was the importance of having a nationally recognized publication record.

Publication is probably 90 percent. (Social & Behavioral Science)

It's true anywhere in a university and it's certainly true at UMass that the guy who is fairly well known for his research, particularly if he has written a lot of books and is in a better position to trade somewhere else, is in a better position to get a promotion or increase in salary than is a person who is unknown to the world at large. Regardless of what you say about sitting on committees or public service and all this kind of garbage, it means absolutely nothing to anyone who really wants to get a promotion in a university. And teaching school makes no difference, frankly. He can be the greatest teacher in the world and not be promoted. It can work to his detriment. It's not helpful. (Professional Studies)

No matter what pronouncements they (the administration) make, it's the publications record that still is the primary criteria for your reward. (Professional Studies)

Honestly, I think the way people are given tenure is in terms of their exhibition success. A person who is a really hot shot, nationally known artist can get away with a lot of other big deficiencies, including teaching. (numanities)

The demonstrated ability to bring in outside grant money was described by several respondents as the key to the attainment of professional rewards. Even research results were seen as secondary in importance.

You are judged by your peers not on your research or its quality but on your ability at the generation of monies. You can be the best teacher in the world and get absolutely nothing. It's the ability to bring money that counts. Merit comes for research and publication. (Professional Studies)

Research is by far the most important. Lip service is paid to teaching. Most emphasis is placed on bringing in grant money. (Professional Studies)

Several respondents who' perceived research to be the single, most important criteria for decision making expressed some degree of frustration with the confusion of institutional, departmental, and personal priorities.

At the departmental level we tend more or less to evaluate the individual in terms of what his actual assigned duties are. Now we have some individuals who are primarily research. We have some individuals who are in the situation where I am, where both teaching and research are involved. And we have some who are primarily teaching. We try to evaluate them on that basis.

As these actions go up the ladder--despite what public pronouncements they make out of Whitmore--they have one thing they can hang a hat on, that's a publications and research contracts record. That's the only thing that equates down to dollars and cents, numbers and figures. Teaching does not. (Professional Studies) .

The whole thing is very frustrating. If you commin all your time to teaching and dealing with students, it's a dead end street which it shoudn't be. On the other hand,

if you go out and get outside support in the form of grants, you have a tremendous advantage. First of all, when you're on nine months, you can take 25 percent of your grant for summer salary. Immediately, there's a monetary reward for it. . . . The second thing is if you go out and get the outside grants, you automatically increase your prestige and not only within the school and department, but also within the field. You couple these two things together and it doesn't say much for spending all your time teaching. This is why it becomes so frustrating. (Professional Studies)

Although research was the primary criteria for personnel decision making, 30 percent of the present sample reported that teaching was considered to be of secondary importance. Persons whose responses were coded in this category generally reported that the status of teaching was on the rise. Whereas teaching had not formerly been given any weight in personnel decision making, the pressures of becoming tenured in and the demands of the state legislature for accountability were slowly reversing this practice.

About 1960, when we were growing rapidly as a university, the emphasis was entirely on research and writing. Of course there were plenty of hours devoted to teaching, but the rewards came through research and writing. And that has remained so just almost down to the present. Some who simply didn't care to do research and writing, I feel that they very often had a sense that they were not in the mainstream of the department. The evaluation of teaching now does fit in but I don't think it will be necessarily primary. (Humanities)

The thing that really gets you by is your scholarship. The teaching gets more recognition than it has before but I've never seen anybody promoted for being a good teacher. . . . In administrative circles, recognition circles, your research is the thing. Your job is almost clearly based on your research. I don't want to say entirely. It used to be entirely. Now I'd say it's mostly. (Mathematics & Science)

On paper they say it must be excellent out of two of the areas and strong on a third. The strong teaching we've had in the last two years helped them none at all. One clear exception occurred this year. A fellow got through who is best known for his teaching. (Humanities)

Faculty members who perceived teaching to receive secondary recognition still experienced some degree of dissatisfaction with the inconsistency of university policy statements and active decision making practices.

They tell you teaching is the most important. They always tell you that. But for some reason, it doesn't seem to be the case. It's what kind of paper you write, what books you've got going, what kind of committees you are on that will bring attention to the department. Education really takes a back seat—that's what I see—to everything that goes on in this department although they tell you that's not the case. (Professional Studies)

As far as keeping my job goes, research is probably more important than teaching. Although they put out information sheets that say they look into three areas—teaching, research and service—when it comes down to writing something on paper it's almost impossible for them to come up with a criteria for how good a teacher you are or how much time you spend in community service. When it comes down to research, it's very easy for them to look at your resume and count up how many publications you've made so when it comes right down to it, I think that research is probably much more important . . . assuming that you're an adequate teacher. (Social & Behavioral Science)

The department takes its teaching seriously, but even brilliant teaching would not take the place of failure in research whereas brilliant research will make up for abysmal teaching. (Mathematics & Science)

Only 15 percent of the faculty members sampled reported that teaching was given equal or greater weight than research in personnel decisions compared to 53 percent of the Wilson and Gaff sample (1975).

Fifty percent of overall performance of any member of the department is teaching, based on student evaluations. (Humanities)

Teaching is considered a professional activity in our department. I think there is reinforcement for teaching here, from students, colleagues, and chairmen. The

highest paid assistant professor we have here got that way from being a teacher. Merit raises were given in this department for good teaching, not research. . . . If you are a good teacher and a good researcher, you are going to get rewarded. (Social & Behavioral Science)

An additional five percent described a departmental policy based on flexible evaluation procedures whereby the faculty member was allowed to set his/her own performance criteria based on departmental and institutional needs and personal skills.

When analyzed by disciplinary affiliation, some patterns in response appeared as demonstrated in Table 19. This variation may be related to the perceived distinction between research and teaching activities. In those departments where teaching and research are often indistinguishable activities, teaching may have been perceived to be of greater importance in personnel decisions and vice versa. Reward practices varied most widely among departments in the humanities group with a much smaller percentage of professors than in other groups reporting that teaching was not considered at all. Among scientists and mathematicians, research was perceived as always primary. However, the majority of respondents from this group perceived some reward to be given for teaching effectiveness. Social and behavioral science departments did not differ from science and mathematics departments in their perceptions of decision making priorities. Professional schools, however, were the most likely group to emphasize research alone with only one in four reporting any recognition at all for teaching. Research, as noted from earlier quotes, was often defined as the acquisition of grant monies.

Variables other than disciplinary affiliation created major differences in response patterns. First, 44 percent of the tenured faculty members reported that teaching received no consideration while only 31 percent of the nontenured faculty members agreed.

Second, male faculty members were far more likely than female faculty members to perceive teaching as insignificant. Third, while 63 percent of the persons reporting a preference for teaching expressed the opinion that teaching was not considered, only 38 percent of the persons reporting a preference for research agreed. In summary, 50 percent of the present sample reported some consideration being given to teaching for personnel decision making at the departmental level. However, some confusion about institutional-level policies was expressed.

What do you perceive to be the primary data sources utilized within your department to evaluate teaching effectiveness for personnel decisions?

Item number eight on the questionnaire asked faculty respondents to rate six methods for evaluating teaching according to the frequency of their use in their own departmental personnel processes. No persons failed to answer the question although 40 percent indicated during the interview sessions that teaching was not considered as a criteria for promotion or tenure in their departments. Table 20 indicates the mean rating given each method by members of the semple as well as by members of each disciplinary subgroup within the sample.

Table 20

Departmental Utilization of Teaching Evaluation Procedures Rated by Faculty According to Frequency of Use

Mean rating

Evaluation Procedure	Humanities	Mathematics & Science	Social & Behavioral Science	Professional Studies	All Disciplines
Student ratings	4.5	4.1	4.3	7.0	4.2
Opinions of colleagues	3.2	4.3	3.3	3.4	3.5
Research or publication	2.9	2.6	3.3	3.4	3.1
Self-assessment	1.8	1.3	2.3	2.6	2.1
Syllabus or course material	2.0	1.9	2.2	2.1	2.0
Classroom observation	1.1	1.3	1.5	1.2	1.2
				ļ	

Note. Rating scale: 1 = Never, 2 = Infrequently, 3 = Sometimes, 4 = Frequently,

5 = Always.

Most frequently utilized as a data source for teaching evaluation was the systematic student rating of courses. However, reactions to the use of students as evaluators of teaching were mixed.

Teaching performance is based on student evaluation. It is collected and evaluated and we are ranked. I find it very good. Before that, there was so much possibility of rumor. People simply said, "This is a good teacher."

"Oh, no, he's terrible."

Personal animosities created a wrong image of a teacher. As soon as these student questionnaires came along, there was something on which to base evaluations. (Humanities)

I think student evaluations can be a very dangerous thing if they are taken too seriously. I think an evaluation from a very competent student can be very valuable. On the other hand, I think an evaluation from someone who doesn't really know what he is talking about can be very harmful. (Humanities)

The opinions of colleagues were rated as the second most frequently used method of teaching evaluation. Faculty members in the science and mathematics departments reported the most frequent use of colleague opinion among the various discipline groupings. One respondent explained the relationship of colleague opinion to student evaluations in the following way:

Rating forms are considered, particularly with younger faculty. If those numbers are consistently high, then the department is pleased to see that it has some documentation that you are doing well. When the numbers are low and colleagues have their own idea of whether someone is doing well or not, they're apt to excuse low numbers as lack of perception on the part of students. It would be difficult for students to hurt a faculty member's reputation in a department seriously, but their appreciation would not go unnoticed. (Mathematics & Science)

A method by which colleague opinion was formulated and collected was described by a faculty member from another science department.

I don't think student ratings are vitally important. I think they're important. I don't think they are the controlling estimators of how good a teacher a person is. The most potent information comes from students we know-junior, senior level, or graduate students, who talk with us about their reactions to people's teaching. And then we gather data by casual conversation with students and colleagues whom we ask about teaching. (Mathematics & Science)

Also rated as "sometimes" utilized to evaluate teaching was research and publication. The author was unsure whether this very indirect method received such a high rating because respondents misread the question or whether research and publications records were indeed considered indicators of classroom teaching effectiveness. A number of studies done in this area have failed to find a correlation between publication record and teaching effectiveness as rated by students. For whatever reason, 46 percent of the present sample reported the use of research and publication records to evaluate teaching "frequently" or "always." Professional and social/behavioral science department; tended to use this method somewhat more frequently than did persons in the humanities and science/mathematics departments.

Three additional methods were rated as "infrequently" or "never" utilized to evaluate teaching--self-assessment, syllabus or other course materials, and classroom observation in descending frequency of use. In summary, the majority of respondents rated two or more methods as "frequently" or "always" utilized in the evaluation of teaching. However, one-quarter of those sampled reported the frequent use of only one data source, usually student evaluation forms. Since such ratings have been mandated by the administration for each course each semester, frequent use of such ratings by 84 percent of the sample was not surprising. At the time when this study was conducted, the

Center for Instructional Resources and Improvement was charged with the supplying and processing of student evaluation forms. As the departments, however, maintained the final responsibility for their use, some departments were not enforcing the administrative policy. The course evaluation policy was changed in the fall of 1976 to place the entire responsibility for course evaluations with the departments. Of interest for future study will be the impact of this change in the locus of power over evaluation on the percentage of persons frequently collecting course evaluations from students for personnel decision making purposes.

#### Do you feel that you are rewarded for your teaching effectiveness?

Respondents were first asked to answer a simple yes or no to the above question. Those who answered yes were additionally asked to describe the sources of that reward. Choices listed included the university, the department, colleagues, students, or personal feelings of satisfaction, self-esteem and/or accomplishment. Interestingly, due to the divided nature of the question, several faculty members answered no, then read the list, changed their response to yes, and checked informal sources of reward.

