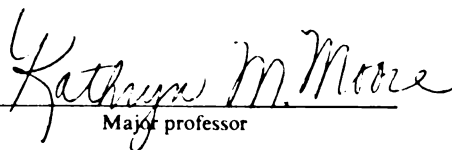This is to certify that the

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MULTIDIMENSIONAL ROLE PERFORMANCE OF FACULTY WITHIN

A RESEARCH-ORIENTED LAND GRANT UNIVERSITY

By

Laurie Beth Wink

A DISSERTATION

Submitted to
Michigan State University
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ABSTRACT

MULTIDIMENSIONAL ROLE PERFORMANCE OF FACULTY WITHIN
A RESEARCH-ORIENTED LAND GRANT UNIVERSITY

By

Laurie Beth Wink

U.S. higher education institutions have unique tripartite missions of

teaching, research, and public service. Recently, concerns have arisen about the

gap between university mission statements professing commitments to students'

intellectual development and knowledge application for society, and promotion

and tenure systems that favor research performance.

Each institution's capacity to fulfill its mission is centered on faculty

members who, as autonomous professionals, set their own goals and perform-

ance standards. This study used qualitative research techniques to describe and

explain how 41 faculty members at a research-oriented land grant university

constructed their roles in order to perform responsibilities in teaching, research,

and public service at high levels of productivity. The approach was guided by the

framework of symbolic interactionism, in which individuals create social roles by

interpreting symbols within the social organization on the basis of interactions

with others.

College and departmental administrators nominated participants they felt matched a description of multidimensional faculty role performance presented by the researcher. Face-to-face audiotaped interviews were conducted with individuals in five colleges representing a range of disciplines, both genders, and all ranks. Transcribed interview data were analyzed in multiple stages using analytic induction and constant comparison strategies.

Findings showed most participants based decisions to become faculty on: affinity for intellectual freedom, enjoyment of multiple role dimensions, and the influence of graduate school role models and mentors. The majority viewed teaching, research, and public service as linked activities, although most did not give equal time to the dimensions and preferred not to divide faculty role activities into categories. This study supported the contention that the public service dimension is not well-defined, evaluated, or rewarded.

Three multidimensional faculty role types emerged: researcher, teacher-scholar, and integrator. Each type embodied a generalized set of values and beliefs that formed a normative view of the faculty role. Participants classified as integrators were most committed to using knowledge in service to society; they were found within all colleges and academic ranks. Recommendations were included for institutional policies that could encourage multidimensional productivity among faculty members.

In loving memory of James McIntosh Wink:
Outstanding coach, exemplary human being, and
someone I proudly call Father.

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your candor and integrity in grappling with the nitty-gritty issues of the faculty role in carrying out all aspects of the university mission. Special thanks also go to Frank Fear, from whom I learned so much about effective group process, commitment to scholarship, and dedication to the task. Your professional insights, personal encouragement, and entertaining e-mail have kept me going more than you could possibly know.

The dissertation phase of the Ph.D. program has been a particularly enlightening one, with alternating stretches of doubt, uncertainty, discovery, elation, and satisfaction in having sustained such a piece of work. Through it all, the voices of the faculty participants in this study kept me moving forward through the force of their own determination and drive to achieve. I am extremely grateful to all of them for the generosity with which they carved out time from already overloaded schedules to share with me the stories of their professional and personal lives.

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CHAPTER I

INTRODUCTION

Statement of the Problem

U.S. higher education institutions historically have combined teaching and research with public service in a unique tripartite mission. The complexities of today's world are challenging public universities to serve societal needs in ways never before encountered.

The capacity of each institution to fulfill its mission is centered in faculty members, who are largely autonomous professionals responsible for setting their own goals and performance standards. With the ascendancy of the graduate school research model in the decades since World War II, prospective faculty members have been socialized primarily as research scholars; many enter their first faculty positions with no teaching experience and with little understanding of service other than as it applies to their scholarly discipline.

Recently, concerns have arisen both inside and outside academia about the gap between university mission statements, which profess a commitment to the intellectual development of students and the application of knowledge for society, and the reality of institutional promotion and tenure systems. Ernest L. Boyer, president of The Carnegie Foundation for the Advancement of Teaching,

acknowledged in <u>Scholarship Reconsidered: Priorities of the Professoriate</u> (1990) that, regardless of expectations that faculty will blend teaching, research and service, the three role dimensions are seen as a hierarchy of functions, with basic research given highest consideration when professional performance is evaluated.

Boyer urged higher education institutions to establish faculty reward systems with performance measures based on their mission statements. Furthermore, he called for a broadening of the definition of scholarly work to include the "four separate, yet overlapping functions" of the professoriate: the scholarship of discovery, integration, application, and teaching (1990, 16).

If the ideals articulated by Boyer are to become standard, models are needed for ways in which the faculty role dimensions -- currently constituted as teaching, research and public service -- are blended in multidimensional role performance. Very little is known about those who simultaneously perform all three role dimensions in what some higher education scholars have labeled the "triple threat" pattern. Such individuals are generally thought to be extremely rare types found at only the most elite institutions (Light, 1974; Blackburn, 1974; Tuckman, 1976; Finkelstein, 1984).

Multidimensional performance might not be possible for all faculty members. Previous research on highly productive, vital faculty members has shown their professional lives to be qualitatively different from their peers. But previous faculty studies have focused primarily on males and have inadequately

investigated the service dimension of the role. Little is known about variations in

faculty members' role behaviors and preferences by institutional type, by gender,

and by academic discipline. Therefore, it is important to further examine the

contributions of individual and institutional factors to the concept of faculty

productivity.

Purpose of the Study

The purpose of this study was to describe and explain how faculty

members at a research-oriented land grant university constructed their roles in

order to perform responsibilities in teaching, research and public service at high

levels of productivity. A total of 41 faculty members representing a range of

academic disciplines, both genders and all faculty ranks participated in the study.

The context for the study was Multidimensional State University (MSU), an

institution embodying both the research orientation predominant in academia

today and the uniquely American land grant tradition. MSU had recently engaged

in a long-range, strategic planning process with one goal being to encourage

multidimensional faculty role performance consistent with the institutional

mission. The MSU mission statement describes the institutional commitment to

excellence through the integration of teaching, research and public service

activities. However, the extent to which the mission was actualized by individual

faculty members who integrated the multiple role dimensions was unknown.

The study identified MSU faculty members whom college administrators

thought exemplified role performance across the three dimensions. Indepth

interviews with nominated faculty members provided descriptions and explanations of the processes by which these individuals interpreted and enacted their professional role responsibilities. The research findings illuminated policy and programmatic strategies that Multidimensional State University and similar institutions could develop for socializing, recruiting, retaining and promoting faculty members who are multidimensionally productive. Furthermore, the study provided insights that could be applied in further research on individual and institutional factors affecting faculty productivity.

Summary of the Conceptual Framework

The approach to this study was guided by the conceptual framework of symbolic interactionism as developed by Herbert Blumer (1986) and others. This view of individual and group conduct is based on the idea that individuals interpret and define their social roles on the basis of their interactions with others. The social organization provides a framework of structural features -- culture, social roles and the like -- that establish conditions for individual actions by shaping situations and supplying fixed sets of objects, or symbols. Individuals act on the basis of their interpretations of these symbols, which can be categorized as physical, social and abstract objects.

Viewed through the lens of symbolic interactionism, universities are social organizations that function as the result of the ongoing processes of interpretation taking place among its diverse set of individual faculty members. This study sought to understand the faculty role from the perspective of individuals who were

working across the spectrum of faculty role responsibilities. Participants' symbolic worlds of physical, social and abstract objects were identified by exploring four primary research questions.

Research Questions

Four research areas of interest were explored in this study.

The Process of Anticipatory Socialization

It was considered foundational to this study to develop an understanding of the processes by which individuals came to identify themselves with the faculty role and chose an academic career. Encounters with individuals and experiences during graduate school are considered instrumental in conveying the essence of the faculty role to prospective academicians and influencing the decision to enter the professoriate. Therefore, the first primary research question explored in this study was:

1. How did participants come to select the role of faculty member, and to define and interpret the role during the professional socialization processes of graduate school?

The Process of Entry and Induction
Into the Professoriate

Upon entering tenure stream positions as new faculty members, individuals usually carry their graduate school views of academia forward into different higher education organizations. It was important to this study to

understand the processes by which individuals evaluated available professional positions, selected a particular position and came to understand what was expected of them in that position. The second primary research question explored in this study was:

2. How did participants interpret and act on the role as new faculty members?

The Process of Faculty Role Continuance

This study sought a more complete understanding of the processes by which faculty members who are working across the three dimensions of the faculty role make decisions about the activities they engage in and how they construct their roles. The third primary research question explored in this study was:

3. How do participants think about and enact the faculty role in a manner resulting in multidimensionally productive performance?

Systems of Constraints and Incentives

Since social organizations provide the framework within which individuals form a social role for themselves, it was important to understand factors within the institutional environment that had either positive or negative impacts on individual faculty role performance. The fourth primary research question explored in this study was:

4. What aspects of the institutional environment do participants view as instrumental and/or obstructional to role performance?

<u>Overview of the Study</u>

The study is organized into four following chapters. In Chapter 2, literature is cited in four areas relevant to this study: academic professionalism; faculty career development; the impact of institutional factors on individual performance; and symbolic interactionism. In Chapter 3, the methodological approach to this study is described, including the research questions, sample selection process, data collection and analysis strategies and the limitations of the study. Results of the study are reported in Chapter 4 in four sections corresponding to the primary research questions: the process of anticipatory socialization; the process of entry and induction into the professoriate; the process of faculty role continuance; and systems of constraints and incentives. Finally, in Chapter 5, the findings of the study are discussed from the perspective of emerging themes and in relation-ships to the relevant literature, implications of the study for institutional policy are suggested, and recommendations for future research are given, along with conclusions about the study. Pertinent documents follow in the appendices.

CHAPTER II

LITERATURE REVIEW

The literature review established the context for this study of
multidimensional faculty role performance by examining scholarly sources related
to the academic profession, faculty career development, and institutional impacts
on individual faculty performance. Much of the literature discusses the academic
profession as a monolithic entity composed of individuals pursuing identical roles
in institutions with indistinguishable missions (Clark and Corcoran, 1985). While
some higher education scholars have placed the faculty role in the context of
historical developments, institutional productivity, adult development, and
professional competence, a neglected area in faculty development research has
been the personal development of individual faculty members (Menges and
Mathis, 1988).

The body of relevant higher education literature was produced only in the
last 25 years by scholars in a field of study that is relatively young (Menges and
Mathis, 1988). To guide emerging theories, higher education researchers have
used conceptual frameworks drawn from the well-established scholarly traditions
of sociology, psychology, anthropology, history and other social science

disciplines. This particular study used the social psychological framework of symbolic interactionism to develop a clearer understanding of the faculty role from the perspective of the individual. Relevant literature on symbolic interactionism is included in the last section of this chapter.

<u>Academic Professionalism</u>

The concept of profession embodies characteristics applicable to some occupations and not others, including: extended education and experience; procedures and standards defined by formalized organizations; autonomy constrained only by responsibility; the sense of having a calling as well as an occupation; and a service orientation (Young, 1987).