Three-quarters of the sample reported that some reward was received for teaching effectiveness. Table 21 indicates the sources of that reward. Most frequently mentioned as a source of reward was a personal feeling of satisfaction. Least frequently mentioned were university—level rewards.

Table 21

Faculty Perceptions of Rewards Received for Effective Teaching by Percentage

Source of Reward	Humanities	Mathematics & Science	Social & Behavioral Science	Professional Studies	A11 Disciplines
	%	%	%	%	%
Personal feelings of satisfaction	100	83	100	06	
Students	88	83	7.5	80	82
Colleagues	75	17	50	07	97
Department	63	50	50	30	97
University	38	0	25	20	21
Other	0	0	25	0	47

Percentages do not add to 100 percent due to the multiple-response nature Note.

of the item.

by disciplinary groupings. All groups reported that personal feelings and students were frequent sources of reward. Colleagues, however, were perceived as a substantial source of reward as well by all but members of the science and mathematics departments. Scientists and mathematicians were also the only group to indicate that the university was not a source of reward. The third difference in results among the four disciplinary groups concerned departmental rewards. Professional studies faculty members more often than those in other groups indicated that little reward was perceived for effective teaching at the departmental level. This latter relates to the finding that research alone was considered as the data source for personnel decision making by this same subgroup.

When examined according to tenured status and sex of the respondent, twice as many tenured faculty felt rewarded for teaching as did nontenured faculty. Female faculty perceived themselves as somewhat more frequently rewarded than did male faculty. In summary, personal, intrinsic reward was perceived to be strong for teaching effectiveness, but formal levels of reward were cited by only one in five of the respondents.

The status of teaching on the University of Massachusetts/Amherst campus as represented by the data collected in the present study was indicated by responses concerning the formal and informal levels of perceived reward. Forty percent of the faculty members sampled indicated that teaching received no recognition in formal personnel

decision-making processes. Reward for teaching effectiveness rested, instead, at the level of personal satisfaction and accomplishment.

As noted in the nonempirical literature and, more recently, in systematic studies of the academic profession, teaching was not perceived to be heavily encouraged at the institutional level. The lack of systematic methods for evaluating teaching effectiveness was cited by some as the reason for not elevating teaching in the personnel process. However, a puzzling 84 percent of those sampled reported via the questionnaire that student evaluations of teaching were utilized to some extent for decision purposes. In only nine cases were such ratings considered alone. More frequently student evaluations were linked with colleague opinion in order to draw conclusions concerning effectiveness.

A comparison of figures for faculty instructional load with total reported weekly hours indicated that when both graduate and undergraduate, direct and indirect contact instructional hours were combined, the average faculty instructional load for the spring of 1976 was 11.99 hours a week out of an average work week of 55.42 hours. Only 22 percent of the work week was reportedly taken up in instructional activities. If this is accurate, perhaps institutional priorities on research can be justified. Until that time when institutional priorities for excellence are clearly stated and acted upon, teaching will continue to be a secondary priority for University of Massachusetts/

#### Career Satisfaction

I like studying. I like reading. I am not quite as excited about teaching as other teachers around. I don't feel motivated as much by this desire to inform everyone. I think I would probably get along just as well—maybe better—in a graduate school where things were oriented toward research and study rather than teaching. But teaching is alright. I don't have anything against teaching. I kind of enjoy it at times. (Social & Behavioral Science)

The faculty member quoted above expressed what would be assumed from a cursory reading of the literature in the field to be a typical position on the question of career satisfaction. In order to examine whether or not such a posture were indeed "typical" of the University of Massachusetts/Amherst faculty member, the researcher included three questions concerning career satisfaction in the present study. First, respondents were asked to describe those aspects of the academic career which they most enjoyed. Open-ended responses to this question were grouped into four major categories during the coding of the interview tapes. Second, faculty members were asked to describe those frustrations or concerns which gave them the greatest amount of dissatisfaction as a teacher at the University. Their responses were often of a multiple nature although two respondents registered no complaints at all. Third, the interviewer asked whether or not the respondents actively considered other careers. For those persons responding yes, reasons for considering career changes were probed. It was assumed by the researcher that older, tenured faculty members would exhibit less interest in changing careers although job dissatisfaction might still be high.

### What do you enjoy about being a faculty member?

Asked in the interview format, this question provoked a multiplicity of responses with most faculty members mentioning at least two sources of satisfaction. Table 22 indicates the categories into which faculty responses were organized and the percentage citing each response for both the entire sample and major subgroups. The study of faculty characteristics conducted by Wilson and Gaff (1971) and the national survey data collected by Ladd and Lipset (1975) suggested that the majority of faculty members enjoyed teaching and considered themselves, primarily, as teachers. Results of the present study did not support that same conclusion. Table 20 indicates that of the Massachusetts faculty members sampled, only 20 percent cited the act of teaching as a major source of enjoyment in their careers. Enjoyment of the performance aspect of the lecture situation and the intellectual challenge of transmitting something believed to beworthwhile were all factors mentioned in describing the satisfaction resulting from involvement in the teaching act.

Satisfactions provided by growing out of contacts with students may reflect somewhat more of an enjoyment of teaching, however, such contacts were mentioned as occurring both in the classroom and the laboratory, both in teaching and research activities.

You get your rewards at an ego gratification level, a personal interaction level. A student responds to you and you feel good. (Professional Studies)

I enjoy the personal relationships you can have on a one to one basis with students. (Humanities)

Students keep you responsive. I use them as a mirror of my own ability. (Professional Studies)

Satisfactions of an Academic Career as Reported by Faculty Compared by Percentage for Various Subgroups

R Variable S	Research & Scholarship	Life style	Relationships with students	Act of Teaching	Working with Colleagues
	%	%	۵,4	<b>%</b>	8%
Total sample	20	32	68	23	∞
Disciplinary affiliation					
Humanities	45	18	82	45	6
Mathematics & Science	88	50	20	13	13
Social & Behavioral Science	33	33	50	16	16
Professional Studies	07	33	73	13	0
Tenured status					
Tenured	99	33	74	30	7
Nontenured	38	31	54	∞	15
Sex					
Male	87	36	79	24	9
Female	57	14	98	14	14

Note. Percentages do not add to 100 percent due to the multiple-response nature

of the item.

In addition, faculty members also cited the enjoyment of seeing students succeed in later professional endeavors.

Students of mine are holding significant jobs. I feel that I have had a little something to do with where they are. I enjoy most the fact that I get feedback. I have communications from students that I had in previous years. (Professional Studies)

Students write after a year or so in the field. (Humanities)

One faculty member rummaged through stacks of bound dissertations to point out the professional positions currently held by those students for whom he had served as a major graduate advisor.

One-half of the respondents directly mentioned research and scholarly activities as key sources of enjoyment. These activities were cited more often by science and mathematics faculty members than by members of other disciplinary groups, by tenured more than by nontenured teachers, by women slightly more than by men, and by faculty members with a preference for research more often than by those with no preference or a preference for teaching. However, three-quarters of those who mentioned research also mentioned teaching or student contacts as well. The statement made by the faculty member at the beginning of this section would appear to be somewhat less than typical of the attitudes of the majority of respondents in the present study.

When teaching approach was examined in relationship to sources of career satisfaction, an interesting pattern emerged. Those faculty members who described their teaching as student centered cited the enjoyment of student contact in 100 percent of the cases. Only one-third of the same group mentioned research as a source of enjoyment.

Those faculty members who described their teaching as instructor centered cited the enjoyment of student contact in 71 percent of the cases while only 52 percent of professors with content-centered approaches mentioned student contact. This suggests that teaching approach is somewhat linked to sources of enjoyment with those faculty members who most enjoy student contact structuring their courses in such a way as to maximize that contact.

Life style, control, freedom, autonomy, and flexibility were terms used by respondents to describe the benefits of an academic life. One faculty member found satisfaction in the cyclical nature of the academic year which regularly provided the chance of beginning again.

A member of an arts department described his enjoyment of performance which did not necessitate travel. Finally, one or two persons mentioned sources of enjoyment in working with colleagues and the making of administrative decisions.

#### What are your frustrations or concerns as a teacher on this campus?

Faculty members in the present sample were given the opportunity to describe those sources of concern and dissatisfaction with their academic careers in both the questionnaire and interview formats.

Although sources of satisfaction had not been limited to those related to teaching, the author believed it necessary to limit concerns to those affecting instruction due to the tendency of persons to use the interview for the expression of a myriad of complaints. Responses reported are based for the most part on questionnaire results due to the low inter-rater agreement on the question in the interview format.

Once again a multiple-response format allowed for the coding of data on a wide range of instructional concerns as perceived by teachers. On the average, each respondent mentioned between two and three concerns.

As might have been predicted, the problem mentioned most frequently was the financial crunch under which the university has been laboring for several years. From January of 1975 until July of 1976, administrators imposed a freeze on both faculty and professional staff positions with the result that if a person were denied tenure or chose to change jobs or retire, that position was not refilled through additional hiring. Existing personnel were expected to take on additional responsibilities to cover the needs of the program or department. The loss of merit increases and pay raises, also due to financial austerity programs, was not categorized here. Instead, responses in this category focused on the loss of support services and staff. Secretaries, supplies, telephones, monies, and paper for xeroxing were in short supply at the time of this study. One faculty member described the results of these cutbacks in the following way:

This has been a very frustrating year with the crunch in the budget. The telephone situation is the worst. It forces me to stay at home. You ought to be here where the kids are. This, undoubtedly, is the worst thing, the phone ringing all the time. The next worst thing is folks coming to the door because they can't find anyone here and want someone to show them where to go. The next worst thing is that it is absurd for them to pay me the salary that they do and not only have me waste my time answering the phone but waste my time in typing my own papers—I don't type—and doing my own reprinting. When we have reprint requests, we send them out ourselves. There's no money to get them reprinted. We do that out of grants. There's no travel money. All

those sorts of support things that could help make this a good, an adequate, university, are unavailable. (Social & Behavioral Science)

Equally troublesome was the loss of morale and increase of anxiety reported by faculty members to have been generated by the position freeze.

Morale is bad. There is increased anxiety about the tenure decision. I have a good deal more anxiety about job security than I thought I ever would. (Humanities)

Good teachers are leaving in droves. (Humanities)

I am looking for a job. We are absolutely demoralized, wasting time talking about what could be done. (Social & Behavioral Science)

In the future they are going to have to open up a little bit because they're going to have a very hard time recruiting good people if there's not some inducement for them to come to Massachusetts. (Professional Studies)

Students, too, were mentioned as victims of the cutbacks. One large program on campus was faced with complete shutdown. Other departments, especially in the professional fields, continued to attract new students while not being able to hire new faculty.

Finally, the freeze deeply affected the trend toward "tenuring in." In the fall of 1975, of the 1268 full-time equivalent faculty members on campus, 904 were tenured or approximately 71 percent. In order not to lose faculty positions during the 1975-1976 academic year, department personnel committees were faced with the dilemma of granting tenure to less than excellent candidates or with taking on heavier teaching loads themselves.

We are keeping people on who should not be on tenure because they are not really qualified. But if we don't, we will lose the position. (Humanities) We are losing top quality people because of the tenure crunch. If you don't have any replacements you are precipitating mediocracy. (Professional Studies)

Persons in the humanities and sciences more frequently mentioned concerns associated with the financial cutbacks than did persons in other fields. Of particular aggravation to persons in the humanities was the loss of telephones and secretarial help. One of the largest departments on campus lost all faculty telephones and had to share a recorded answering service among the hundred plus faculty members.