<u>Standards of Professional Practice</u>

Members of the professoriate are generally considered professionals. Yet, there is considerable disagreement within the literature about whether the academic profession has enough of the requisite characteristics to be considered a profession. The academic profession is unified to a certain extent by widespread socialization practices and common values -- namely academic freedom, autonomy and collegiality -- learned during graduate school (Bowen and Schuster, 1986). The professoriate also engages in similar role dimensions -- broadly defined as teaching, research, and service (Bess, 1982; Young, 1987; Boyer, 1990), with some adding a fourth category of administration (Tuckman, 1976) or institutional governance (Bowen and Schuster, 1986).

However, unlike professions that have a common core of technical knowledge, the academic profession consists of many disciplines, each with its own set of scholarly standards (Bess, 1982; Light, 1974; Young, 1987). Faculty rarely receive formal training in all role dimensions for which they are responsible, and monitoring systems to maintain performance standards are nonexistent or inadequate (Bess, 1982; Toombs, 1985; Young, 1987).

Role Socialization Process

A faculty role can be defined as "the formal and informal demands for behavior placed on faculty members by a variety of persons, organizational offices and generalized cultural norms" (Bess, 1982, 36). Socialization is "the process by which individuals acquire values, attitudes, norms, knowledge, and skills needed to perform their roles acceptably in group(s) in which they seek membership" (Bragg 1976, 6). Role socialization depends on three things according to Brim (1966): knowing what is expected; being able to meet role requirements; and desiring to practice the behavior. An important part of the socialization process is learning to distinguish between "ideal role prescriptions" and what is actually expected of someone in a role (Brim, 1966, 29). Since many roles in formal organizations are not clearly specified, one is required "to learn as best he can through observation and gleaning information..." (Brim, 1966, 29).

In higher education institutions, graduate students learn the values, attitudes and behavior of the academic profession from faculty members who

serve as advisers and role models (Bragg, 1976). During graduate school,

prospective faculty members learn to give priority to scholarly research rather

than service to others (Hartnett and Katz, 1977; Bowen and Schuster, 1986).

Students observe professors who, in their dedication to research and scholarship,

"...stay with their thoughts or experiments at whatever price to their personalities

and home lives" (Clark, 1987, 82). And new faculty members at most institutions

soon realize that faculty members are rewarded primarily for their performance in

the research function (Seldin, 1984).

According to Finkelstein (1984), the dominance of the graduate research

model was established in the decades between World Wars I and II, when faculty

developed specialized expertise and graduate programs expanded dramatically.

Public support and respect for the academic profession increased significantly as

university researchers put specialized knowledge to work for the national

defense. In The American Academic Profession. Finkelstein (1984, 29)

observed:

> By the end of World War II, the components of the academic role had
> clearly emerged and crystallized into the highly differentiated model by
> which we recognize the professor today – teaching, research, student
> advisement, administration, institutional and public service. Since its initial
> crystallization, the model has shown remarkable durability; over thirty-five
> years and enormous fluctuations in the fortunes of American higher
> education, it has only come to approach more closely its ideal typical
> expression through greater emphasis on research activity, fuller
> participation in academic citizenship, and fuller development of the public
> role.

Many would argue that the "ideal typical expression" of this academic

professional model does not fit the modus operandi of most American academics

today. In fact, Finkelstein's own review of the literature led him to conclude that the vast majority of professors consistently report interests focused more on teaching than research (1984, 87). Clark (1987, 98) considers the fact that most professors teach most of the time but that research is the most rewarded activity to be "the greatest paradox of academic work in modern America".

The Idealized Role

A less frequently discussed paradox is that, while American higher education takes pride in its unique service mission, such service is not well defined, evaluated or rewarded. Regardless of the "idealized expectation" that faculty will blend teaching, research and service, the three are seen as a hierarchy of functions, with basic research given the highest consideration when professional performance is evaluated (Boyer, 1990). Research is the dominant norm even among faculty at land grant universities, which have a mandate in the area of public service originating with the Morrill Act of 1862 (Clark and Corcoran, 1985).

Although the ideal of service is a core trait of professionalism (Braxton, 1986), faculty members are thought not to be initially attracted to the field on the basis of the service dimension (Bess, 1982). The generalized view of service as a kind of philanthropy or "good citizenship" prevents it from being considered equal to scholarship in esteem and reward (Lynton and Elman, 1987).

Faculty members have considerable flexibility in choosing their professional activities (Tuckman, 1976; Clark, 1987), but few engage in public

service as their primary activity (Tuckman, 1976). The advancement of knowledge is seen as the academic profession's primary activity, and its members view the cause of learning as their "client" (Braxton, 1986). Most faculty members engage in a mix of activities that changes with time, personal interests, opportunities and needs (Bess, 1982; Lynton and Elman, 1987; Baldwin and Blackburn, 1981).

Yet, the expectation persists that faculty members will teach, actively pursue scholarship, participate in institutional governance and serve the larger community, despite the fact that each area could be a full-time job (Gaff, 1975). Whether or not the various faculty roles are interrelated and can be performed by the same individual is a matter of considerable disagreement in the literature. Some argue that the primary faculty roles support each other and merge in "a seamless blend" (Clark, 1987), although the claim is largely unsupported by empirical evidence (Bess, 1982). Most faculty are thought to lack equal measures of skill in the areas of teaching, research and public service (Tuckman, 1976). Yet, while studies have shown research productivity and teaching effectiveness are largely independent traits (Linsky and Straus, 1975), research has not shown that different sorts of people or distinctive personality types are required for quality performance in each area (Finkelstein, 1984). Still, the simultaneous performance of all three faculty role dimensions — the "triple threat" pattern as it is sometimes called — is considered an ideal attained only by a small

number of faculty found mostly at outstanding universities (Light, 1974;

Blackburn, 1974; Tuckman, 1976; Finkelstein, 1984).

While research has shown that individual expectations and values

formulated in graduate school are strong predictors of a faculty member's role

behavior throughout the professional career, the impact of collegial and

organizational values on individuals subsequent to graduate school is less clear

(DeVries, 1975). Austin (1990, 62) cites four primary cultures influencing faculty

values and behavior: the academic profession; the discipline; the academy as an

organization within a national system; and the specific type of institution. In

particular, the values of the disciplinary culture -- specialization, scholarly

publication, participation in professional associations -- have come to the fore

over the past four decades as a predominant influence on faculty assumptions

about tasks to be performed and standards of effective performance (Austin,

1990).

However, some scholars see evidence of change toward more

multidimensional performance standards. Checkoway (1991, 224) states:

> Quality research, teaching and service are emerging as complementary
> activities in many professions and fields. The new vision is one in which
> excellence in one activity is increasingly inseparable from other activities in
> accordance with the best traditions and highest standards of the academic
> community.

And Young's (1987, 12) view of the reality of academic performance is that:

> Professors themselves and their institutions have found it hard to segment
> research, teaching, and service roles when assessing performance and
> rewarding achievement...Faculty members judge themselves and are
> judged by others in the complex of their roles.

He advocates for faculty professional development programs that strive to produce individuals capable of performing all the roles expected of a faculty member.

While it may not be necessary, or even possible, for the entire professoriate to achieve multidimensional productivity, it is essential to provide a system of incentives that encourages everyone to strive for the ideal (Lynton and Elman, 1987). In order to identify appropriate incentives, more research is needed on the academic socialization processes, career development patterns, and institutional influences on faculty members who are highly productive in the multiple dimensions of the academic role.

Faculty Career Development

A review of the literature indicates a theory of faculty career development is in the formative stages (Clark and Corcoran, 1985), and "no simple formula for dynamic careers" has been discovered (Baldwin, 1990, 178). Research conducted over the past twenty years has informed the understanding of the working lives of the diverse collection of academic professionals. However, it is difficult to generalize results based on studies that have used different measures, sampled a single discipline and/or single institution, and produced data mostly on males working in research universities (Blackburn, 1985). More research on how and why faculty careers evolve is needed in order to develop strategies to enhance faculty careers (Schuster and Wheeler, 1990).

Career Stage Models

Early research applying adult development theory to higher education

faculty resulted in career stage models that helped clarify how individuals form

and revise their professional goals (Hodgkinson, 1974). But these models were

based on small numbers of men and gave little attention to career orientations

and performance of female faculty members (Baldwin, 1990). Baldwin and

Blackburn (1981) studied male faculty members from five disciplines and five

career stages and concluded that interests continued to evolve over the course of

an academic career; for example, full professors more than five years from

retirement were likely to look for opportunities for service beyond their campuses,

as their interests in teaching and research diminished.

Productivity and Vitality

Faculty productivity appears to be unaffected by age. Most research has

shown productive people remain productive throughout their careers, but the gap

between producers and nonproducers increases over time (Blackburn, O'Connell,

and Pellino, 1980). Disciplinary differences have been found in the average ages

at which faculty members achieve their most important scholarly work; for

example, historians and philosophers achieve peak performance in their 50's and

60's while natural scientists peak in their 30's (Havighurst, 1985). General

differences among disciplines have also been found in styles of teaching, service

expectations and professional products (Blackburn, O'Connell, and Pellino,

1980).

A seminal study by Clark and Corcoran (1985, 118) at the University of Minnesota identified 63 "highly active ideal type" faculty members, defined as those "who continuously publish, teach and perform administrative and/or professional services at highly productive levels". These faculty members had high self-esteem, believed they worked harder than most colleagues, were strongly oriented to research, felt their careers were moving, and perceived themselves as steadily productive during different career stages.

Applying Clark and Corcoran's faculty vitality concept to professors in small liberal arts colleges, Baldwin (1990) found vital professors worked longer hours and lead more diversified work lives than their colleagues. Vital professors tended to take professional risks and found ways of expanding and growing in their roles and, therefore, were less likely than other faculty members to feel stuck in their careers.

While noting that faculty motivation is "a complex phenomenon that is not easily regulated", Baldwin and Krotzeng (1985, 10) identified several factors that appear to contribute to faculty achievement: peer support; a feeling of autonomy and control over one's work; stimulating students and colleagues; and administrators who encourage faculty initiative. Other research indicates the desire for self-direction is particularly strong in the most productive scholars (McKeachie, 1979; Glueck and Jauch, 1975).

Rewards and Incentives

The literature regarding the influence of reward and incentive systems on faculty behavior is inconsistent. Studies have shown faculty members are more motivated by intrinsic aspects of their work — autonomy, intellectual interchange, working with students — than extrinsic factors such as the institutional reward system (Austin and Gamson, 1983; Finkelstein, 1984). But, extrinsic factors such as facilities, administration, and monetary rewards are generally the source of faculty dissatisfaction (Tuckman, 1976; Austin and Gamson, 1983; Finkelstein, 1984). According to Tuckman (1976, 117) the "effects on faculty behavior of incentives are uncertain", but he nevertheless states, "The reward system can be used to change the direction of the modern university" (1976, 119). The latter assertion was echoed by Lynton and Elman (1987, 150) who maintain:

> Without a substantial adaptation of the faculty reward system, all efforts at greater university outreach and expanded faculty activities will continue to be what they have been in the majority of institutions: a matter of well-intended by ineffective rhetoric.

The amount of public service a faculty member does is thought to be determined by a combination of individual preference and those of the department head and the dean (Crosson, 1983). Most service, or outreach, activities appear to be done by tenured faculty or professional staff who are not on the tenure track (Lynton and Elman, 1987).

According to the conventional wisdom, faculty members do not engage more actively in service because they perceive it does not carry much weight in promotion, tenure, salary or other reward decisions (Blackburn, O'Connell, and

Pellino, 1980; Crosson, 1983; Checkoway, 1991). Studies have shown salaries

and promotions are based more on the amount of research done than on

teaching awards and student evaluations (Blackburn, O'Connell, and Pellino,

1980). A national survey of full-time faculty with Ph.D.s found the most prolific

publishers had higher salaries, consulted more often, spent fewer hours

preparing for teaching, and participated less frequently in campus governance

than their peers (Carnegie Foundation for the Advancement of Teaching, 1991).

Individual/Institutional Vitality

While some inherent differences appear to separate highly productive

faculty members from their colleagues, organizational factors may have a

stronger influence on vitality and productivity than individual faculty

characteristics (Bland and Schmitz, 1990). The higher education literature

reflects an increasing recognition that "individual and institutional vitality are

interdependent (Clark, Boyer and Corcoran 1985; Toombs, 1985; Melendez and

deGuzman 1983; Schuster and Wheeler 1990; Bland and Schmitz, 1990). In

fact, "vitality" is defined differently, depending on the institutional type and

mission (Clark, Boyer and Corcoran 1985; Baldwin and Krotseng, 1985; Bland

and Schmitz, 1990).

Researchers who have studied the concept of vitality among higher

education faculty members have identified several assumptions to guide future

studies (Clark, Boyer and Corcoran 1985):

1. Individual and institutional vitality are interrelated.

2. Vital institutions are not necessarily synonymous with elite institutions, although there is some overlap between the two.

3. The performance emphases (among teaching, research and service dimensions) of the ideal type of vital faculty will differ according to institutional type and mission.

4. Vitality should include both qualitative and quantitative measures of effectiveness and productivity.

5. Consideration should be given to nonspecific, abstract dimensions of vitality (e.g. enthusiasm and energy).

Organizational Influences on Productivity

Studies have shown that scholarly output is influenced by the institution in which the faculty member was trained, the current place of work and the work environment (Blackburn, O'Connell and Pellino, 1980). Productive faculty appear to be most satisfied in an environment that fosters their autonomy and freedom to pursue their own goals (Lawrence, 1985). When the environment threatens not to support the individual's goals, stress increases (Melendez and deGuzman, 1983). Organizational determinants of productivity include: material resources, internal communication processes, leadership, group climate and decisionmaking processes (Bland and Schmitz, 1990).

Thus, productivity appears to be the byproduct of a close fit between an individual's characteristics, abilities and needs and the role expectations of the environment (Lawrence, 1985; Bland and Schmitz, 1990). But few studies have

been done on the extent of congruence between goals of faculty members and institutions, and the extent to which congruence is related to the commitment of faculty members to a university (Austin and Gamson, 1983).

Institutional Mission and Faculty Activity

Higher education institutions are defined in certain ways by the roles their members choose to perform (Melendez and deGuzman, 1983). The degree to which institutional missions are actualized depends on the extent of faculty members' commitments to and abilities to perform the various missions (Austin and Gamson, 1983; Bowen and Schuster, 1986; Birnbaum, 1988).

A disjunction between the institutional mission statement and faculty activities is bound to exist, according to Davies (1986), because mission statements reflect a philosophical idealism that is rarely defined in precise terms. A mission statement focuses on what leaders want the institution to become, rather than what it is, and therefore cannot be taken as a statement of fact. Furthermore, institutions have their own values and goals based on their histories and constituencies (Hind, 1971).

Because institutional goals are often ambiguous, faculty members receive mixed signals about which activities will be rewarded (Austin and Gamson, 1983). For example, while most higher education institutions include a commitment to public service in their formal mission statements, few institutions have policy documents on public service (Crosson, 1983).

Faculty members face conflicts among role expectations of their profession and their institution (Austin and Gamson, 1983; Schuster, Wheeler and Associates, 1990). In addition, faculty members are stressed by the difficulty of making the multiple roles and responsibilities of work and home life compatible (Sorcinelli and Gregory, 1987).

Symbolic Interactionism

To develop a clearer understanding of how individuals make their multiple roles and responsibilities compatible, this study was guided by the conceptual framework of symbolic interactionism. "Symbolic interactionism," a term coined by Herbert Blumer, is a view of social psychology with roots in the philosophy of pragmatism and the work of G. H. Mead (Hewitt, 1984). Symbolic interactionism has three premises (Blumer, 1986, 2):

1. Human beings act toward things on the basis of the meanings those things have for them.

2. Meanings are derived from social interaction with one's fellows.

3. Meanings are modified through the interpretive process one uses in dealing with things encountered.

The first premise sets forth the idea of multiple realities rather than a single reality. In the view of symbolic interactionism, reality is not something that exists a priori but, rather, is what one makes of it. The second premise asserts that individual behaviors and perceptions are developed within a social framework and are subject to the modifying influence of others operating within that framework. The third premise maintains that an individual acts on the basis of a

system of belief, or shared meaning, that develops through interpretation of experiences with others (Roberts, 1991).

This ability to interpret each other's actions and act on the basis of the meaning those actions have for the individual is uniquely human, according to Blumer (1986). Because human beings have a sense of self, they are conscious of their surroundings and take note of -- or, as Blumer says, "make indications of" --things that guide their actions. These indicated things are referred to in symbolic interactionism as symbols or objects. Blumer (1986, 11) presents three categories of objects: physical (book, trees); social (friend, father); and abstract (moral principles, ideas such as compassion). In a given situation, an individual acts on the basis of her/his interpretation of these objects:

> In any of his countless acts -- whether minor, like dressing himself, or major, like organizing himself for a professional career -- the individual is designating different objects to himself, giving them meaning, judging their suitability to his action, and making decisions on the basis of the judgement. This is what is meant by interpretation or acting on the basis of symbols (Blumer, 1986, 80).

Through the ongoing process of interacting with and interpreting objects of meaning in various social contexts, individuals establish roles for themselves.

Blumer and other proponents of symbolic interactionism focus on roles as the key links between individuals' perspectives and behavior and the social situations in which they find themselves (Hewitt, 1984). Central to symbolic interactionism is the tenet that a role is not a distinct, concrete set of behaviors but, rather, a more fluid set of expectations of what one should do that is continuously created and modified (Heiss, 1981; Turner, 1962). In addition to

more formal positions, such as professor, roles can exist for what Heiss (1981, 95) calls "social categories", such as "hard worker", that are characteristics used to define individual identities.

The Social Framework for Role Socialization

Roles become sources of personal identity through the process of socialization, which takes place within cultural systems as part of social situations (Gecas, 1981). Symbolic interactionists see socialization from the individual's point of view as "the process of development or change that a person undergoes as a result of social influences" (Gecas, 1981, 165) or, put more succinctly, "learning social roles" (Gecas, 1981, 168). This conceptualization of socialization is based on a reciprocal relationship between the individual and her/his environment, in which the individual is both influenced by and influences the environment (Gecas, 1981, 168):

> Roles, then, are part of the social environment, embedded in cultural systems and distinguishable to some extent from the individuals who occupy them at any given time. Yet, they are also molded and fashioned by their individual occupants and (to a greater or lesser degree) become sources of personal identity, values, and beliefs. Consequently, roles provide a means for anchoring individuals to social systems.

Social organizations offer a context for socialization, whether intentionally or unintentionally, by providing frameworks within which individuals define their roles on the basis of interactions with others. Features of the social organization, such as culture and social roles, establish conditions for individual actions by shaping situations and supplying fixed sets of objects. But organizations do not

determine individual actions. Rather, individuals act on the basis of their own interpretation of situations.

The Idealized Role Conception

A role embodies norms of what people ought to do as well as what they actually do. Some norms transcend a specific role and are more widely held by members of a social group. Hewitt refers to these norms as "ideal expectations" (Hewitt, 1984, 84). According to Turner, individuals act as if roles were concrete by framing their behavior according to these ideal conceptions and, through role-taking and role-making, continuously modifying their actions:

> Roles "exist" in varying degrees of concreteness and consistency, while the individual confidently frames his behavior as if they had unequivocal existence and clarity. The result is that in attempting from time to time to make aspects of the roles explicit he is creating and modifying roles as well as merely bringing them to light; the process is not only role-taking but role-making (1962, 22).

Internal and External Role Validation

Individuals are able to act as if roles really exist and to bring unity to their changing conceptions of roles by verifying them through internal and external validation processes (Turner, 1962).

Internal validation emerges out of the "continued interplay" between the ideal conception of roles and the actual experience of enacting the roles (Turner, 1962, 30). Through each experience of enacting the role with varying degrees of involvement and in differing relationships with others, the individual constantly

modifies the content of specific roles and, occasionally, rejects identification with

a role and discovers or creates a new role (Turner, 1962).

External validation takes place by determining whether certain behavior

constitutes a role in the view of others "whose judgments are felt to have some

claim to correctness or legitimacy" (Turner, 1962, 30). External validation

involves developing "a sense of what goes together and what does not" based on

"the example of key individuals whom the individual takes as role models",

according to Turner:

> Acceptance of the role behavior of an individual model as a standard may
> lead to the inclusion of much otherwise extraneous behavior within a role
> and to the judgment that kinds of actions which, by other criteria are
> contradictory, are actually not inconsistent (1962, 31).

It is in relation to these "reference others", as Hewitt (1984, 130) calls role

models, that an individual defines her/his identity and obtains an understanding of

the social structure. Reference others may be positive role models or they may

be "negative images of what to avoid rather than to emulate" (Hewitt, 1984, 130).

To fully comprehend a person's actions in a given situation, it is necessary to

"describe the identity the person brings to the context -- which of several

reference others are of particular importance..." (Hewitt, 1984, 130).

Role Learning

According to Heiss (1981), symbolic interactionists have not fully explained

the process by which individuals learn particular roles, so he draws on

psychologist Albert Bandura's social learning theory, which posits that human

beings derive most of their ideas by observing the actions of others who serve as models. Bandura does not clearly explain how people identify role models, other than referring to the development of "associational preferences"; Heiss interprets this to mean "we tend to associate with people who are attractive to us and who display functional behavior" (Heiss, 1981, 102).

In order to acquire particular behavior, the person must have "effective contact" with the behavior through attentive observation of the model's actions (Heiss, 1981, 102). However, attentive observation may not be sufficient for long-term retention of a new behavior unless the observed pattern is also rehearsed, either through actual performance of the behavior or through imagining oneself performing the behavior.

When dissatisfaction with the behaviors presented by particular models develops, an individual is capable of engaging in "creative modeling", which Bandura, quoted by Heiss (1981, 103), explains as a process of combining aspects of various models "into new amalgams that differ from the individual sources".

Significant Others

Because individuals often know several versions of a particular role, they rank these versions according to a "hierarchy of prominence" which is based on anticipated rewards for certain role performance from "significant others", according to Heiss (1981, 113):

> Other things being equal, a version of a role preferred by significant others is more likely to be higher on an actor's hierarchy than is a role version favored by nonsignificant others...The same reasoning would suggest that if the model for a particular version of a role is a significant other, that version is likely to have a higher preference rating than an alternative presented by a model who is less significant.

And because people can also reward themselves, they may come to prefer a particular role pattern if it provides self-reinforcement, even if it is less socially acceptable (Heiss, 1981). For example, individuals are likely to repeat roles that are easier to perform because they suit general personality traits and competencies.

Group Interaction

Symbolic interactionism views an organization as a dynamic group environment impacted by the introduction of certain actors and the removal of others (Roberts, 1991). Instead of functioning because of some fixed inner structure, an organization functions because individuals interpret and act upon situations in certain ways (Blumer, 1986, 20):

> Both the functioning and the fate of institutions are set by this process of interpretation as it takes place among the diverse set of participants.