In comparing responses in this area between male and female faculty members, the researcher found that 71 percent of the female respondents commented on financial problems while only 39 percent of the males did the same. As female faculty members are more likely to be nontenured and to hold a lower rank than males, their high level of concern may have reflected their anxieties about promotion and tenure. However, responses were not significantly different between tenured and nontenured members of the entire sample.

The second most frequently mentioned source of dissatisfaction was the problem of time, or rather, the lack of it. Tension among various faculty responsibilities was reported to be felt by 40 percent of the sample members. Most often described was a time bind between teaching activities and research pursuits.

There is a tension between teaching and research. I cannot do both simultaneously. I feel I don't have as much time to read as I would like. We work 60 hours a week. (Humanities)

I experience a pull between teaching and research. Whenever I am teaching, I feel guilty that I am not doing research. (Social & Behavioral Science)

My research takes pretty much a back seat while I am teaching. Unfortunately, this is where most of the advancement comes, at least in terms of salary. One cuts into the other. (Professional Studies)

The loss of faculty positions was perceived to have aggravated the research/teaching tensions more than usual.

We feel that we are tremendously overloaded in terms of our teaching obligation. (Professional Studies)

Where the rub is beginning to show is where we have a tremendously increasing enrollment and we have less and less time to spend on research so that publication, research efforts are declining. The part where the critique is really going to carry the weight is research and you're doing all this extra teaching which, in reality, you're not getting credit for. It really begins to bind. This could be an increasing bind because we're not going to be hiring faculty in as carefree a manner as we have in the past. . . You're really in a constant battle with yourself. I really should be doing this with this course but I don't have time for it. You're going to concentrate where it's going to do the most good. I guess I suffer for it myself because I really hate to let the students down. (Professional Studies)

In the hard and social science fields, 50 percent of the faculty respondents reported concerns in this area compared to smaller percentages in the humanities and professional fields. Both nontenured and male faculty members were more prone to describe time as a problem than were tenured and female faculty members.

The lack of appropriate administrative and legislative leadership was mentioned by 37 percent of the sample as an area of concern as well. Professional faculty members cited this area as problematic almost two to one over members of all other disciplinary groups, with all of the nontenured professional faculty members describing concerns in this area. Almost one-half of the male faculty members cited this area of concern but no female faculty members alluded to it at all.

Concern was expressed by some faculty members over the lack of a clear definition of purpose and direction for the university.

This, they believed, was related to a lack of strong administrative leadership.

At one time, universities knew what they were about. The product was more culturally homogeneous. We no longer have any sense of mission. (Social & Behavioral Science)

There is a lack of purpose in education. (Professional Studies)

The university has defined the wrong goals for itself. (Professional Studies)

The real problem is one of campus leadership. In a period of readjustment where growth for growth's sake is no longer a sufficient rationale, there is a dire need for a concerned and intelligent leadership which we do not feel is often apparent. (Humanities)

I don't know what the goal of this institution is. I don't think they are oriented toward teaching. (Professional Studies)

Administrative policies were also perceived by some respondents to be particularly repressive and hostile to the development of both the individual faculty member and the university itself.

The university is a good place to get ulcers if you don't do everything they say. Everything you do is controlled by the administration and their inefficiency really bothers me. (Professional Studies)

The whole school is rampant with politics. The average faculty member here is very mediocre. I would say the top faculty is very good, but the policies are made for the average faculty and the mediocre faculty are trying to hold onto their jobs. (Professional Studies)

They (the administration) aren't responsive to my needs but I'm supposed to meet their needs. That's not good administration. (Professional Studies)

The administration is very often arbitrary in this university. They make decisions on whatever the present needs happen to be in the institution, not the long range, but the present needs. If the budget is tight, they cut. Where do they cut? They cut the people who are less vocal and have the least ability to fight back. (Professional Studies)

That these concerns were campus wide was borne out by two events. In 1976, the faculty senate passed a resolution stating a lack of faith in University of Massachusetts President Robert Wood. At the same time, the movement toward faculty unionization began to gather steam, moving toward an acceptance vote in February of 1977.

Closely related to the concern over administrative leadership was a problem mentioned by 37 percent of those sampled—the lack of appropriate reward. The major complaint in this area was of a lack of appropriate recognition and reward for good teaching.

The university does nothing to encourage good teaching or to let the faculty member feel he is helping to run the university. (Humanities)

Student ratings don't reveal what I'm trying to do in class. Something needs to be done about the importance of teaching in this university. What the university is doing is leading to depreciate rather than appreciate teaching. (Social & Behavioral Science)

Basically, the whole thing comes down to this--are the people that govern whether faculty keep their jobs or are promoted going to be willing to recognize teaching as a co-legitimate activity? (Mathematics & Science)

How much time can you put into teaching when it is not personally rewarding? The pay is low compared to industry considering the long hours you spend keeping up with the literature, maintaining research, etc. (Professional Studies)

Several other respondents mentioned the lack of cost of living increases, the loss of merit pay, and the lack of professional standing of a particular department. Professional faculty members

mentioned such problems more frequently than did members of other disciplinary subgroups. Nontenured faculty described lack of reward as a concern three to one over tenured faculty while men cited it three to one over women.

A final area of concern shared by one-third of faculty members was the lack of ability, motivation and/or interest on the part of University students.

We may be training people who ought not to be in college at all, people who have no intrinsic (I hate to say it) academic talent. That makes me what's called an elitist, I guess. I would restrict training to people who have some academic ability to begin with. (Mathematics & Science)

There is a failure among students to master basic communication skills, both written and oral. (Social & Behavioral Science)

The illiteracy in Massachusetts is appalling. (Humanities)

I don't want to make the mistake of catering to the brightest students because that loses the rest of the class. Still you have to realize that you can't win them all. Some problems are due to shortages of preparation in students' backgrounds. (Mathematics & Science)

I think UMass undergraduates are terrible students. I don't think I've ever had worse students. They don't prepare. They don't study very hard. They're not very well educated when they get here. They can't read or write very well. They are less sophisticated, less interested and less motivated. (Humanities)

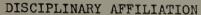
Students were also described as apathetic, disinterested and unmotivated.

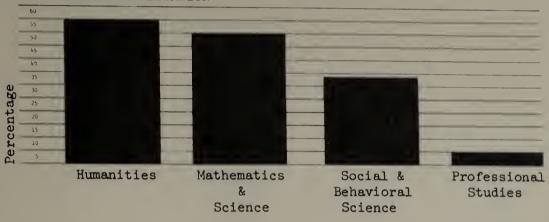
There are too many people at this school who don't belong in college, who don't especially want to be here, who have no real motivation for being here, but who have no other real option. There's no other option that society really offers. (Humanities) This school is a very difficult one to teach at--what I mean is that we have an extremely large number of kids who could care less. (Mathematics & Science)

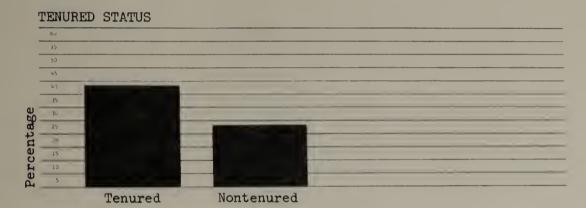
There is no real interest or ability, no real potential among the students in this department. Since I have been here I have not seen one eye light up. (Mathematics & Science)

Figure 1 demonstrates the particularly large discrepancy in the frequencies with which members of various subgroups in the sample cited student attitudes and abilities as problematic. Professional school respondents may have different perceptions of student abilities and interest due to the self-selection of students into these disciplines.

Several faculty members described the University of Massachusetts student as less prepared today than in years past. Partially this was seen to be a result of lower admission standards as well as lower standards for classroom performance set by individual teachers. During the same period in which the present study was being written, ACT released figures demonstrating a drop in college entrance exam scores across the nation. Faculty perceptions on the university campus are somewhat supported by the ACT results. However, an office for adult students on campus recently released figures showing that 47 percent of the students on campus are considered nontraditional, i.e., older than the traditional 17-21 year old student. Most of these nontraditional students, of which only several thousand are graduate students, are characterized as serious about getting a job. They are over 25, married with one or more children, time oriented, and upper middle class. They are not lecture oriented but prefer self-directed,







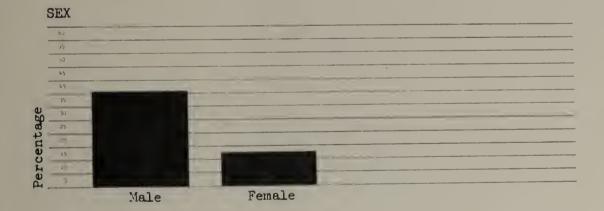


Figure 1. Percentage of faculty describing lack of student ability and/or interest as a major instructional problem examined by disciplinary affiliation, tenured status, and sex of the respondent.

independent or active classroom involvement. They tend to enroll in applied or professional fields and to avoid nonrelevant areas of study. Such students do not fit the descriptions by faculty members of their students as disinterested and unprepared. Some investigation of this discrepancy deserves further study.

A variety of other sources of dissatisfaction was mentioned by four or less of the sample respondents. These responses included in descending order of frequency: (a) the slighting of lower division undergraduate courses; (b) the sudden growth in size of the university; (c) an overabundance of administrative duties for faculty members; (d) the isolation of faculty members from one another leading to a duplication of effort and a lack of feedback; (e) the move toward unionization; and (f) the infrequent use of alternate teaching methods. Inadequate physical facilities, growing old age and intolerance of the faculty, the closing of career areas for students, and not being allowed to teach in one's area of specialty were each mentioned by one respondent.

# On those days when you no longer want to teach, do you consider other careers?

A final measure of career satisfaction was the activity of faculty members in considering other careers. The majority of University of Massachusetts professors reported that they still consider careers other than university teaching due, perhaps, to the current financial insecurity provided by the University of Massachusetts. Only 40 percent of those responding reported that they do not frequently or occasionally actively consider changing careers. Professional faculty were more likely than other discipline groups to consider new careers.

This group reported the availability of other professions and complained of the large salary discrepancies between academic and applied positions. Tenured and male faculty were only slightly more apt to consider a change than were nontenured and female faculty. From the response to this item, it might be deduced that University of Massachusetts faculty members at the time of this study were somewhat more dissatisfied with their career choices than were faculty nationwide.

In order to probe the reasons behind this response, faculty who answered yes to the above question were asked to describe their reasons for considering other careers. Responses, as offered, consisted of both positive and negative reasons for leaving the academic career.

On the positive side, several professors mentioned the need for continual professional and personal growth.

I never close the door. I want to be careful that individual growth doesn't confine itself to the discipline. There is danger of seeing only one way of life. I feel the continual need to look around and see what the rest of of the world is doing. (Professional Studies)

I would probably leave the university tomorrow if a better job were offered. If I don't do what I'm doing here, I wouldn't do any other kind of teaching. (Professional Studies)

I feel a need for new curriculum or new skills. (Professional Studies)

The majority of the reasons cited alluded to some sense of dissatisfaction with the University of Massachusetts situation rather than with the academic career itself.

I'm not saying I would never try teaching again. I most probably would but not in a place like this. . . . not so much for the lack of money but because you can't see the value of what you're doing. (Humanities)

I can't bring myself to cope with complete submission to the system. I've always got to fight. (Professional Studies)

It's a good career but the satisfactions have gone down over the last five years. (Social & Behavioral Science)

I think the biggest thing is this place is no longer a comfortable place to be. It has become a machine. The professors are dealt with as commodities and so are the students. (Mathematics & Science)

It's the peripheral junk of the university that makes me think of leaving, the red tape, the telephone bills, the administration. (Mathematics & Science)

Several professors cited a dissatisfaciton with teaching as a major reason for considering other careers.