Group action consists of the collective activity of individuals "who fit their respective lines of action to one another through a process of interpretation" (Blumer, 1986, 84). Common understandings or definitions of how to act in certain situations emerge from previous interactions and, therefore, most people in a given society define situations in the same way, according to Blumer (1986, 86):

These common definitions enable people to act alike. The common repetitive behavior of people in such situations should not mislead the student into believing that no process of interpretation is in play; on the contrary, even though fixed, the actions of the participating people are constructed by them through a process of interpretation. Since ready-made and commonly accepted definitions are at hand, little strain is placed on people in guiding and organizing their acts. However, many other situations may not be defined in a single way by the participating people...and collective action is blocked.

The following chapter on methodology will discuss the appropriateness of symbolic interactionism as a conceptual framework for a qualitative study of the multidimensional faculty role from the perspective of individual faculty members.

Summary

This study was intended to contribute to the emerging theories of the faculty role by viewing it through the interpretivist framework of symbolic interactionism. This framework posits that individuals construct a role for themselves and continually modify it through ongoing processes of interpretation of role experiences and interactions with others. Through these interpretative processes, the individual makes sense of the world and her/his place in it.

The study's purpose was to describe and explain how individuals considered by administrative gatekeepers to be highly productive in the multiple dimensions of the faculty role (e.g., teaching, research, and public service) originally selected the faculty role for themselves, were socialized into the role, and made decisions about role enactment. To inform the study, relevant literature was reviewed in the areas of academic professionalism, faculty career development, and the interaction of individual and institutional vitality.

The literature on academic professionalism identified several paradoxes: (1) the faculty role is frequently discussed as a monolithic entity based on a common core of values and activities, but individuals are socialized by various advisers and role models into academic disciplines with different ways of discovering, transmitting, and applying knowledge; (2) the idealized role expectation espouses that faculty members blend teaching, research, and public service activities, even though most institutional reward and incentive systems rank performance in the three dimensions in a hierarchical manner with research at the top; and (3) faculty members who simultaneously perform all three faculty role dimensions (e.g., the triple-threat pattern) are thought to be rare individuals found only at the most elite universities.

Most research on faculty career development has applied adult development theory to studies of males working in research universities. The consensus has been that faculty motivation is complex; conclusions are inconsistent about the influence of reward and incentive systems on faculty behavior. In general, faculty are thought to be motivated more by intrinsic factors, such as autonomy and intellectual stimulation, than by external factors, such as monetary rewards.

However, growing evidence was found in the literature of the interdependence of individual and institutional vitality, with productivity seen as a by-product of a close fit between the role expectations of the institution and the performance abilities and needs of the individual. Still, institutional goals are

often ambiguously stated in mission statements that reflect a philosophical idealism that is rarely defined in precise terms. Therefore, faculty frequently must make sense of mixed messages about performance expectations from within the university and from their academic discipline.

The literature review informed the design of the methodological elements discussed in the following chapter.

CHAPTER III

METHODOLOGY

General Approach

The purpose of this study was to describe and explain how faculty

members within a research-oriented land grant university construct their roles in

order to perform responsibilities in teaching, research and public service at high

levels of achievement. The context for the study was Multidimensional State

University (MSU), an institution which had recently engaged in a long-range,

strategic planning process with one goal being to encourage multidimensional

faculty role performance consistent with the institutional mission. The mission

statement describes the institutional commitment to excellence through the

integration of teaching, research and public service activities. However, the

extent to which the mission was actualized by individual faculty members who

integrated the multiple role dimensions was unknown.

To understand the faculty role from the perspective of individual faculty

members, this study used techniques of qualitative research, since the main

objective of qualitative research studies is the development of an appreciation of

the world as others experience it (Crowson, 1987). The approach to this study

was guided by the framework of symbolic interactionism, a view of human

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conduct in which individuals create their own social roles by continuously interpreting and defining symbols within the social organization on the basis of their interactions with others in the organization. Symbolic interactionism provided an appropriate framework for this qualitative study because it requires direct examination of the social world through naturalistic modes of inquiry in which analytical elements emerge as the study becomes progressively more focused (Blumer, 1986).

Research Questions

Based on the literature reviewed in Chapter II, four primary research questions emerged as the focus of this study.

The Process of Anticipatory Socialization

It was considered foundational to this study to develop an understanding of the processes by which individuals came to identify themselves with the faculty role and chose an academic career. Encounters with individuals and experiences during graduate school are considered instrumental in conveying the essence of the faculty role to prospective academicians and influencing the decision to enter the professoriate. Therefore, the first primary research question was:

1. How did participants come to select the role of faculty member, and to define and interpret the role during the professional socialization processes of graduate school?

The Process of Entry and Induction
Into the Professoriate

Upon entering tenure stream positions, new faculty members carry their graduate school views of academic forward, usually into different higher education organizations. It was important to this study to understand the processes by which individuals evaluated available professional positions, selected a particular position, and came to understand what was expected of them in that position. The second primary research question explored in this study was:

2. How did participants interpret and act on the role as new faculty members?

The Process of Faculty Role Continuance

This study sought a more complete understanding of the processes by which faculty members who are working across the three dimensions of the faculty role make decisions about the activities they engage in and how they construct their roles. The third primary research questions explored in this study was:

3. How do participants think about and enact the faculty role in a manner resulting in multidimensionally productive performance?

Systems of Constraints and Incentives

Since social organizations provide the framework within which individuals form a social role for themselves, it was important to understand factors within the

institutional environment that had either positive or negative impacts on individual

faculty role performance. The fourth primary research question explored in this

study was:

4. What aspects of the institutional environment do participants view as

instrumental and/or obstructional to role performance?

Sample Selection Process

A description of a faculty exemplar of multidimensional role performance

was developed for the purpose of identifying participants for this study. The

description was based on criteria for an annual faculty award given at

Multidimensional State University (MSU). The latest criteria were formulated by

the 1990-91 awards committee appointed by the MSU president and made up of

tenured MSU faculty members (half of whom were previous award winners)

representing a diversity of gender and ethnic backgrounds. In addition, the

paragraphs at the beginning and end of the exemplar description incorporated

concepts of sustained productivity and qualitative aspects of performance that

were taken from other studies of vital faculty (Clark and Corcoran, 1985; Rice,

1986; Baldwin, 1990).

The following faculty exemplar description was used to identify study

participants:

> A faculty exemplar is an individual who has a sustained record of
> exceptional achievement in the multiple roles of the academic profession --
> research, teaching and public service.

Exceptional research is demonstrated in the discovery of new knowledge and/or the creative aggregation, interpretation and application of existing knowledge.

Exceptional instruction incorporates efforts to challenge undergraduate and/or graduate students and contribute to their overall development through creative teaching approaches, curriculum development, and academic advising or mentoring.

Exceptional public service involves the successful extension and application of knowledge to address the needs of people at the local, state, national or international level through activities that build upon the faculty member's professional expertise, such as applied research, consultation and technical assistance, policy analysis, program evaluation, off-campus instruction and public information.

An exemplar's productivity is characterized by quality of output, not solely by quantity, and by professional growth throughout the academic career. A faculty exemplar is widely respected by colleagues and constituents both on and off campus. Her/his efforts make a difference in the lives of those with whom she/he is engaged.

A purposeful sampling method was used to select participants from all faculty ranks, both genders and a range of academic disciplines, in order to expand the developing understanding of the faculty role by including a variety of subject types (Bogdan and Biklen, 1982). In keeping with the purposive, or theoretical, sampling method, a serial selection process was used in which participants were nominated by gatekeepers, initially college deans in this study (Lincoln and Guba, 1985).

Deans were used as the initial nominators of faculty exemplars because, within the decentralized organizational structure of Multidimensional State University, they are key interpreters of institutional, collegiate and departmental missions. They serve as intermediaries who interpret policies and procedures of the central administration to departmental administrators and faculty, and vice versa. As persons who must approve all departmental personnel actions -- such

as decisions to hire, promote and tenure individual faculty members -- deans are in a position to be broadly knowledgeable about the performance of faculty members in all departments of their colleges. According to Henry Rosovsky (1987, 34), a former Harvard dean:

> The dean is likely to know more members of the faculty than anyone else -- usually by first name...No ordinary faculty member can have as wide a circle of friends and associates...

In January 1992, 13 deans were sent a letter under the signature of a senior faculty member that presented them with the faculty exemplar description and asked for an interview appointment to discuss its applicability to college faculty members. In face-to-face interviews conducted with individual deans in February and March 1992, the senior faculty member and doctoral researcher probed for an understanding of their views of exemplary faculty performance and asked for names of faculty members who fit the exemplar description. The deans were specifically asked to recommend some faculty members who were at early career stages, as well as women who fit the description. A total of 114 faculty members (78 full professors, 25 associate professors, and 11 assistant professors) in 13 colleges were named by deans during these interviews; 33 were women.

To narrow the exemplar pool to a reasonable sample for qualitative research, 5 of the 13 colleges were selected as the focus of study. These five colleges were chosen to represent a diverse collection of academic disciplines in the arts and humanities, engineering, and biological, social and physical

sciences. In keeping with the purposeful sampling technique used to obtain a variety of participant types, a sample framework was developed in which the participant group from each of the five colleges was to include at least one woman and at least one faculty member in all three faculty ranks (assistant, associate, and full professor). Because interviews with deans of four of the five colleges in this study did not produce the desired sample of women and junior faculty, the researcher conducted face-to-face interviews with six chairpersons of departments within the four colleges. To select these departments, the researcher consulted the campus directory and identified departments listing female and junior faculty members. Using a procedure similar to that for deans, the researcher contacted the chairpersons by letter and then phone call to set up face-to-face interviews. During the interviews, the chairpersons were asked to discuss the exemplar description and to suggest faculty members who embodied the description, without being told whom the deans had recommended.

From discussions with deans and department chairs in the five colleges, a sample of 45 faculty members was identified. A letter under the senior faculty member's signature was sent to these faculty members requesting their participation in an extended confidential interview with the researcher regarding their faculty role and career evolution. The letter explained in general terms that they had been identified by college administrators as faculty members who do an exceptional job of teaching, research and public service, but did not include the faculty exemplar description in order to avoid introducing a particular way of

thinking about the role prior to the interviews. The prospective participants were told that interview data would be used for a doctoral dissertation, and that verbal and written reports of the study would not use real names of the institution, the interview participants, or their departments or colleges.

About a week after sending the letters, the researcher contacted individual faculty members by telephone to request and arrange an interview appointment. Faculty members who agreed to participate in the study were asked to sign the bottom of the letter, which also served as a consent form, and return it along with their current vitas to the researcher prior to the interview date. Of the 45 faculty members contacted, 41 agreed to participate; of the four who declined, two were males who were on sabbatical leaves and two were females who said they did not have time.

Data Collection Strategies

Data were collected primarily through face-to-face, in-depth interviews with the 41 faculty participants, as well as through analyses of faculty vitas and information obtained during interviews with college administrators. The methodology of in-depth interviewing is considered more effective than participant observation in qualitative studies of individuals who do not constitute a group but who share a particular trait, in this case multidimensional role performance (Bogdan and Biklen, 1982). The interview offers an opportunity to efficiently obtain data that is focused on the central questions of the study directly from the

persons who are the subjects of the study and in their own words (Crowson, 1987).

A semi-structured interview protocol with 11 primary questions and additional probes was developed by the researcher, drawing from a revised interview guide used by Clark and Corcoran, (1982) in a study of faculty vitality and from questions posed to schoolteachers by Lortie (1977). The interview protocol was pretested and refined based on face-to-face interviews with three faculty members who were not part of the participant sample. The protocol was designed to generate open-ended responses that explored the four primary research questions in this study.

At the outset of the interviews, participants were reassured of the confidentiality of their responses and their right to decline participation at any time. Before beginning each face-to-face interview, the researcher asked the participant for permission to audiotape the interview. The researcher made handwritten notes of participants' responses, as a backup system in case of tape recorder malfunction and in order to record participant comments made when the tape recorder was turned off. All participants were interviewed in their offices, except four who were interviewed in conference rooms. Interviews took place in single sessions lasting from one to three hours, and were conducted between April and July 1992. Transcripts of the audiotapes were produced as interviews were completed.

Data Analysis

The data from the interview transcripts were analyzed in multiple stages involving processing strategies of analytic induction and constant comparison (Glaser and Strauss, 1967; Lincoln and Guba, 1985). The interview protocol questions, which were based on the four primary research questions guiding this study, served as preliminary categories by which to group and analyze responses. Response data from individual participants were entered on index cards that could be sorted and resorted as categorical comparisons were made; the index card data were recorded in a way that would be comprehensible to an external auditor (Lincoln and Guba, 1985).

In one analytical stage, responses of participants within each college were examined by question category to check for patterns and relationships among collegiate groups. In another analytical stage, responses across participants were arranged under question categories according to subtopics that emerged as data were analyzed. The researcher recorded memos about emerging themes, patterns, relationships, and hunches in a notebook during the ongoing process of data analysis (Glaser and Strauss, 1967).

The results of the data analysis are presented in Chapter IV in four sections that correspond to the four primary research questions of the study. In the first two sections, data are reported by each of the five colleges under subtopics representing themes that emerged from the data analysis. In the second two sections of Chapter IV, the data are discussed according to a faculty

role typology that emerged in this study. A composite description of each of three

role types – researcher, teacher-scholar, and multidimensional – is presented

and supported by direct quotations that articulate the essence of the role type.

The data analysis was used to generate a grounded, or developmental, theory

(Glaser and Strauss, 1967) of multidimensional faculty role performance

discussed in Chapter V.

Limitations of the Study

The study was based on a purposefully selected group of tenure-stream

faculty members within a single public higher education institution in the Carnegie

classification of Research I university. In addition, the institution is one of only 16

universities in the United States to be designated as both a land grant institution

and a member of the research-based American Association of Universities

(AAU). Therefore, no attempt is made to claim either universality or

generalizability of the results to other individuals or institutions within higher

education (Glaser and Strauss, 1967).

Furthermore, while a uniform description of exemplary faculty performance

was used to identify participants for this study, the participant sample of faculty

members was selected on the basis of nominations made by particular

administrative gatekeepers. These administrators have perspectives of faculty

performance that may differ from the perspectives of faculty peers or others

within the institution. It should be noted that all five deans and six chairpersons

who nominated faculty exemplars for this study were white males and, therefore, may bring a certain gender- and racially-based view of exemplary role performance to the participant-nomination process.

Another limitation of this study was that interviews were conducted with faculty members in only five of the colleges within the chosen university. Although the colleges were selected to represent diversity across gender and academic ranks and disciplines, it is still possible that responses of the 41 participants did not accurately represent the entire population of 114 multidimensional faculty within the institution identified through initial dean interviews.

The possibility of interviewer bias is inherent in qualitative research and might have occurred inadvertently during the presentation of questions to participants or in nonverbal reactions to participant responses. The researcher's background of more than 12 years of professional experience at the institution had included previous responsibility for interviewing faculty members about their work. This professional background provided the researcher with expertise in conducting field interviews as well as insights into the faculty role, but it also gave her a familiarity with some of the participants in this study that may or may not have affected their responses.

CHAPTER IV

RESULTS

The purpose of this study was to describe and explain the ways in which faculty members at a research-oriented land grant university construct their roles in order to perform teaching, research and public service activities at high levels of productivity.

In this chapter, data from field interviews have been organized into a section on participant characteristics, followed by four main sections that correspond to the primary research questions guiding this study. Each main section has multiple subsections representing themes that emerged from the data.

Section I: The Process of Anticipatory Socialization discusses how participants chose the faculty role and how they learned aspects of the role during graduate school. Section II: The Process of Entry and Induction into the Professoriate presents ways in which participants interpreted and acted on the role as new faculty members, with particular attention given to incidents and individuals having significant impacts on the process. Data for these two sections are reported by college, using a parallel topic structure for each college.

Section III: The Process of Faculty Role Continuance presents data according to a role typology that characterizes each participant as a researcher, a teacher-scholar, or a multidimensional faculty member on the basis of how he or she thinks about and enacts the faculty role.

Section IV: Systems of Constraints and Incentives discusses participants' career shifts and turning points, as well as factors they consider instrumental and obstructional to their role performance.

Participant Characteristics

Characteristics of the participants should be mentioned as background to the presentation of study results. A total of 41 faculty members in 31 departments within 5 colleges at MSU participated in this study. The participant group in each of the five colleges included faculty members in all three academic ranks. The total group included: 28 full professors; 6 associate professors; and 7 assistant professors. Each of the five college groups also included at least one woman, with a total of 10 women (about 25 percent of the sample). It should also be noted that 3 of the 41 faculty members held joint appointments in two different colleges included in this study, but each was discussed in the context of one college (see Table 1).

Of the total group, 31 were men, including: 28 white males; 1 black male; and 2 males from other racial/ethnic groups. The 10 women in the group included: 9 white women; and 1 black woman. Four participants (almost 10 percent) were foreign born. Participants' ages ranged from 30 to 70 years. The

number of years spent in tenure stream faculty positions at MSU ranged from 1 to

31. About 83 percent took their first tenure stream faculty positions at MSU.

Seven participants had received their doctoral degrees from MSU.

Table 1: Faculty participant characteristics.

Characteristic	% of Sample	% of University
Rank		
Professor	68	54
Associate professor	15	27
Assistant professor	17	15
Specialist	0	4
Gender		
Female	24	22
Male	76	78
Race		
African American	5	4
White	90	89
All others	5	7
Status		
Tenured	83	80
Years at University		
$\leq$ 10 years	34	34
11-19 years	32	27
$\geq$ 20 years	34	39

Section 1: The Process of Anticipatory Socialization

Socialization refers to the processes by which individuals acquire the values, attitudes, norms, knowledge and skills needed to acceptably perform roles within a social organization. Individuals' socialization experiences as graduate students are considered pivotal to their selection of the faculty role.

This section reports on participants' perceptions in two primary areas: 1. making the decision to become faculty members; and 2. learning the role during graduate school. Some noteworthy observations are made about the socialization experiences of each participant as well as some that generally apply across participants.

Prior to graduate school, about sixty percent of the participants said they received recognition for academic achievements and encouragement to further their educations, either from parents, high school teachers or faculty members they encountered as undergraduates, or from educational experiences they had during those periods. In looking across the participants, it appears that most made the decision to become faculty members because of an affinity for the freedom and flexibility they perceived to be inherent in the faculty role. This freedom and flexibility to shape the role on the basis of their own scholarly agenda became especially significant when weighed against other professional positions -- notably in government and industry -- in which work is directed by others and held accountable to measures of political popularity or the financial bottom line, as one participant observed.

In addition, they were attracted to the professoriate by the opportunity to enact multiple role dimensions not found in positions outside the academy. Some participants had been in professional positions in which they did only research, or teaching, or policy analysis. The challenge of combining teaching, research and outreach appealed to them, for reasons which will be explained more fully in the following sections.

Prospective faculty members are socialized into the professoriate through graduate school experiences. While all graduate students engage in research to fulfill the requirements for an advanced degree, some also enact other aspects of the faculty role. Many participants in this study got a taste of the faculty role by being given various opportunities to teach courses, work one-on-one with students in labs, co-author papers, give research presentations at professional meetings, conduct workshops for clientele groups, and even to assume temporary faculty positions. However, none of the 41 participants talked about receiving formal training in teaching during graduate school.

One of the most important catalysts for their interest in the professoriate was the example set for them by faculty members who embodied the best of what academia had to offer. While some negative examples were cited, participants' interactions with faculty members were predominantly positive and sometimes profoundly affected their understanding of academic life, as well as the values and beliefs underlying their role performance today. Many of the participants became enamored of the role by observing faculty members whom they felt were

highly effective in the various faculty role dimensions. Several even described their major professors as "multidimensional" or "triple threat" faculty. Contrary to the image of the isolated academic laboring alone in the laboratory or library, these role models cared about and interacted well with people. They combined a commitment to scholarly achievement with a desire to relate their scholarship to students and apply it to real world problems and concerns. They worked hard themselves, challenged their students to achieve, served as mentors to the academic world and, often, as guides to life in general. Many forged strong personal links to participants that have endured.

Participants' decisions to enter academic careers were grounded in perceptions of the faculty role as they had come to understand it through graduate school experiences. The majority decided to become faculty members at some point during or at the end of graduate school, rather than earlier in their lives. Many discussed their enjoyment of intellectual inquiry and "discovering new things". Because they had learned to thrive in an academic environment, becoming a faculty member meant being able to continue "doing what you like to do", as one said.

While it is impossible within the scope of this study to fully account for the factors that went into each individual's selection of an academic career, some patterns of influence were evident and are presented in this section under the following topic headings:

1. Parental Support
2. High School Influences

3. Undergraduate Experiences as Catalysts
4. Career Growth as a Motivating Force
5. Legacies of Mentors
6. Collective Influence of Faculty Members
7. Learning from Negative Experiences
8. Learning to be Autonomous

All categories are used in reporting data from each college, whether or not

participants' comments applied in every category.

College A

College A is a mixture of disciplines in the social, biological, and physical

sciences and engineering, with the 11 faculty members from this college

representing that mixture.

The College A participants had varied opportunities at the master's and

doctoral program levels to enact the faculty role: 2 were teaching assistants with

complete responsibility for one or more courses, and one was temporarily

appointed to a faculty position; 2 were teaching assistants in laboratory or

discussion sections of courses; 1 was a teaching assistant for one term as a

degree requirement but otherwise was a research assistant; 1 was a research

assistant; 2 had both teaching and research assistantships; 1 was a research

assistant and learned about outreach; 1 was predominantly a research assistant

who also did outreach and some classroom lecturing; 1 engaged in the teaching,

research and outreach dimensions of the faculty role during graduate school.

Their reflections upon the life changing decision to enter the professoriate

follow.

Parental Support

None of the College A participants specifically cited the influence of parents in selecting an academic career. One participant did mention that his father was a faculty member at another type of higher education institution. Another participant said he was the first person in his family to graduate from college.

High School Influences

A female participant in College A found her career focus during high school, when she read about ecology and the world food crisis. Given her idealistic nature at the time, she became "pretty directed" toward a career in biological research in which she could address those issues.

Undergraduate Experiences as Catalysts

Several College A participants experienced intellectual awakenings as undergraduates, often through associations with faculty members who catalyzed their interest in particular subject areas and who ultimately influenced their decisions to pursue graduate degrees. As a freshman, the female participant had an academic adviser who arranged an independent study in a research lab with someone she considers a mentor:

> I was lucky in that I wasn't even a dishwasher [in the lab]...I worked in four
> different labs as an undergrad, but the first person was influential in that,
> up until then, professors were these distant people in huge classes, and
> this was somebody who actually knew who I was, cared about what was
> going on in terms of, you know, was my experiment working, that kind of
> thing. And so, in that sense, he was very influential.