I've had a heavy enough assignment in extension and research now compared to teaching that the teaching is really getting to be a pain. I've got a million other things I need to be doing. (Professional Studies)

I don't think that my rewards have been related to my teaching. I think it's quite clear that my promotions, etc. were based on my performance as a professional—my publications, the quality of the work I've done. (Professional Studies)

It's incredible that you are expected to teach as many as 200 to 500 students a semester, have a five-day-a-week teaching load, and at the same time, produce valuable, worthwhile scholarship and make a significant service contribution to my department and my university. I've been "turkeyed" into putting in an enormous amount of work. (Humanities)

Sometimes I get tired of teaching. (Humanities)

I don't know if I would have stayed had I been given tenure. I don't like teaching. (Mathematics & Science)

In summary, faculty members on the University of Massachusetts/
Amherst campus were less likely than faculty members in both national
surveys and empirical studies to describe teaching as a major source
of career satisfaction. Only one-third of those citing the enjoyment

of research and scholarly work also mentioned the satisfaction derived from teaching itself.

Career dissatisfactions covered a broad range of issues with the most attention being given to the effects of the financial austerity program operating on the campus. Related to this problem were problems in administrative leadership and the lack of appropriate reward.

Respondents were a great deal more likely than those sampled by Eckert (1972) in 1968 to list career dissatisfactions. The large percentage of each interview used by faculty respondents to discuss problems related to teaching may be explained in several ways. First, the unusually strict procedures initiated by the Massachusetts legislature and university administration were experienced as particularly repressive during the academic year 1975-76. Second, the lack of communication among faculty members and a growing sense of powerlessness evidenced in the move to unionization may have made the interview situation particularly useful to the faculty member as a medium for expressing building frustrations and hostility.

Such frustrations led 60 percent of those responding to report that they "frequently" or "occasionally" considered changing careers.

Although reasons for doing so were varied, almost six out of ten cited dissatisfactions with university policies and activities as major reasons for considering such changes in the midst of a shrinking and unsteady job market. The academic year 1975-76 was a difficult and trying time for both those faculty who enjoyed the teaching function and those who preferred to pursue research and scholarly study.

### Direct Statements of Attitude

Throughout the conducting and coding of the interviews, the author made particular note of direct statements of attitude toward teaching. No questions were designed to specifically solicit such statements on the rationale that by examining a number of facets of a single issue, a more exact reading of attitude might be obtained than by directly asking for a single statement of that attitude.

The author had postulated that responses to the question of research/teaching preference would provide some information upon which distinctions could be drawn between varying attitudes toward teaching. Relationships between direct statements of attitude and expressed preference were strongest for those persons who described their preference as research oriented. Such faculty members tended to comment negatively on their teaching. Several expressed discontent with what they considered to be excessively heavy teaching loads.

We feel that we are tremendously overloaded in terms of our teaching obligation which is largely service. (Professional Studies)

As far as getting in the laboratory and actually doing things, why we don't have enough time for doing this anymore as the teaching load gets heavier and heavier. Although I'm only teaching one course a semester, I usually have an honors student or two and perhaps end up teaching a special problems course. One cuts into the other. (Professional Studies)

One faculty member was particularly vitriolic, expressing an extremely negative attitude toward teaching that had grown out of unpleasant experiences in his attempt to be a good teacher. The better he became, the more students he was given.

My attitude toward teaching at the University of
Massachusetts is atrocious. I hate the place and I'm
getting out. I hate the place enough that it has
raised questions in my mind about the whole system of
American higher education. There is too much of a
feeling that what I do is unessential and unimportant.
There is very little positive feedback from anyone
above me about what I do. If they would let me teach,
let me go into my classes and teach, I would be a happy
man. It's just not so. I'm supposed to be a teacher but
I'm not a teacher. I'm a paper pusher. The worst part
about it is that it is not just the administration but
also my colleagues that support this approach. (Humanities)

Broad generalizations offered by respondents concerning teaching on this campus painted the picture of a large, impersonal institution devoted to research. Individual faculty members described an academic norm against which they perceived themselves to be working in the support of teaching.

The university is a place where you make knowledge as well as dispense it. It has to come from somewhere. There has got to be someone doing the thinking. That's what goes on in universities. That is why a real university professor is a maker of knowledge as well as a dispenser. Who makes knowledge? Some people can get by using the ideas of others to teach their students. But the ideas have to come from somewhere. The best universities are where the lively minds are who make the knowledge that other people dispense in the provinces (chuckle). Our department is a very distinguished department. (Humanities)

The best teaching in America goes on in kindergarten. As you go up the ladder, teaching gets increasingly worse and the worst teaching you find is in the university with the possible exception of summer school. I don't think people care about teaching.

I have a very biased opinion about that because in our department, I know that the people, 90 percent of them, do it on order to provide some means of living. They don't want to do it. They want to do their own things. They can't make a living at doing that, so they teach in a college or university. (Humanities)

Teaching is used as a punishment. If you're good, you don't have to teach as much. If you are bad, you have to teach more. The thing also goes in levels. If you are good, you can teach high-level, specialized courses. If you are bad, then you have to teach introductory courses. This is totally contrary to what teaching should be all about. (Professional Studies)

Positive statements concerning teaching were most likely to have been made by professors expressing a preference for teaching equal to or greater than that for research. These persons expressed a love, an enjoyment, and an enthusiasm for teaching.

I love teaching. Most of my time is in teaching. Timewise I'm 75 percent teaching and 25 percent research. I enjoy them both, especially if I can do applied research. (Professional Studies)

I enjoy teaching. I couldn't imagine not trying to do it well. They pay me well for it and I enjoy it. (Social & Behavioral Science)

I'm happy with what I'm doing. I really like teaching. I've not had any regrets over that decision to to enter the profession. I've tried something else and I like this better. (Social & Behavioral Science)

Teaching is something I do enjoy tremendously. You want to create something of yourself and it's a creative activity. You also feel like you're transmitting something worthwhile. That's one of the great things about teaching. You can really see in some cases how you altered people's lives. All of us have had that happen to us. You really feel you had a significant impact. That's one of the rewards of teaching and you give up money for that. (Mathematics & Science)

Creating the aesthetical experience, taking a group from zero, is an art. It is like telling a group of people that you are going to blindfold them and lead them through a rocky, dangerous mountain pass where rocks will fall on them. They will trip. They may fall. But when they take off their blindfolds, they will be in the most beautiful place imaginable. (Humanities)

The necessity of a positive attitude for success in teaching was underscored by several faculty members.

From my own experience in teaching the course, the way the course goes is just 100 percent dependent upon your own attitude. That I found out last spring. I just couldn't wait for the semester to get over. It was reflected in the way I taught and the interest of the students. This year I went in with a completely different attitude. I was going to enjoy it and the kids have enjoyed it a lot more. They've gotten a lot more out of it. We've covered a lot more material at a lot more depth. Your attitude toward teaching makes the different. There's no question about it. (Professional Studies)

You have to want to teach. You have to want to be interesting and take the time to do it. I won't let the students down. They're important. (Professional Studies)

If you start droning or take on a negative attitude, you can sense it in the class almost immediately. People get up and walk out on you. No matter how I really feel about the situation, what I do is just the opposite. I start walking up the stairway and become part of the audience. (Mathematics & Science)

Two faculty members reminisced about being awarded Distinguished Teacher's Awards. One, in particular, commented on the importance he believed teaching to have played in his own advancement within the academic community.

The biggest reward I had was being honored as a Distinguished Teacher. That meant a lot to me. I would never mention it to a student or to a colleague. I would never mention it to anyone, but it meant a good deal to me. I think I have been rewarded for my teaching. I think it has been my main contribution to the university since I've been here. (Mathematics & Science)

Other positive attitudes toward teaching were revealed in comments concerning goals, expenditures of time, and personal values.

I feel very dedicated to teaching and the preparation of teachers. I feel it is a tremendous responsibility. We could change the world. We have this in our power. Just think. There will be 350,000 young graduates coming out of colleges and universities this year. They are going to be dealing with one million children next year. (Humanities)

My chief goal is teaching. (Mathematics & Science)

Teaching becomes my basic definition of myself, in a way that it isn't for a lot of people. I've never really been able successfully to divide teaching from anything else. I like to write very much. It's the thing I like to do best along with teaching. I wouldn't choose one over the other one. But I don't really see any division between the way I research and write and the way I teach. They are extensions of one another. Sometimes one or the other will be prior but there's a basic interrelationship. (Humanities)

#### Summary

The "typical" faculty member at the University of Massachusetts/ Amherst as illuminated in the present study of faculty attitudes toward teaching differs somewhat from those faculty members portrayed in earlier empirical studies in the field. S/he is less likely to demonstrate the characteristics outlined by Wilson and Gaff (1975) for their respondents, the majority of whom were found to favor academic change. S/he is less satisfied with his career choice than were respondents in Eckert's (1972) study of Minnesota faculty members. S/he tends to be more vocal concerning teaching philosophy than professors interviewed by Sanford et al. (1972). Like the typical respondent in Eble's (1972) study, however, the University of Massachusetts professor respects teaching but is less interested in it than respondents sampled nationwide by Bayer (1972) and Ladd and Lipset (1976). The level of interest that does exist is not acted upon because institutional reward structures favor research and publication. In short, there is little evidence to support the conclusion offered by Hruska (1975) that the University of Massachusetts professor is "extremely interested" in teaching.

#### CHAPTER 5

#### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary of Findings

Attitude toward teaching is a value question concerning one's personal stance in relation to styles of teaching and the goals of the educational process. The issue is related to the reasons people became teachers; it is also tied to the satisfactions faculty gain (or lack) in their own role as teachers. (Brown & Shukraft, 1971, p. 196)

In order to explore the attitudes toward teaching held by faculty members at the university level, the author asked a series of questions of 40 full-time faculty members at the University of Massachusetts/
Amherst using an in-depth interview procedure. Responses to these questions were reviewed and organized into five major topics for analysis: (1) career choice and preparation. (2) philosophy of teaching, (3) self-assessment of teaching effectiveness, (4) formal and informal rewards for teaching, and (5) career satisfactions.

Faculty participants were randomly selected from among the population of full-time faculty members on campus in the fall of 1975 according to two parameters: discipline affiliation and tenured status. Sample size was held at 40 due to the nature of the interview as a data collection tool. The advantages provided by the interview for the exploration of attitudinal information were judged to outweigh the disadvantages of having a small sample given the purposes of this investigation.

Data were collected, therefore, through a combination questionnaire/
interview procedure. After initially contacting the faculty member
by phone, the researcher asked the respondent to complete a ten-item
questionnaire in order to collect background information and to provoke
some forethought on the issues to be discussed in the interview session.
For the interview itself, the author prepared a series of questions
designed to arouse interest in the topic, collect specific attitudinal
and descriptive information, and encourage the open exchange of opinion.
Interview sessions lasted approximately 45 to 90 minutes although
respondents were asked to set aside one hour. In all but five cases,
these sessions were tape recorded.

Generally, receptivity was high. Faculty participants demonstrated a willingness to talk and many were eager to extend the interview session beyond the allotted hour. Several respondents thanked the interviewer at the end of the session for the opportunity to discuss such issues, an opportunity that they reported to be rare.

During the second phase of the study, a coding system was devised from a small subsample of the interview tapes whereby the open-ended responses elicited in the interview format could be categorized and tabulated for analysis. Results were then reported in terms of frequencies and relative frequencies and responses examined in light of the independent variables included in the study. Where additional relationships had been suggested by earlier literature in the field or researcher experience, questions were paired and examined for possible associations. Due to the small size of the sample, statistical tests

of association were not performed on the contingency tables thus formed.

The major findings of this study are summarized for presentation here into three different patterns that bear directly upon the primary questions under investigation—the attitudes of faculty members on this campus toward teaching and any differences that exist in those attitudes among the various disciplines and ranks represented in the sample. First, results are summarized for the sample as a whole. Second, results are grouped in order to summarize those responses that best discriminate between the various disciplinary groups or between persons with and without tenure. Third, those responses are reported that best characterize the attitude of those persons who described their interest as oriented more toward teaching than toward research.

# Attitude Toward Teaching: A Summary of Major Findings for the Entire Sample

The majority of the faculty members sampled in the present study expressed an interest in teaching equal to or greater than that in research. This interest, however, was moderated by the lack of institutional support perceived for effective teaching. Aspects of career preparation, teaching style, and self-perceptions of teaching effectiveness also tended to encourage a greater focus on research activity than on teaching in terms of time and energy.

Most of the respondents had not selected the academic career for the opportunity it provided to work with students in an instructional capacity. Many, in fact, described their choice of the career as a non-choice. They had continued going to graduate school out of an interest in a particular subject or sheer happenstance until there was nothing left to do with their degrees but teach in a college or university. Along the way, a few had picked up courses in pedagogy, served as graduate teaching assistants, or taught in elementary or secondary schools. A full two-thirds, however, had entered the profession having had no formal instruction in pedagogy as either graduate or undergraduate students.

No one philoshopy of teaching was ascribed to by a majority of the sample. However, most described their major objective for student learning as an increase in knowledge or technical skill. Slightly less than one-third of the respondents mentioned as the primary objective of their teaching the development in students of critical, analytical, or creative thinking behaviors.

When asked to describe their major strengths as teachers, faculty respondents initially hesitated, unwilling, unable, or unused to analyzing their teaching in such a fashion. After some contemplation, all but three persons were able to pinpoint one strength ranging from the ability to establish a positive relationship with students to extensive knowledge of the subject matter. Most faculty respondents reported the use of some combination of three major data sources for the personal assessment of teaching success, whether for one class or for an entire course: systematic student rating forms, nonsystematic student comments, and student activities both in and out of the classroom.

Three-fourths of the faculty members sampled agreed with the statement in terms of their own experiences that "no one can be a good

persons also reported that they were actively involved in research with the exception of four who did not respond. Research involvement, however, was found to include such things as directing graduate students, managing a grant, writing a textbook, keeping up in one's field, as well as the planning and implementing of hypotheses testing.

At the departmental and institutional levels, research was reported to be the major criteria for the awarding of tenure and promotion by three-fourths of the faculty members sampled. Teaching was reported to be considered in one-third of these cases as a secondary factor. However, the method used to evaluate teaching for such decision making was not perceived to be consistent. Systematic student evaluations were reported as "always" used in only one-half of the cases sampled. Used less frequently were the comments of colleagues or research and publication records.

Although teaching was not perceived as a source of formal reward, it was cited by over two-thirds of the respondents as a major source of career satisfaction in terms of student contacts and enjoyment of the teaching act itself. All of those persons describing their instructional style as student centered reported that student contacts were major sources of career satisfaction. Those persons describing their teaching styles as instructor or content centered were less likely to report that contacts with students were a major source of satisfaction.

Most respondents in this study reported two or three major concerns or frustrations that they perceived to directly effect the quality of

their teaching. Most frequently mentioned was the effect of recent financial cutbacks that had reduced the availability of supplies, equipment, and staff. A lack of sufficient time to complete teaching, research, and service responsibilities as well as a lack of strong administrative leadership and appropriate rewards were mentioned by approximately two-fifths of the respondents as troublesome. One-third complained of student apathy or lack of ability. Finally, over half of the respondents reported that they frequently or occasionally considered other careers due to these frustrations.

# A Summary of those Findings that Discriminate Among the Various Subgroups Examined

In the present study, response patterns to several of the questionnaire and interview items varied widely when the various independent variables were manipulated. Those results that best discriminated among the four disciplinary affiliation groups, between tenured and nontenured faculty groups, and between male and female faculty groups are briefly described below.

#### Humanities.

- (1) Faculty members in the humanities were most different from members of other disciplines in the area of teaching philosophy. Over four-fifths of those sampled in the humanities described their teaching style as instructor centered with a wide variety of projected outcomes for student learning.
- (2) It would follow, therefore, that members of this disciplinary group overwhelmingly listed students as a source of career satisfaction.

  The act of teaching, too, was perceived as particularly rewarding.

- (3) Systematic student ratings were reported to be a major factor in the determination of teaching effectiveness for both personal and decision-making purposes.
- (4) Humanities faculty members were the least likely of all respondents to perceive research to be the sole criteria for advancement.
- (5) Somewhat discrepant with their positive attitudes toward students, faculty members in the humanities were more likely than those in other disciplines to cite students as a major source of frustration.
- (6) Faculty members in the humanities were the least likely of those in any other disciplinary group to have had pedagogical instruction or previous teaching experience prior to entering university teaching.
- (7) Members of the humanities group were the least likely to have had experience in other careers since three-fourths of them reported choosing the academic career either during or immediately upon completion of their graduate work.
- (8) The majority of the respondents in this group described their method of choosing the academic career as accidental.
- (9) The frustration mentioned most often by humanities teachers was the financial squeeze experienced by the University of Massachusetts since January of 1975.

# Science and Mathematics.

(1) In spite of a stereotype that suggests that science and mathematics courses involve the memorization of long lists of facts, one-half of the scientists and mathematicians in the present study

reported as a major goal of their instruction, the development of critical and analytical thinking processes in students.

- (2) Two-thirds of the scientists and mathematicians reported the use of intuition in the personal assessment of teaching effectiveness. Systematic student evaluations were utilized with much less frequency for this purpose.
- (3) All members of this group reported that research was the primary criteria for advancement. When teaching was considered, colleague opinions were the most frequently utilized source of evaluation.
- (4) Colleagues were also reported to be an infrequent source of reward for teaching effectiveness by members of this group.
- (5) Although no one reported an interest in teaching greater than that in research, two-thirds of the sample described their interests as equally divided between their research and teaching activities.
- (6) Research, however, was perceived as the most satisfying aspect of the academic career by four-fifths of the scientists and mathematicians sampled. In addition, life style was mentioned as source of career satisfaction much more frequently by this group than by any other.
- (7) Scientists and mathematicians reported more frequently than did respondents in other disciplines a concern over the lack of time available for completing research and teaching responsibilities.

### Social and Behavioral Science.

- (1) One-half of the social and behavioral scientists sampled reported that they had chosen the academic career because of a strong interest in the discipline itself.
- (2) Social and behavioral scientists were more likely than those in other disciplines to have come to the academic profession with some training for its teaching component. One-half had participated in instructional seminars as graduate students specifically designed to prepare them for college teaching.
- (3) Two-thirds of the members of this group reported that the major outcome of their instruction was the increase of knowledge or technical skill for students.
- (4) Social and behavioral scientists were also the most likely of all respondents to describe their interests as research oriented.

  One-half of this group indicated a greater preference for research than for teaching.
- (5) However, members of this group were the more likley than those of other disciplinary groups to perceive teaching to be included as a criteria for departmental decision making.
- (6) Systematic student ratings were used least frequently by members of this group than by those of any other disciplinary group to assess the personal success of course and class activities. However, such ratings were utilized more frequently than any other source in the formal evaluation of teaching effectiveness.

(7) A lack of sufficient time to complete research, teaching, and other responsibilities was cited by one-half of the social and behavioral scientists as a particular frustration.

#### Professional or Applied Studies.

- (1) Although few respondents subscribed to a student-centered philosophy of teaching, members of the professional schools were the most likely respondents to do so. One-fourth described their teaching style as student centered.
- (2) Professors in the applied fields were the most likely respondents to emphasize an increase in knowledge or technical skill as the major goal of their instruction.
- (3) Research was perceived by slightly less than two-thirds of the professional studies group to be the sole criteria for decision making. Rewards for effective teaching were not reported to originate at the departmental level by the majority of the respondents in this group.
- (4) Three-fourths of those in professional studies departments reported that contacts with students were the most satisfying aspect of the academic career. This group, too, was the least likely group to mention student apathy or ineptitude as problematic.
- (5) As the professional studies group was the largest of the four disciplinary groups to be sampled, their responses to interview and questionnaire items most frequently influenced the results of the present study. Very few findings were unique to this group of respondents.

### Tenured and nontenured faculty members.

- (1) Little difference was found to exist in terms of responses between tenured and nontenured faculty members. As 68 percent of the faculty at the University of Massachusetts/Amherst were tenured in the fall of 1976, the responses of tenured faculty strongly influenced the results of the entire study.
- (2) The major difference found to exist between tenured and nontenured respondents concerned teaching philosophy. The majority of nontenured faculty respondents described their teaching style as content centered whereas the majority of tenured respondents described their styles as instructor or student centered. This may reflect the effect of tenure which provides a measure of security within which one may more widely vary one's teaching methods and styles.
- (3) Twice as many tenured as nontenured respondents felt intrinsically rewarded for their teaching, although both groups were equally prone to agree that research was the sole criteria for advancement.
- (4) Tenured respondents reported more satisfaction derived from relationships with students and the act of teaching than did nontenured respondents.
- (5) Personal teaching effectiveness was determined through the observation of student activity and intuition more frequently by tenured than by nontenured respondents. Nontenured respondents reported a reliance on student comments, both systematically and nonsystematically collected, to assess personal teaching effectiveness.

(6) The majority of the tenured faculty respondents reported that research activity was a major source of career satisfaction and a necessary corollary to good teaching.

Male and female faculty members. Although not treated as a major variable in the present study, several inferences were drawn about male and female faculty members from the data collected. Due to the small number of female respondents in both the population and the sample, such inferences require additional study before more accurate generalizations can be made.

- (1) Male respondents most frequently described their teaching style as content centered while female respondents most frequently described theirs as student centered.
- (2) Female respondents more frequently indicated that the development of critical thinking in their students was the major objective of their instruction than did male respondents.
- (3) No female respondents indicated an interest in teaching over that in research although the majority indicated an equal interest in both.
- (4) All female respondents agreed that active research involvement was a necessity for good teaching. This may have been the result of their position, in general, at the bottom of the advancement ladder.
- (5) Female respondents more frequently than male respondents reported that students were a major source of career satisfaction.

  Male respondents were more likely to complain of student apathy and ineptitude.

(6) Female faculty members in the sample were more likely than members of all other groups to complain about the effects of the financial cutbacks. This too may have been related to their lack of status within the institution. Several were particularly concerned that when cuts were made in faculty, they would be the first to go.

#### A Summary of those Findings Most Characteristic of Respondents Who Described their Interests as "Leaning Toward" Teaching over Research

Only one-fifth of the respondents in this study described their interests as greater in teaching than in research on questionnaire item number six. The author had postulated that many of the responses offered by members of this group to the various interview questions would differ noticeably from those offered by other faculty members. However, only one major topic was found to discriminate consistently between those who described their interests as teaching oriented and those who described their interest in teaching as equal to or lesser than that in research: comments concerning students.

- (1) Persons who described their interests as leaning toward teaching in all but one case had primary teaching responsibilities at the undergraduate level.
- (2) Most of the respondents whose interests favored teaching were tenured and had taught at the university level for 11 years or more.
- (3) In general, members of this group had come to the profession after experience in another career.