She had a variety of mentors in science laboratories throughout her undergraduate experience, and was even listed among the authors of a scholarly publication. Two weeks after receiving a bachelor's degree, she entered graduate school and was a research assistant the entire time, except for one term in which she fulfilled a required teaching assistantship.

Another participant had intended to enter the "commercial world" after receiving a bachelor's degree but, based on his academic record, was encouraged by his advisor to pursue graduate studies. At about the same time, he met a faculty member who was visiting his campus:

> ...he invited me to come up and interview for a [graduate assistant] position he had and I did so and he offered it to me and I went and it very quickly went from there on to a Ph.D. and I guess I've never looked back. So I just started down the path and that's the way it worked.

Another interviewee recalled working as an undergraduate in a professor's laboratory. As he became interested in this man's specialization, the professor recognized his potential and offered him a graduate assistantship:

> I suspect that's what results in half of the decisions to pursue graduate work...It's kind of a mutual development without a lot of forethought put into it. It just sort of happens.

Others in College A reported similar step-by-step progressions in their decision making, based on academic achievement and enjoyment of the subject matter. One faculty member said he became "extremely interested" in his area as an undergraduate and decided he wanted to do more with it than he could with only a bachelor's degree.

After years of academic underachievement, one interviewee experienced

an intellectual awakening in college and graduated at the top of his class:

> I was excited because I felt I finally got to a place where I could ask the
> questions I wanted to know and I had run into people who could answer.
> So I thought a B.S. degree was not a terminal degree. It was the
> beginning of getting going, and so I wanted to go to grad school.

Another senior faculty member recalled:

> I think my education has been essentially progressive, that is, as one
> completed a program of study like a bachelor's degree, you begin to look
> at what the next alternatives were. And you say, "Well, maybe I could get
> a master's"...And I pursued that I guess in part because there was always
> a challenge. I kind of grew up thinking anyone who would get a Ph.D.
> must have it all together. I never really thought that attainable until I
> basically worked my way up the step, and then that step and that step and
> finally it became a challenge of completing the program.

Career Growth as a Motivating Force

Three College A faculty members had taken career paths outside of

academia when they completed their doctoral degrees. Two worked for the

federal government and one was a high school teacher before they decided that

joining the professoriate would enable them to do the kinds of things they had

come to enjoy during graduate school.

After spending six years in Washington, D.C. engaged in "high-speed,

around-the-clock kinds of things", one faculty member gave in to what he called a

craving for "reinvesting in myself in the academic environment". This so-called

craving was based on fond remembrances of academe:

> I had had prior excellent experiences going through graduate work, and in
> my undergraduate work with the university faculty members.

He left Washington after being recruited for a university position by two administrators and a nationally known scholar from that institution. Similarly, another interviewee was recruited away from his federal government research position after giving a presentation at an annual state meeting of professionals in his field:

> A couple of days later, I had a call from someone saying, "We'd like to talk with you about a faculty position at MSU"...The process for hiring then was much different than it is today. Essentially, the faculty identified someone they wanted and simply went out and tried to get that person.

Although he didn't know exactly what the faculty position entailed, he willingly gave up the one-dimensional research role in an isolated setting for the opportunity to do some teaching, which he had enjoyed during graduate school.

Another participant began taking graduate courses to help him do a better job as a high school teacher. During his Ph.D. program, he had the opportunity to become what he calls a "mini faculty member" and began to realize the multiple dimensions of the role:

> Because of my major professor's activities, I had activity giving workshops...teaching undergraduate classes, or portions of them, I even served on a master's student [thesis] committee as an additional member, and then was involved not only in my own research, but on several projects that were ongoing...He [major professor] just thoroughly immersed his students in everything that went on. And I got a flavor for the whole frenetic lifestyle that was possible.

Legacies of Mentors

As participants reflected on their choice of an academic career, their responses frequently flowed into fond remembrances of faculty role models and

mentors who paved the way for the decision, either by offering direct

encouragement and networking to find the first faculty job, or by serving as

examples of the best that a faculty member could be.

One senior faculty member gave glowing testimonials to two mentors, one

of whom was his master's degree advisor:

> [He] was a good model of caring and he was always hale and hearty and
> [had] a good smile and a twinkle in his eye and cared about people and all
> of those things appealed to me...He was very special, and primarily
> because of that strong sensitivity he had for other people.

During his doctoral program at a different institution, this participant said he was

"blessed" with another very special major professor:

> He was not only nationally renown in his field but he was highly regarded
> within the university structure...[Name of professor] was a three-pronged
> person. He was a strong teacher, he was a strong researcher, and he was
> a very, very strong outreach person, extremely strong. He was one of the
> best in the university by far...He impressed me as a person who had a lot
> of world smarts as well as being a good academic. The term today that I
> would use is "practicing scholar." You know, you'd get him going into
> something and you'd think you were about to nail him with some new
> reading material or some new things...and the son of a gun would know it,
> which always pleased him and was intriguing and made for great
> conversation.

This participant experienced the outreach dimension of the faculty role by

observing his major professor working with off-campus groups and discussing

these interactions with him:

> I traveled a lot with him...We'd pop in the car together and go to [name of a
> place] and he'd have a night program there and I'd watch him work with
> the citizens and I'd watch him work with the county agent...They loved him.
> They just loved him. He was good, very, very capable. He'd move into a
> situation and make a difference...And then sometimes we'd critique it.
> Maybe not then. Maybe on the way home, or maybe after an all-night
> bridge game or something like that. The guy had an incredible energy

base. He could go literally around the clock, which I admired and tried to emulate. He gave a sense that, you know, you did what you needed to do. If you had to be here in the evening and across the state at 8 a.m., you just sucked it up and did it. There wasn't any big deal about it...He did a lot of things in group process which today they have marvelous labels for but he did them because they made sense and he did them because they empowered people.

Another participant had an "excellent" major professor who spent a lot of

time advising him on personal and professional matters, and influenced his

academic values and philosophy:

> While I was working for him, he had a philosophy he called "the half and half philosophy of research" where you do half your work in solid science and half applied...I see faculty members who do very basic research which has no application, or no immediate application, to an end user...and we see others that do very applied research where the science may be shallow, if we can use that term, and he tried to walk the line down the middle with the idea of always doing the research in such a fashion that, when you were through, you could have a publishable [article] and would have an application to the commercial [world]...It probably reflects a good deal of my philosophy now from the standpoint of the research program that I carry on. Other values would include, if you talk about productivity...he said, more than once, you spend 40 hours a week doing the paperwork and the mundane things and, to get papers published and be successful, would [require] time beyond that 40 hours and here, as I move into a faculty position, there's no doubt in my mind that's true.

This mentor gave him opportunities to attend international symposia and

expected him to present a paper or poster at a national professional meeting

each year, as well as giving presentations to off-campus clientele groups.

A female faculty member worked closely with one person during her

doctoral program who taught her values that she has incorporated into her

professional role:

> My major advisor and mentor was an extremely meticulous advisor and was a wonderful person too. He really gave me really good habits as far

as keeping my [lab] notebook...and doing experiments carefully, and being critical, so that was really excellent...[In terms of writing proposals and papers] when we wrote, we would really write together...We also clicked intellectually, so it was always just fun.

Collective Influence of Faculty Members

Rather than citing particular faculty members as mentors, several

participants talked about the collective influence of a number of faculty members.

By carefully observing these effective professors, they developed what one

described as an intuitive knowledge of the faculty role.

After finishing a master's degree, one participant decided to go on for a

Ph.D. because he thought additional education would be "desirable" and

because, if he left school, there was a good chance of being drafted. While

pursuing his doctorate, he most enjoyed working with people who applied

knowledge to meet clientele needs:

> They were problem solvers. They were real world doing things people, as opposed to academic up in the sky theory that never has any relevance in the real world [people].

However, as another participant observed, the graduate school

perspective of the faculty role proved incomplete in the face of actual professorial

responsibilities:

> I was fairly close [during graduate school] with several faculty members. Several of them were outstanding teachers. They were mentors and role models for me. I thought I had a good feel for what a faculty member does, though I realized once I became a faculty member that I didn't have as good a feel as I thought I did in terms of how people spend their time and the amount of work that is required...Once you become a faculty member yourself, you find out there's a whole lot more than just going to class and talking occasionally to graduate students and showing up at

their exams. There's committee work and administrative work and answering phones, providing service there, so there's a ton of things that graduate students don't see faculty members doing.

Learning From Negative Experiences

A few participants mentioned observing or participating in situations that helped them to decide how they didn't want to approach the faculty role. The female College A participant had a postdoctoral fellowship in an intensely competitive environment:

> The person I worked for was very creative, very knowledgeable and loved to play around with ideas, that sort of thing, and was also extremely demanding and that was tougher for me in the sense that I was more comfortable with setting my own hours...The expectation was that you'd be there all the time. I mean, when I showed up for only two hours on the 4th of July, that wasn't sufficient...I was the only one who didn't spend a full day on the 4th of July in the lab.

Another participant recalled learning lessons from both the negative and positive traits of his major professor:

> My major professor was a wild eagle in a lot of ways...He was known as an extremely creative person...He broke all the rules...He didn't tend to finish projects. He would get bored with it and go on...If anything, I tried to learn from that experience. Being creative is good, but you have to have the stamina to carry a project to completion.

Learning to Be Autonomous

One of the frequently mentioned values associated with the faculty role is the inherent autonomy to shape the role according to one's own professional interests and preferences. Several College A faculty members clearly enjoyed

opportunities they had during graduate school to be self-directed and learn about

aspects of the role for themselves.

One participant was among the few doctoral students in his program to be

appointed as a part-time undergraduate instructor:

> I went from no teaching [experience] to full responsibility. I said to them,
> "What are the guidelines?" They said, "You cover these chapters.
> Beyond that, whatever you want to do." I found that I loved teaching...I
> wasn't aware [before that] of the excitement and the personal
> communication, interaction aspects of teaching.

Another participant was appointed as an instructor during his master's

degree program and enjoyed teaching so much that he delayed completion of his

degree for several years:

> I started teaching at the tail end [of the master's program]. I was given an
> instructor's position...and I was a bad boy for two and a half years. I put
> my [unfinished] thesis in the back drawer and I taught...I just had a great
> time teaching students.

As part of a teaching assistantship, one participant's master's adviser gave

him complete responsibility for teaching sections of courses:

> He did not merely have me grade papers or do the dirty work and the busy
> work...He would say, "Here are the topics I want you to cover. You're
> responsible. You write the test questions. You do all the lectures. You
> grade it. If you get stuck, come see me." Knowing him the way I do, I
> knew it was the stuff he liked to talk about the least anyway, so there was
> some personal benefit for him, but there was some good benefit for me
> and I took it as something to enthusiastically get involved with.

At the time he completed the master's degree, the adviser went on a sabbatical:

> ...the chair here had been familiar with my work and said, "Why don't you
> just take over these courses?"...In fact, when the faculty member came
> back, they found other things for him to teach and they said, "Why don't
> you just keep teaching these things? You're doing such a nice job"...I was

in an odd position to be able to build up a record in teaching and as a faculty member before I applied for a tenure stream job.

In terms of the scholarly research required for a dissertation, one participant's major professor treated him more like a junior faculty colleague than an inexperienced graduate student:

> He expected me to be a real self-starter...We had, literally I think, four conversations about my dissertation...That was great with me. A little terrifying but great...I think he had a decent sense about how far and how fast to encourage a person to fly on their own wings, and he certainly never got in the road. If he pulled me up, he would only pull me up with a penetrating question, or sort of an "I gotcha" kind of question.