- (4) The teaching strength mentioned most frequently by the members of the teaching-oriented group was the ability to establish good working relationships with students.
- (5) Teaching-oriented respondents were more likely than others to assess their own teaching effectiveness through the observation of student activity both in and out of the classroom.
- (6) Respondents who described their interests as greater in teaching than in research were more likely than others to report that they had chosen the academic career out of a desire to work with students.
- (7) This group of respondents was not prone to derive satisfaction from the act of teaching itself, but from the relationships that teaching provided with students.
- (8) In spite of this unusually positive attitude toward students, particularly undergraduates, teaching-oriented respondents were not prone to employ student-centered teaching styles although they were more likely than others to emphasize the development of critical and analytical processes in their students.
- (9) The majority of the members of this group perceived research to be the sole criteria for advancement. Rewards for teaching effectiveness were not seen to emanate from the formal recognition and reward structure of the department, but instead, from the recognition provided by colleagues for a job well done. This latter finding correlates closely with the assertion with which this paper began, that the perceived support of colleagues is the reality base upon which action is built: "Thus if a faculty member believes his

colleagues are not interested in teaching, that is an important fact for him" (Gaff & Wilson, 1971, p. 475) and vice versa.

#### Discussions and Conclusions

Results of the present study correlate to some extent with the recent survey findings of Ladd and Lipset (1976). Faculty at the University of Massachusetts, however, were less likely than faculty sampled nationwide to express a preference for teaching over research. Although many indicated an equal interest in teaching and research, only one-fifth preferred teaching over research compared to nationwide.

Several factors were found to restrict the active expression of that interest expressed in teaching on this campus:

- (1) Most faculty respondents did not consciously select the academic career for its teaching aspects nor did they formally prepare themselves in the discipline of teaching.
- (2) Most faculty respondents saw as the major purpose of instruction the transmission of a body of knowledge rather than the development of a way of thinking.
- (3) The majority of the faculty members sampled responded to the questions concerning the self-assessment of teaching as if they had not reflected on their own skills as teachers. However, most indicated some utilization of various data sources such as student ratings, student comments, and student activity to judge the success of a particular class session or entire course. Such assessment procedures were generally considered at the conclusion of the semester, therefore, having little impact on the immediate teaching situation.

- (4) Most respondents viewed effective teaching as an outgrowth of research and publication activities suggesting that a thorough knowledge of the subject is the sole prerequisite of good teaching.
- (5) Although informal rewards for teaching were perceived to exist by the majority of the sample, the major criteria for personnel decision making at the departmental level was reported to be research productivity. Teaching was perceived to be considered of equal or greater importance in personnel decision making by only 15 percent of the respondents.
- (6) A lack of both institutional support for teaching and strong administrative leadership worked to depreciate rather than to appreciate the value of teaching.
- (7) The majority of the 60 hour work week described by respondents was taken up with noninstructional activities.

Due to the small number of persons sampled from all but the professional fields, accurate generalizations about the various subgroups examined in this study were difficult to make. The stratified, proportionate nature of the sampling procedure lent itself more appropriately to the discovery of findings concerning the population as a whole rather than its component parts. Teaching approach, including the philoshopy and objectives of teaching, discriminted most frequently among the various disciplinary groupings. The status afforded to teaching in formal reward structures and the sources of reward perceived for teaching effectiveness were found to vary widely from disciplinary group to disciplinary group as well. Career choice and preparation occasionally provided an additional measure of differentiation among disciplines.

Differences between tenured and nontenured faculty respondents were found to be slight. Tenured faculty with 11 years or more of teaching experience were somewhat more likely than others to approach teaching from a student centered point of view. Such faculty may experience a strong sense of security, therefore taking advantage of opportunities to experiment with classroom methods and techniques. This conclusion corresponds with the experience of the author who has found that such faculty are also the most likely to take part in both long and short term teaching improvement programs offered on campus.

Some attitudinal differences were suggested between male and female faculty members, especially in relation to students. However, the small number of female respondents in the sample prohibited the making of broad generalizations about either group.

In conclusion, faculty members in the present study were interested in teaching but did not perceive professional advancement and reward to emenate from developing themselves as teachers. Instead, they found it necessary and advantageous to spend the majority of their time in noninstructional activities and perceived no immediate benefit to accrue from taking part in the numerous opportunities available on campus for the improvement of teaching.

## Recommendations for Further Research

The present study was intended to generate a number of specific hypotheses for future testing. Due to the limited scope of this investigation, many of the findings summarized in the previous section for both the entire sample and various subgroups within that sample

require further testing with a larger population. In addition, the following section itemizes those questions which arose during the course of collecting, coding, and analyzing interview data. Research studies organized around any one of these questions might serve to provide relevant information for both the improvement of teaching on college and university campuses and the establishing of more productive work environments for those in the academic profession.

- (1) What is the relationship between teaching approach and the type and amount of pedagogical instruction received by the faculty member as a graduate student?
- (2) What effect does teaching experience and effectiveness at other levels of education (elementary, secondary, junior college, or as a graduate teaching assistant) have on those persons who subsequently enter university teaching?
- (3) What factors are most responsible for the gap which was found to exist between faculty perceptions of their environment and the environment itself? For example, many respondents in the present study complained that their colleagues were not interested in teaching. However, over one-half of the sample reported that their interest in teaching was equal to or greater than that in research.
- (4) Do university teachers teach as they were taught or as they themselves learn?
- (5) What is the effect of teaching assistant experience or graduate courses in pedagogy on later interest in teaching over research?

- (6) Why do female and professional faculty members tend to use student-centered styles of teaching more frequently than others, if indeed this is the case?
- (7) Are student, institutional, or personal pressures more responsible for the heavy reliance of university teachers on the lecture method?
- (8) What are the needs of the older student? As the student population at the University of Massachusetts/Amherst becomes older on the average, will different skills and approaches be demanded of professors? Are older students more prone to register for applied or liberal arts courses?
- (9) Do faculty members who describe their interests as teaching oriented spend their time differently both in and out of the classroom than those faculty members who describe their interests as research oriented?

# Implications for Faculty Development

The findings of the present study of faculty attitudes toward teaching hold several implications for the design and implementation of faculty development programs, particularly on the University of Massachusetts/Amherst campus. At present two offices cooperate to provide instructional improvement services to faculty at the university—the Center for Instructional Resources and Improvement and the Clinic to Improve University Teaching. Data collected in this study indicate that a clientele for such services does exist. The majority of respondents interviewed reported an interest in teaching equal to or

greater than that in research, especially among members of the professional schools. Records of previous years suggest that professional school faculty have indeed outnumbered faculty from other disciprines in their use of instructional improvement services.

Although faculty members are interested in teaching, 40 percent of the sample reported that they had come to university teaching without formal training in pedagogy or prior teaching experience of any kind.

A need for instructional assistance in course design, the use of various teaching skills, and the alternatives to traditional lecture methods was mentioned by one-third of those sampled. An audience for such faculty development services would thus seem to exist.

#### Institutional Reward Structure

However, before any program of faculty development can begin to impact a significant number of persons at the University of Massachusetts, personnel policies for tenure and promotion need to be clarified, if not altogether revised. Over one-third of the respondents said that a lack of appropriate reward was one of their greatest concerns as a teacher. When asked to describe needed faculty development services, one-third also indicated that changes were needed in promotion and tenure policies. Until teaching effectiveness is recognized and rewarded as a major criteria in decision making, participation in any instructional development activity will be limited to those persons already deeply and seriously committed to teaching—about 14 percent of the present sample.

Reward structures were perceived by 40 percent of the respondents in the present study to ignore teaching performance altogether, with

promotion and tenure decisions being based almost entirely on publications, research, and grant acquisition. Several persons claimed that although lip service was paid to teaching in their particular departments, information concerning teaching was neither systematically collected nor reviewed. With the abolition of the merit raise system, recognition for teaching effectiveness was virtually eliminated.

The present policy states that faculty shall provide evidence of excellent performance in two out of three activity areas--research, teaching, and service--and good performance in the third. Such a policy statement does not sufficiently delineate the institutional policy around which faculty members can plan and evaluate their own contributions. At the very least, a comprehensive goal statement needs to be agreed upon by administrators and faculty for the university as a whole.

Several alternatives beyond the mere clarification of the status quo also exist. (1) Competencies could be determined and methods of evaluation specified for all levels of personnel decision making. (2) Departments and individual faculty members could implement a flexible personnel policy based on a periodic review of institutional, departmental, and student needs. Such a review, when coupled with an analysis of the skills and interests of each faculty member, would provide for the negotiation of activities to be undertaken in a process responsive to the changing needs of all involved. (3) Finally, alternatives to tenure might need to be explored in light of the static, no-growth future of the university.

In addition to a change in policy statements and implementation, faculty development activities could be mandated on a periodic basis. The concept of research-oriented sabbaticals could be expanded to include sabbaticals for the purpose of instructional or personal development.

A third strand in the clarification of institutional personnel policies might include the funding of research concerning the interrelationships existing between effective teaching and active research involvement for various disciplinary areas. Although the recent unionization of faculty and staff may restrict the exploration of such alternatives, at the very least, the results of this study indicate that a strong statement of institutional goals that are consistent with institutional policies and practices is badly needed.

## Instructional Improvement Services

Approximately one-third of the faculty members sampled reported an interest in individual consultation for instructional improvement.

A teaching consultation service coupled with strong institutional support for teaching excellence is central to the adaptation of current instructional practices for a changing student population. Clinic and Center records indicate that 80-100 faculty members and TA's have taken advantage of the Clinic's Teaching Improvement Process each year. This Process involves the faculty member in the systematic collection of data about his/her teaching, the analysis of that data for teaching strengths and problem areas, and the implementation of strategies for improvement. Each step of the Process is undertaken with the assistance of a trained teaching improvement consultant.

In a recent survey of past participants, faculty members reported that they had experienced improvements in their use of particular teaching skills, increased satisfaction with their teaching roles, and better student ratings on the University's course evaluation form. In addition, the individual consultation process may serve to encourage faculty members to gather information about the students in their classes for the purpose of designing more appropriate teaching practices. The strength of the Process lies in the catalytic function played by the teaching improvement consultant and the individualized nature of the change strategies.

At present, the Center and the Clinic are working to involve entire departments in the teaching improvement process in order to broaden the base of recognition and support for those participating. In addition, departmental groups are being encouraged to work together with staff assistance on mutual teaching and related problems.

Unfortunately, on a campus with 1200 faculty members, the small staff of the Center cannot hope to reach even those third who reported an interest in participating.

## Other Faculty Development Activities

Two further implications for faculty development are discernable in the present study. First, curriculum development resources for faculty members need to be expanded both in the area of design and the production of materials. The one full-time staff member currently provided through the Center for Instructional Resources and Improvement cannot hope to provide such services to a faculty body of 1200. With a

somewhat larger staff, the Center might provide more of several existing services: (a) assistance in departmental curriculum review; (b) individualized consultation on course design (orten the outcome of the Clinic's teaching improvement process); and (c) summer growth grants for course redesign. In addition, the Center might be able to broaden its curriculum development service with: (a) curriculum work groups composed of interested faculty members utilizing periodic staff assistance; (b) seminars on alternate curricular approaches, especially those found to be most effective for adult learners; or (c) facultydesigned projects supported by release time, Center resources, and small financial grants for the production of materials awarded on a competitive, semester-long basis. The result of such activities could be the regeneration of faculty interest in and enthusiasm for teaching, more student-responsive courses, more effective use of faculty talents and skills, and the revitalization of departmental and interdisciplinary curriculums.