College B

College B is made up of disciplines in the arts and humanities. All five of the faculty members in College B who participated in this study made the decision to become faculty members largely on the basis of their perceptions of the teaching dimension of the role. Four of the five participants entered doctoral programs in their disciplines after pursuing other career options.

The College B participants had varied teaching experiences prior to entering their first full-time university faculty position: 2 were teaching assistants during graduate school and had complete responsible for teaching one or more courses; 1 taught undergraduate courses at a college near his graduate school and had taught in the Peace Corps; 1 had a series of part-time teaching positions at three higher education institutions after completing the Ph.D.; and 1 taught non-credit courses as a staff member at a university prior to entering the doctoral program.

Parental Support and High School Influences

Participants were not specifically asked whether any discussions or experiences with parents or high school teachers significantly influenced their decisions to become faculty members, and none of the College B participants mentioned such influences.

Undergraduate Experiences as Catalysts

Although a case could probably be made for the cumulative influence of positive academic experiences on all College B participants' decisions to become faculty members, none of them mentioned specific individuals or incidents during their undergraduate programs as having particular significance.

However, one participant drew on undergraduate impressions of faculty life to make a pivotal career decision. After completing his undergraduate program, he entered law school and worked on weekends in his chosen artistic field to, as he said, "keep my sanity." A lack of interest in law school caused him to look at career alternatives, and he began to see the professoriate as offering both creative and intellectual challenges:

> I knew I wanted to be a person who was active in creative [his field] and also I really enjoyed the academic life, as I perceived it from the student side...One thing that attracted me was that there was a certain rigor to the life that I saw my faculty members engaging in...They were constantly being challenged by their students and they were challenging the students.

He applied for admission to a graduate program in his creative field and received a teaching assistantship.

Career Growth as a Motivating Force

After completing undergraduate degrees, three other College B

participants held professional positions before deciding to become faculty

members. All of them were engaged in aspects of teaching.

One participant was as an academic staff specialist who taught noncredit

courses at a university. In this position, she attended faculty meetings and

learned more about what the role entailed. She decided to pursue a Ph.D. so she

could teach credit courses and advance her own creative ability:

> When I went back for my doctorate, it was with the intention of seeing what
> I could do with my [own work] before I got a lot older and unable to really
> improve in that area...I thought I'd wind up with some kind of a college
> teaching job.

Another participant had a university staff position in which she supervised

student interns. She enjoyed the student interactions and, although she was

"petrified of teaching", the students were encouraging:

> I guess the only positive thing that I relied on was that they [student
> interns] would say once in awhile, "Gee, you would make a really good
> teacher."

She decided to enroll in graduate school and taught two courses a term as a

teaching assistant.

One College B participant taught in the Peace Corps after completing an

undergraduate degree:

> I found I enjoyed it [teaching] and I thought I was good at it. It sort of
> seemed natural to me. So then I applied to graduate school with the
> intention of becoming a teacher.

His graduate program did not offer assistantships, so he taught undergraduate
courses at a nearby college and his enjoyment of and confidence in teaching
became stronger.

Legacies of Mentors

While graduate school faculty often work directly with individual students
as mentors who help shape their understanding of and performance in the faculty
role, only one College B participant talked about being mentored. She learned
from two mentors -- one female and one male -- whom she continues to consult
for personal and professional advice:

> ...When I was first here [in a temporary faculty position], we had several
> deaths in my family and I was pretty depressed and I was worried about
> how I was going to make my own niche in the [professional] world and I
> remember that she [her mentor] and I had long talks that summer where
> she said, "Take your time and don't try and do things too fast. Take time
> to explore what's going on around you and see where you fit and don't
> worry so much about carving your niche just yet." And she reminded me
> that she published her first book when she was 54...She is a very well-
> known and well-loved clinician in the country and one of the things she has
> always told me is, "Don't work as hard as I have"...But there was no
> pretense of cutting back her own load at that time...But the other person
> [mentor] is...a very balanced person as far as he has a life outside of
> school and...I have turned to see him lots of times for feedback on just life
> in general.

Faculty Members as a Collective Influence

Only one College B participant specifically cited three graduate school
professors who contributed in positive ways to his understanding of the faculty
role:

>I had a professor at the master's level who was a major influence. She was a good teacher, very systematic, bright, had a good program that really met my expectations -- it was stimulating but very well thought out and well-structured. One professor [in his field] was very solid and a great scholar who was internationally known. The kinds of experiences we had in his classes were very valuable learning experiences. Another professor was much flakier but was trying to push the profession beyond traditional limitations. He really gave me the impetus to do the same thing, to go beyond what had already been done and to pose some new questions.

Learning From Negative Experiences

On the other hand, four of the five College B participants talked about faculty members who either failed to offer guidance and mentoring, or served as models of ineffectiveness in enacting the faculty role.

The same participant who cited three positive faculty role models said his motivation to enter academia came from inadequate college instructors he encountered in his chosen field:

>The real stimulus...was I had a lot of mediocre teachers who showed me there was plenty of room for improvement. I felt that I was capable of filling some of the gap.

Another College B participant commented that the quality of instruction in his graduate program at a highly prestigious university was "terrible."

In two other cases, participants referred to experiences or insights they did not learn from the faculty members with whom they interacted in graduate school. One participant felt she learned more about how to handle aspects of teaching from fellow graduate students than from faculty in her graduate program:

>...you were more or less intimidated by the faculty...they were nice people, they loved to have social things...but whenever it came to school, there

wasn't the time for mentoring...There wasn't any supervision...No one ever said, "This is how you write a problem."

In retrospect, another College B participant realized that, as a graduate student, he lacked an understanding of the role of a faculty member in the departmental and institutional context and felt he should have been better prepared for the realities of academic life:

> We got no perspective at that point that there were certain things that were beyond your control...The impression -- and it certainly was an idealistic and naive one -- was that the faculty member was the head of the [particular] area and had a lot of control over the growth and development of that area. And I've learned to my chagrin that that is not at all the case...I think it would be very valuable for any university, any college, to have a course or a forum, a seminar of some sort that would help prepare its graduate students who do plan to become faculty members and to be very frank with them and to explain different modes of organization at various academic institutions and the whole gamut of concerns that one must deal with as a faculty member.

College C

This college is made up of disciplines in the social sciences. The seven faculty members from College C who participated in the study decided to enter their chosen fields at various points in their lives. One recalls being 8 years old when she wrote her career goal on a piece of paper. Others were practitioners in their fields after completing baccalaureate degrees and went to graduate school to broaden their career options. For several participants, the professoriate was one of the few choices available for work in their particular fields.

College C participants had varied graduate school experiences in enacting the faculty role: 2 had teaching assistantships, and 1 of them also taught at a

nearby university before completing the Ph.D.; 1 was a teaching assistant and learned to do outreach; 2 were both teaching and a research assistants, and 1 of them also served on committees; 1 was a research assistant and became a research project manager; and 1 experienced the teaching, research and public service dimensions of the faculty role prior to graduate school.

Parental Support and High School Influences

As with those in College B, none of the College C participants specifically mentioned the influence of parents or high school experiences as factors in their decisions to pursue careers in academia.

Undergraduate Experiences as Catalysts

Two College C participants started on the path to the professoriate through the influence of faculty members they encountered in undergraduate courses.

One took a course from a "marvelous professor" who encouraged him to go to graduate school in the professor's field. The other "stumbled into" an undergraduate course in what became his academic field:

> The teacher made the subject matter so interesting. The idea that this person could be doing the variety and the kinds of things he did and get paid for it was real appealing...It was the first time that anything academic really interested me for its own sake...It was the first class where I was able to get involved and put my hands on things and...go out and do field research and really interact with the faculty at kind of an intellectual level.

After receiving a bachelor's degree, this participant taught special education for one year and tried to decide whether to go on to graduate school in special education or in the field which had captivated him in that undergraduate class.

He applied to one university and was accepted into the graduate program in his current academic field. At that time, he hadn't made up his mind about an academic career:

> I don't think I really thought that I could do it [become a faculty member] at that stage. I figured I'd probably go get a master's and then do something else. I had no confidence that I would be able to get a Ph.D., or very little. It seemed like something for other people.

While in graduate school, he was a teaching assistant during his first two years and then got a teaching job at one of the state's regional universities. He clearly enjoyed university teaching:

> I liked the gratification, the student feedback and the actual interaction with students. I felt good about being in the role...I never worked harder in my life. I don't think I was ready to be teaching complete classes, but I did.

Career Growth as a Motivating Force

Four of the seven College C participants had developed an interest in their professional areas through post-baccalaureate career experiences and were initially motivated to attend graduate school more by the desire for professional advancement than by the notion of becoming faculty members.

One participant worked in the policy arena of a worldwide organization and realized that, with a Ph.D., more career opportunities would be open to him. Since his parents were both academics, he felt he knew what that life was like and the research dimension, in particular, appealed to him.

Another College C participant entered graduate school to increase her professional competence and earning potential. Once there, she recognized

what she could accomplish in her chosen field as a faculty member who did research, designed programs and trained other people. Although she thought her interest in "the real world" was "counter to the norms of academia", she decided to join the professoriate.

Another participant had considerable professional experience when he decided to pursue a Ph.D. in order to become more effective at what he was already doing. As he forged a connection with some like-minded faculty members and experienced academic freedom firsthand, he found the faculty role appealing:

> Before I went to graduate school, I was doing some teaching, I was doing research, I was doing community innovation (in both private sector and local government entities) and I did that in graduate school and found a group of faculty who were supportive of that and I saw how they did it from...a base of the academic institution...I think the base of an academic institution allows you to innovate and do research that may be riskier or may be less politically popular...I don't mean to say that higher ed is apolitical at all or that it's less political, but it's just that the politics are less damaging to your work somehow...It's sometimes hard to convince the university community that what you do is intellectually important, so there's that tradeoff, but that is better to me than trying to convince politicians or the private sector that what you're doing is politically popular or will come through to the bottom line quickly.

One other participant spoke of being involved in "social activism and social service types of things" as an undergraduate. He planned to go to law school to avoid the military draft but, after drawing a high draft number, he looked for a job in a social service area and found one in his current field:

> I met people [on the job] that were there doing research...I saw what these folks did and I said, "These are interesting questions. This is a kind of thing I might like to do"...I worked there for three years in a variety of administrative positions...I did just about everything...The only sure thing I

got interested in while I was there was doing research and I gradually shifted my view of what I wanted to do from becoming a lawyer to getting a graduate degree in a social science area.

Legacies of Mentors

Four College C participants talked enthusiastically about their major professors, who served as mentors and role models for them during their doctoral studies and, in several cases, continue to have an influence on their professional development.

One participant talked about having an "extremely close relationship" with his thesis adviser, whom he considers a mentor. He received "moral, financial and practical support" from this professor and they remain in close contact, even co-authoring a book recently.

A female College C participant's dissertation adviser continues to have a strong influence on her:

> ...I saw him last Saturday...and we talked about my life and how it's going and what did I need from him in the near future, and just tell him who to call and he'd call them and just decide what you want and let him know...I found him in my second year of graduate school and I've been with him ever since... Nobody in my family had ever gone to any place called graduate school, so I kind of played it by ear as I got there. I'm very good at learning by watching people do things and I learned how to weave that way, sewing, getting tenure, whatever it is, you know, you watch and you pick a good model and you can pretty much figure it out...As I looked around this scary place, the obvious choice for me in terms of interest was this big old scary, internationally famous, oh my God if he looks at me and speaks to me I'll pass out person...We really liked each other in a really appropriate, healthy way...We're interested in the same things, have the same kind of passions. He likes working with smart people and likes the sparks...It's that kind of relationship where we really just spark each other. So he's been very good for me.