Faculty respondents in the present study who described their interests as teaching oriented or those faculty members who have experiences with alternate methods of instruction might be utilized on a release-time basis to work with the Center to assist other faculty members wishing to explore particular approaches to teaching. Visitations to other institutions and inter-University teacher exchange programs could be used to further introduce teachers to new approaches or new material or to assist them in changing professional foci.

## Training for Graduate Teaching Assistants

The lack of preparation for the instructional responsibilities of a faculty career reported by 40 percent of the respondents suggests the need for a systematic, instructional program component for graduate teaching assistants. Any such program might originate with social and behavioral science departments since support for and experience with graduate student training was reportedly higher among members of this group than any other.

'Several approaches have been tried by universities around the country ranging from a one-shot workshop to semester-long seminars on pedagogy.

Whatever the program instituted, one requirement seems essential—that teacher training not be added as an extra responsibility to the graduate students' load. Instead, appropriate course or work credit should be awarded for participation.

development programs for TA's is to prepare graduate supervisors in each department to plan and implement a systematic supervision and training process. Where TA numbers are low, departments with similar approaches to instruction might work together to further reduce staff time involvement. This approach is currently being undertaken by a staff member of the Center and a School of Education professor.

Enrollment of graduate supervisors in the program has been low, probably due to the lack of departmental support for the time spent in such an activity. Future implementations of this approach will need to increase political and professional reward by negotiating with department heads for release time or merit increases.

A second approach would be to establish a required course for all new TA's as part of employment or course requirements. The course could include classroom observation, videotoping and feedback coupled with curriculum planning and techniques of instruction.

A particularly interesting approach has been used at Northwestern University in which groups of TA's participated in a videotape/feedback cycle on a monthly basis. Weekly video analysis sessions were run by a faculty development staff member and seminars were provided on a monthly basis according to group needs and interests.

In whatever form, instructional development programs for teaching assistants need to be fully supported by departmental policies and appropriate recognition structures. The outcome could be better instruction in many freshman level courses and laboratories conducted by TA's as well as an increased interest in teaching for future professors.

#### Learning Resource Center

One-third of the faculty members sampled complained of a lack of student ability and motivation. The experience of the investigator in working with faculty members across the entire campus has demonstrated that often students need assistance in breaking out of traditional classroom patterns. Their expectations of a passive, note-taking, testing environment limit the teacher to lecture and midterm/final formats. If the learning styles and classroom behaviors of students were to be examined and improved, faculty members might feel freer to experiment with new methods and approaches to instruction. At the very least, one

more of their excuses for resisting change would be eliminated.

If indeed, as SAT scores suggest, basic communication and mathematical skills are down in many of today's high school graduates, students might benefit from remedial-type programs in reading, writing, and mathematics. As the university dips lower into the student population pool to fill freshman admission requirements, the demand for such programs will grow. Brush-up courses for nontraditional students, peer tutoring, and counseling services might also be joined in a system of coordinated student services.

In order to meet all or a portion of these demands, the university could establish a Learning Resource Center with a focus on the development of learning and study skills. Such a center could also provide laboratories or courses for those students wishing catch-up or review work in communication or mathematical skills. At the University of Massachusetts, several student-oriented service programs now exist as separate and distinct offices. A more efficient use of staff and financial resources might be to merge, restructure, and expand existing programs into a Learning Resource Center.

Those faculty members who reported that contacts with students were major sources of career satisfaction might be utilized to spearhead projects in this area. Distinguished Teacher Award or Growth Grant Recipients might also be nominated to explore and recommend learning resource programs.

### Conclusion

With the current decline in the numbers of college-age youth. universities will soon find their doorways empty unless they act to broaden institutional foci beyond the sheer generation and publication of "new" knowledge. An interest already exists among faculty (stronger at a national than local level) that could be encouraged and rewarded by the university in its search for not only quality, but for survival itself. Faculty development services aimed at the improvement of the teaching and curriculum components of the university have the potential to contribute heavily to the retooling of the university and its faculty for the demands of the future and the realities of the present. Such support services, however, cannot hope to survive without broader recognition, staffing, and support from administrative centers. Faculty, too, will need encouragement, recognition, and reward if professional development, essential to the provision of quality education, is indeed going to be maintained in a no-growth period.

- 5. What personnel decision, if any, is pending for you this year or next year?
  - a. None
  - b. Contract renewal
  - c. Tenure/promotion
  - d. Promotion
  - e. Special reappointment cycle
- 6. At present, how do you find your interests divided between your responsibilities as a teacher and as a researcher/publisher?
  - a. Extremely interested in research and/or publication
  - b. Interested in both, but leaning toward research and/or publication
  - c. Equally interested in both
  - d. Interested in both, but leaning toward teaching
  - e. Extremely interested in teaching
- 7. At which level do the majority of your teaching and teaching-related responsibilities occur (e.g., classes, advising, independent study, supervision, etc)?
  - a. At the undergraduate level
  - b. At the graduate level
  - c. Equally at both
- 8. What do you perceive to be the primary data sources utilized within your department to evaluate teaching effectiveness for personnel decisions? Indicate the frequency of use by locating the data source on a scale from ALWAYS to NEVER:

	5	4	3	2			1		
	Always	Frequently	Sometimes	Infreq	uently	Ne	ever		
a.	Classroom visi	tation	A	lways_5	4	3	2	1	Never
ь.	Opinions of co	lleagues	A	Always_5	4	3	2	1	Never
c.	Self-assessmen	ıt		Always_5	, 4	3	2	1	Never
d.	Course syllabu	ıs		Always_5	5 4	3	2	1	Never
	Student rating			Always_5	5 4	3	2	1	Never
	Research and/o		ons a	Always_	5 4	3	2	_1	Never
g.	Other, please	describe							
9		•		Always_!	5 4	3	2	1	Never

(Note: During the interview session, we will be talking about what you believe would be the best system for assessing teaching effectiveness.)

9.	Do you feel that you are rewarded for your teaching effectiveness?						
	a. Yes						
	b. No						
	If Yes, by whom? Please note that you may circle more than one.						
	a. The department						
	b. The university						
	c. Colleagues						
	d. Students						
	e. Personal feelings of satisfaction, self-esteem and/or accomplishment						
	f. Other, please describe						
10.	At this point in your career, would you personally find any services in the area of instructional improvement useful for your professional growth?						
	a. Yes						
	b. No						
	If Yes, what types of services would you find most helpful?						
11.	Describe briefly the major problems which give you greatest concern as a teacher on this campus.						
Nam	Bldg. & Office No						
	Partment Telephone No						
	nk						
the	ease indicate the most convenient time for you for the conducting of e interview session. Upon receipt of the returned questionnaire, I contact you to confirm or renegotiate the date, should that prove						
nec	essary.						
INI	TERVIEW DATE: TIME: PLACE:						

ALL DATA WILL BE KEPT STRICTLY CONFIDENTIAL AND REPORTED ANONYMOUSLY FOR THE PURPOSE OF THE STUDY. THANK YOU VERY MUCH FOR YOUR COOPERATION.

#### APPENDIX B

February 6, 1976 318 Hills North

Dear	

Thank you for agreeing to participate in my dissertation study of teaching on the University of Massachusetts/Amherst campus. The purpose of the study is three-fold: (1) to explore the attutudes of faculty members towards their own teaching and its rewards, (2) to delineate faculty perceptions of those behaviors involved in university-level teaching, and (3) to identify specific instruction-related concerns which exist on this campus.

Before further experimental research can be successfully carried out in the area of post-secondary teaching, clear operational definitions of relevant terms as well as descriptions of the attitudes and environments in which those terms operate is necessary. For example, before researchers can ask which activities should be labeled as teaching and which as research, a working definition of teaching is needed from faculty members and various subgroups in that faculty as well as from administrators. Before researchers can determine the effects of the present reward system on teaching, an exploration of how the faculty perceives and acts on the perceptions of the reward system operating in their own university is needed. The proposed study is designed to enlarge our existing data base, thereby allowing for the formulation of more relevant and testable hypotheses in the field of university teaching, its effectiveness, its improvement and its assessment.

The attached questionnaire will provide a modicum of background information useful in the structuring of the interview sessions which will form the backbone of the study. Please complete and return the questionnaire before February 20. Upon receipt of your response,

I will contact you to confirm the date and time of the interview.

Thank you again for your cooperation and interest. All data gathered during the course of the study will be treated strictly confidentially and will be reported anonymously for the purpose of the dissertation. If you have any additional concerns or questions, please contact me at home (253-5409) or at my office in the Graduate Research Center (5-0868, 5-0828).

Sincerely,

Ms. Luann Wilkerson

Doctoral candidate

School of Education

#### APPENDIX C

Of the courses you have taught within the last semester or two, does any one stand out in your mind as particularly successful or enjoyable?

What were your goals for that course?

How did you structure and conduct the class?

How did you decide whether students had reached those goals?

How did students react to the course?

What is your philosophy of teaching? Why did this course work? How do students learn? What is your role as a teacher?

How does this philosophy effect the way you teach?

In most academic fields, scholars vary between a more rigorous, factual, cognitive approach on the one hand and a more qualitative, affective, humanistic approach on the other. How would you locate your own approach on the cognitive-affective continuum?

What do you consider to be your greatest strength as a teacher?

What do you like best about being a teacher?

What is it you most hope to accomplish as a teacher?

How did you become a teacher?

- Do you agree with the statement that "No one can be a good teacher unless he/she is involved in research"? Answer in terms of your own experience.
- Are you actively (a publication within the last academic year) involved in research and publication?
- On those days when you no longer want to teach, what other careers do you consider?
- What particular frustrations do you encounter as a teacher on this campus? You mentioned \_\_\_\_\_\_. Are there any others?
- Do you feel that teaching is considered a professional activity by your department when compared to research, scholarly competence in the discipline?

- How do you personally determine when your teaching is most effective?
- What makes it worthwhile for you to continue to invest time, energy and effort into teaching excellence?
- Do you find any difference in your activities, interests, attitudes now as opposed to the time when you were non-tenured?
- What do you believe should be the primary criterion for promotion of faculty?
- What do you believe would be the best attainable system for assessing teaching for promotion purposes?
- Could you describe a time when you deviated from your usual teaching style to try something different, outrageous, experimental or wild in a class session or an entire course?

Would any services have facilitated that experience?

You mentioned that no in-service experiences would be helpful to you at this point in your career. Could you fantasize any that might prove useful sometime in the future or would have been helpful in the past?

How do you go about improving your teaching?

Are there any interests, concerns, issues that we have not covered that you feel are crucial to your role as a teacher on this campus?

#### APPENDIX D

#### INTERVIEW CODING FORM

#### Directions:

The tape to which you will be listening is of an interview conducted in order to explore the faculty member's attitude toward teaching. Key questions have been isolated as particularly relevant to the determination of this attitude. On this form, you will be asked to code indicated information and to transcribe those statements which you feel are directly related to the determination of this interviewee's attitude toward teaching.

Circle the most appropriate response category for the questions listed below. Some responses may be given even though the specific questions is not asked. Wait until hearing the entire tape to mark answers which you might infer. After hearing the entire tape, check your coding to see if the entire interview alters your original responses in any way.

On a separate sheet, please note any specific comments that you think relate directly to the attitude of this person toward his/her teaching.

Thank you very much.

# EFFECTIVE TEACHING (Questions 1 - 3):

- 1. What is your philosophy of education? How do you believe that students learn? What do you see as your role as a teacher? If you cannot answer in general terms, refer to a specific class of type of class.
  - 1. Content-centered teaching and learning
  - 2. Instructor-centered teaching and learning
  - 3. Student-centered teaching and learning
  - 8. Other (please describe briefly)
  - 9.. No response

Coding suggestions--

## Content-centered teaching and learning

Primary task is to cover the material teacher as expert, formal authority teacher is the representative of an institution students exhibit competitive or dependent behavior examinations are usually objective format is usually lecture and formal discussion cognitive and/or skill-oriented content teacher is source of information could include some types of automated instruction

# <u>Instructor-centered</u> teaching and learning

teacher as model of way one should approach a discipline or field
teacher's behavior demonstrates best ways of handling and understanding
concepts

teacher is a socializing agent, gateway to vocation focus is on how personality of the teacher encounters a subject dramatic use of lecture, performance teacher-centered discussions, teacher-student interactive orientation goals and evaluation set by teacher, often subjective content is cognitive and affective

# Student-centered teaching and learning

focus on intellectual training and personal growth of students teacher as facilitator students are collaborative or independent

- emphasis on learning contracts, individualized goals, resources and means of evaluation student-run discussions, group discussions, role-plays, simulations, field work, independent study cognitive and/or affective content experiential learning
- 2. What do you most hope that students accomplish in your courses?
  - 1. increase in knowledge or technical skills
  - 2. ability to think creatively, analytically, logically
  - 3. growth as a moral/ethical/social person
  - 8. other (please describe)
  - 9. no response

### increase in knowledge

facts
technical skills
ability to read, write or speak better
cognitive focus
knowledge of concepts important in the field
does not include developing personal interpretations

### ability to think

content is related to development of mental processes ways to solve problems is emphasized over answers goes beyond factual mastery to application and interpretation asks students to use content analysis, synthesis, evaluation activities growth as an intellectual person behavioral focus

### growth as a person

values oriented examination of personal development content is secondary, usually partially determined by students affective focus

- 3. What do you consider to be your greatest strength as a teacher?
  - 1. knowledge of the subject
  - 2. critical, analytical, logical, creative thinking
  - 3. enthusiasm, the ability to generate interest in the subject
  - 4. relationships with students
  - 5. other technical skills of teaching
  - 8. other (please describe)
  - 9. no response

## knowledge of subject

keeping abreast in one's field familiar with various viewpoints includes skill in discipline performance, e.g., art, drama, music, phys ed

## critical thinking

organizational skill modeling of behavior of expert in the field

### relationship with students

ability to get students to participate rapport mutual respect takes students' needs into account

#### technical skills

does not include those listed above separately based on TABS--pacing, elaboration, expression, etc.

- 4. How do you determine when your teaching is most effective?

  (Specify whether each alternative was "mentioned" or not "mentioned."

  As this process does not indicate importance of each alternative,
  please star the one you feel was most important to the respondent.)
  - (a) mentioned M (b) not mentioned NM
- 1. Consideration of systematic student feedback
  - (a) M
  - (b) NM
- 2. Consideration of non-systematic comments by students about the course
  - (a) M
  - (b) NM
- 3. Consideration of student achievement activity
  - (a) M
  - (b) NM
- 4. Consideration of indirect feedback
  - (a) M
  - (b) NM
- 5. Intuitive sense
  - (a) M
  - (b) NM
- 6. No method is utilized for considering my effectiveness
  - (a) M
  - (b) NM
- 8. Other (please describe
- 9. No response

## systematic feedback

course rating forms
written comments solicited
from all students

non-systematic comments
received directly from students
not solicited by teacher
focused on course, content, activities

# student achievement activity

exam performance participation classroom performance on-the-job success artistic performance

## indirect feedback

comments from colleagues, usually based on comments from students class attendance course enrollment

- 5. When you work to improve a course, what types of changes do you usually make?
  - 1. Radical change in approach or methodology
  - 2. Moderate change in approach or methodology
  - 3. Change in content but no change in basic approach
  - 4. No changes
  - 8. Other (pleas describe)
  - 9. No response

## Radical change

could reflect value change experimental or innovative approach would include changes in materials and content but these would be secondary to change in approach

### Slight change

e.g., adding discussion section to lecture create a new activity as part of the same approach experiment on a small scale as with pass-fail in same approach

### Change in content

include change in text, assignment details,
 emphasis, etc.
include updating content

- 6. You mentioned in the questionnaire that (some, no) in-service experiences would be helpful to you at this point in your career. Could you suggest things you think that the university could do to better support teaching on this campus?
  - 1. Dissemination of information on innovations, research findings, or methodologies in higher education
    - (a) M
    - (b) NM
  - 2. Assistance in planning and/or implementing instructional strategies
    - (a) M
    - (b) NM
  - 3. Support in the provision and training of teaching assistants (TA's)
    - (a) M
    - (b) NM
  - 4. Changes in the reward/promotion system
    - (a) M
    - (b) NM
  - 5. No need of support services
    - (a) M
    - (b) NM
  - 8. Other (please describe)
  - 9. No response

### Dissemination

include workshops, seminars, etc. include new faculty activities printed materials

### Assistance

CIRI/CIUT individual and dept. services growth grants teaching awards

### Reward/promotion system

changes in student evaluation component more recognition of teaching effectiveness re-installation of merit increases

# RESEARCH AND TEACHING (Questions 7 - 9):

- 7. What relative importance do you perceive teaching and research to have as criteria for personnel decisions in your department? Research may include publication, scholarly work and artistic performance.
  - 1. Research is primary; teaching is not considered
  - 2. Research is primary; teaching is secondary
  - 3. Research and teaching are equal
  - 4. Teaching is primary; research is secondary
  - 5. Teaching is primary; research is not considered at all
  - 8. Other (please describe)
  - 9. No response

- 8. Do you agree with the statement that "No one can be a good teacher unless (s)he is actively involved in research?"
  - 1. Strongly agree
  - 2. Agree, with reservations
  - 3. Disagree, with reservations
  - 4. Strongly disagree
  - 8. Other (please describe)
  - 9. No response

Please note reservations:

- 9. Are you actively involved in research and/or publication at this point in your career? (Usually indirectly answered)
  - 1. Yes
  - 2. No
  - 8. Other (please describe)
  - 9. No response

# CAREER CHOICE AND SATISFACTION (Questions 10 - 14)

- 10. When did you decide to become a professor?
  - 1. Prior to entering college
  - 2. While an undergraduate
  - 3. While a graduate student
  - 4. After graduate school but before entering another profession
  - 5. After some experience in another profession
  - 8. Other (please describe)
  - 9. No response

- 12. What do you enjoy about being a faculty member?
  (Specify whether each alternative was "mentioned" or "not mentioned."
  As this process does not indicate importance of each alternative,
  please star the one you feel was the primary response.)
  - (a) Mentioned M
- (b) Not mentioned NM
- 1. Pursuing my research and scholarly work
  - (a) M
  - (b) NM
- 2. Personal life style possible
  - (a) M
  - (b) NM
- 3. Working with colleagues
  - (a) M
  - (b) NM
- 4. Relationships with students
  - (a) M
  - (b) NM
- 5. The act of teaching
  - (a) M
  - (b) NM
- 8. Other (please describe)
- 9. No response

### Pursuing my research

working with my own ideas scholarly atmosphere

### Life style

freedom flexibility of schedule locale summers free

#### Students

graduates or undergraduates in-class or out of class cooperation on research work learning from students interactive teaching

## Teaching

chance to present views lecturing performance aspect of teaching not student relationships

- 13. On those days when you no longer want to teach, do you consider other careers?
  - 1. Yes, frequently
  - 2. Occasionally
  - 3. No
  - 8. Other (please describe)
  - 9. No response
- 14. If you answered Yes or Occasionally, for what reasons do you consider other careers?
  - 1. Other interests gain predominance
  - 2. Dissatisfactions with teaching or students
  - 3. Dissatisfaction with institution other than teaching, students, and financial reward
  - 4. Financial reasons
  - 5. Denial of tenure or promotion
  - 6. Unsolicited job offer
  - 8. Other (please describe)
  - 9. No response

- 15. What are your frustrations or concerns as a teacher on this campus?

  (Specify whether each alternative was "mentioned" or "not mentioned." As this process does not indicate importance of each alternative, please star the one you feel was the primary concern.)
  - (a) Mentioned M
- (b) Not mentioned NM
- 1. Change in size of the University of Massachusetts
  - (a) M
  - (b) NM
- 2. Excessively large classes
  - (a) M
  - (b) NM
- 3. Effects of financial cutbacks (other than salary)
  - (a) M
  - (b) NM
- 4. Lack of sufficient time to fulfill all responsibilities
  - (a) M
  - (b) NM
- 5. Lack of administrative and/or legislative leadership
  - (a) M
  - (b) NM
- 6. Lack of student ability, motivation, and/or interest
  - (a) M
  - (b) NM
- 7. Lack of appropriate reward
  - (a) M
  - (b) NM
- 8. Other (please describe)
- 9. No response

# Effects of financial cut

lack of supplies
lack of secretarial help
loss of TA's
effect of freeze on hiring

#### Lack of time

conflicting demands of teaching, research service and/or administration too much emphasis on publication at expense of good teaching

# Lack of appropriate reward

inadequate personal reward-sense of purpose, sense of
achievement, satisfaction
inadequate financial reward-low pay, no merit increases
inadequate professional reward-lack of recognition within
the institution or discipline
or any professional activity

Content-centered teaching and learning: The primary task in this mode of teaching and learning is to cover the material of a course or discipline in a coherent and systematic manner. The content of various courses within a discipline is ordered in generally the same way in most colleges and universities. The teacher is viewed as empert, formal authority, or "priest"; the most compatible students are those who exhibit competitive or dependent learning styles. The goals of courses with this orientation are usually set by the demands of the material; evaluation is usually objective and performance is measured against the material. Lectures and formal discussions are the usual method or instruction. The content of these courses is primarily cognitively and/or skills oriented, and the environment will probably either be oriented toward the teacher as a source of information or will be automated.

Instructor-centered teaching and learning: In this mode of teaching and learning, attention is most often focused on the instructor, not primarily as a source of information, but as a model of the way one should approach a particular field or discipline. The best ways of understanding and handling the concepts of the course are demonstrated by the instructor's own behavior and personality. The teacher is usually viewed as a socializing agent or ego ideal; he is a "shaman" and performer; when particularly talented, he can be very charismatic. may make dramatic use of the lecture format, while discussion sessions tend to be oriented toward him. Students who are highly dependent will rather non-critically embrace this mode; participant students will approve of this mode if the instructor appears to be competent; the discouraged worker may find this mode comfortable if the instructor pays some attention to him. Both the goals and standards of evaluation are usually set by the teacher, often in a subjective manner. The content of these courses, though often cognitively oriented, may have an important affective component. The environment may be either teacher or interaction oriented, with the focus in the latter case clearly on the teacher.

Student-centered teaching and learning: This kind of teaching and learning emphasizes the intellectual training and/or personal growth of the students. The teacher acts primarily as a facilitator and as a person in relationship to students who are collaborative or independent. This mode is also appropriate for the avoidant student if he gives the experience a change. Rather heavy emphasis is often given in this mode to establishing learning contracts between teacher and student which enable them to define specific learning goals, resources, and means of evaluation which are uniquely tailored for each student. The teaching methods most frequently used are student-run discussions, group discussions, role plays, simulations, field work, and independent study. The content here will be either cognitively or affective oriented (or both), and the environments may be interaction oriented, student oriented, sheltered experience oriented, or experience oriented.

from Bergquist, H. & Phillips, S., (Eds.). A handbook for faculty development. Washington, D.C.: Council for the Advancement of Small Colleges in association with the College Center of the Finger Lakes, 1975.

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