Another College C female participant learned valuable lessons from the woman who headed her dissertation committee. She saw this woman as a role model:

> ...particularly in terms of teaching and the care she put into her teaching...And also in terms of living your life, juggling roles.

Another College C participant was impressed by the way in which his major professor was able to achieve a balance between advising students, achieving scholarly recognition at the national level and having a personal life:

> ...we [graduate students] wondered how he would have the time for us as students [and] to do the things that he did to maintain a national reputation. He, for us, was multidimensional excellence. He was a triple threat. He was a great teacher. He was a super mentor. He wouldn't necessarily pal around with students, but he was there for whatever you needed...kind of the father confessor of graduate students -- open door, never too busy, but always writing and publishing. He seemed to have a personal life, too, you know. So he was a role model and, recently, I had a chance to talk to him and so I blamed my maniacal productivity on him...He had a real impact on me of what a role model is like for [his field].

Collective Influence of Faculty Members

In conjunction with the discussion of his major professor, this same participant mentioned another professor who influenced his view of teaching:

> ...ironically, another person who had an equal impact on me was a person who was not into writing and publishing and into the fast track of academic pursuits...He could do that, but he chose not to...He chose to spend his time with students and he challenged me and others...His classes were very demanding and he would spend a lot of time with students and got close to people...He chose to spend his time in ways that were not as rewarding and not mainstream and he then left there and went to teach in a small school in Oregon...So he had an impact on me in a different way and that was sensitivity and working with students...challenging people.

In fact, graduate school was "a Camelot experience" for this participant because the faculty in his doctoral program were among the best in the country, and his fellow graduate students were "exceptionally bright people" with whom he maintains contact.

Several other College C participants mentioned the positive contributions of a collection of faculty members with whom they worked during their graduate programs. As mentioned previously, one participant was encouraged to enter graduate school in his chosen field by "a marvelous mentor," who subsequently became a university president. This man was one of three persons with whom the participant worked during graduate school and who "greatly shaped the way I viewed the world". The participant was a graduate assistant for a one professor for five years:

> I learned a lot about the subject matter but I also learned how he interacted with the students...As busy as he was, he always had time for the students. He used to say, "That's why I'm here."

This participant learned how outreach fits into the role of a faculty member from another mentor:

> He trained a generation of students who went on to do all kinds of exciting things in social policy...He taught me the importance of the role of the university in social policy. He was a good role model because he did it himself. And he would say that it was important for faculty members to be involved in this kind of thing, because they could bring back rich experiences to the classroom.

Another College C participant knew what he wanted to do when he went to graduate school and formed a close working relationship with two faculty members:

We worked very much together as colleagues from the day I entered graduate school. Now, part of that probably was age. They were only slightly older than I was...We had similar interests and my experiences could help push their research possibilities, so we got very interested in doing research...They were both people who were committed to doing community research and being academics in a traditional sense.

Learning From Negative Experiences

None of the College C participants mentioned negative incidents or individuals before or during graduate school that affected their perceptions of the faculty role or academia.

Learning to Be Autonomous

Unlike the other six College C participants, one did not have any opportunities to teach during graduate school, but he considered that as a drawback only in retrospect. Instead, he learned to become a self-directed researcher when his major professor gave him the rare opportunity to serve as a project manager for an applied research effort:

> The important thing that happened to me in graduate school, and again this was serendipitous, was my major professor became the principal investigator of a national evaluation study...There were five sites across the country...They asked me to coordinate one of the sites...I think that had more to do with my professional development than anything. It was an emersion into the world of applied research and it was sort of like being thrown in the deep end...We developed a lot of skills out of necessity...There were a lot of issues that came up that we had to resolve on our own...I learned a lot about doing applied research. I learned a lot about myself and how to work with agencies in a research capacity...I came back after that year and a half and I was focused. I knew what I wanted to do.

College D

College D is made up of disciplines in the physical, mathematical and biological sciences. Many of the 10 College D faculty members who participated in the study had high school teachers who recognized their academic abilities and encouraged their educational advancement. Four participants had parents who influenced their career decisions. All four female College D participants in College D spoke at various times during their interviews about difficulties and frustrations they experienced as women pursuing careers in male-dominated fields.

College D participants had varied experiences in enacting the faculty role during graduate school: 4 were teaching assistants and taught courses, (one taught at the graduate level); 1 was both a teaching and a research assistant; 2 lectured in some courses and had research assistantships; 1 was a research assistant and also learned about the outreach role; 1 was a teaching assistant at the master's level and a research assistant as a doctoral student; 1 was a research assistant.

Parental Support

Four of the ten College D participants received a kind of indirect support for their decisions to pursue careers having to do with science or teaching from parents who served as role models.

From an early age, a female College D participant wanted to follow the career path of her father, who was a research scientist in industry. After

experiencing the rewards of teaching as a graduate assistant, she decided to

deviate from his path somewhat by combining teaching and research in a faculty

position:

> I found teaching so rewarding and so interesting that I decided that's really what I wanted to do...I liked explaining somewhat complex scientific issues to people and watching the light bulbs go on when they finally understood.

Another woman said that, while formal training in teaching was not part of

her graduate program, she always valued the teaching role because her father

was a high school teacher and two of her sisters are K-12 teachers. She did a

considerable amount of teaching during her doctoral program in addition to begin

a research assistant:

> Probably the fact that my advisor didn't have enough money to support me was the best thing that ever happened to me because I taught...The compensation was the same money you got if you were being supported for research but I had to do two jobs, research and teaching, and that was tough but I guess if I hadn't done that, I couldn't imagine myself in this [faculty] position right now.

One male College D participant taught high school before pursuing a

doctorate and recalled his mother's influence:

> When I was maybe 10, I decided I wanted to be a teacher, and I suppose that's partly because of my mother who, although I never knew her to be a teacher, she told me she did some teaching.

Another female participant's interest in science was triggered by her

father's explanation of a traumatic childhood incident:

> One time my mother...made a mistake and she put some eardrops in my nose, or something like that. And I thought I was going to die. I thought she had poisoned me. I was very young. She freaked out, I freaked out and my father took me in his arms and he made me a drawing and there was a big person and he just put this little dot that was meant to represent

the mass of these drops she had put [in] compared to the mass of my body and how could I be poisoned by such a little drop...I think it had a big impact -- being appeased of something that was terribly threatening by an explanation that seems so rational.

High School Influences

Four of the College D participants gained experiences or encountered individuals during high school that convinced them of their academic ability and gave them the impetus to continue their studies.

Three College D participants mentioned high school teachers who made a difference in their lives by steering them towards college, where they pursued science careers instead of the fulfilling family expectations. One man, whose parents had eighth grade educations, did not plan to go to college until several teachers made the decision for him:

> A group of teachers ganged up on me and made sure I took the SAT exams. I had a few people that really looked out for me, and my homeroom teacher actually got the guidance counselor and some other teachers together and filled out my college application...I would not have gone to college if they had not forced the issue.

A female College D participant's high school chemistry teacher gave her the courage to continue her education:

> ...my science teachers were men...and one in particular, my chemistry teacher, asked me whether or not I was going to go to the university...By then my father had died. We were really poor...I had never thought about it...I think I seized upon a chance to go beyond what looked like was going to be my lot [becoming a school teacher]...maybe I would have become one if it hadn't been for this chemistry teacher saying, "What about going to a university?"...At the end of...high school, he said, "What are you going to do?" And I remember that he made a specific appointment for telling me that, and he was the only person who had bothered...Nobody ever told me that I was smart as I was growing up.

She also credits her mother for encouraging further education:

> My mother was more thirsty for knowledge than I've ever known anybody in the world to be and I think that had an incredible impact on me, and it was a beautiful thirst...a pure thirst for knowledge...So she did want me to get educated.

This participant began to gain teaching experience during high school:

> I was always interested in teaching, always, always, always...I made money in teaching from the time I was an adolescent on. I tutored grade school kids and when I was at the university, I tutored rich sons of doctors...I had T.A.ships and did substitute teaching...When I lived in Boston, I taught in a VISTA project for dropout school kids...I really, truly love to teach.

Another female College D participant first recognized an interest in

teaching her subject area as a high school student:

> I was the kid in my country high school who had study sessions for everybody else throughout my entire four years of high school, and the kids came to my house every night. So somebody asked me one day how long I had been a teacher, and I said I felt like I'd been a teacher of [her field] all my life. I always loved it and I always loved trying to ask a question or to do something that would make it clear to someone.

Undergraduate Experiences as Catalysts

Three College D participants were drawn into science careers through

experiences they had during their undergraduate programs. One participant

knew he was going to graduate school about halfway through his undergraduate

program because "the subject and school and learning were interesting."

Another participant recalled getting "the research bug" during his junior

year when, as a student worker in a laboratory, he "got to watch a faculty

member in action". He wrote a senior paper from his experience and then a master's thesis. But his love for science actually began much earlier:

> I've always been in love with biology. I remember collecting my first [insect] when I was 11 years old...basically what I feel like I'm doing is I'm getting paid for my hobby. I mean, it is really an ideal, very ideal situation.

The junior year was pivotal for another participant, who met a professor who was "a real scientist":

> [He] was just really top notch and was really heavily involved in research...I guess that's what I was interested in, getting somewhere beyond knowledge that was in books and that was already known and I wanted to be an explorer to get beyond that stuff...and this guy really communicated that. He was an extremely demanding professor...so I felt like I met the first person who was really at the frontier and he just really turned me on...

Having experienced a kind of intellectual awakening, this participant began "really digging into" the professor's field of study and he became socialized into the scientific culture:

> ...There was a whole group of students whose lives came to revolve around the science building and we had a handful of professors that really made us feel at home there and went out on field trips with us and we did a lot of things outside of formal classrooms.

While still an undergraduate, he co-authored several publications, and he received a prestigious fellowship for graduate study. Before graduation, his undergraduate mentor took him and several other students to a major university and introduced them to various professors:

> A couple of them [professors] that I liked, that sounded interesting, he would say, "Nope. Not good enough." And he would nix them...So I got shielded from all these mistakes that a lot of other graduate students make coming into graduate school, getting tied up with bad people. He was really a father in some ways to me and steered me to a person who was new in the department but was very good...Anyway, when I hit graduate

school, I was already experienced beyond what most of the graduate students were because I'd essentially done a master's degree as an undergraduate...I ended up in [his field] because this guy [his mentor] had gotten his degree in [this field].

Career Growth as a Motivating Force

Only two of the ten College D participants tried other career paths before deciding to join the professoriate. Both of them were high school teachers.

One participant became "disenchanted with high school" when he and the principal did not agree on educational approaches. He decided to pursue a doctoral degree in order to position himself for another kind of job in the public school system:

> ...but I never got back [to the public schools]. After I started teaching as a graduate student at the college level, it just worked out that way...I decided I was going to...look for a university job...Of course, I had been teaching, and I liked the research aspect that goes on at the university, so it [being a faculty member] was sort of like the perfect job...like baseball players say, "I get paid for what I like to do".

A female College D participant taught high school for one year and felt the need to go to graduate school to keep up with the dramatic changes occurring in her academic field:

> ...I felt, even in that first year of teaching, that my undergraduate [name of field] education was absolutely obsolete...So I applied to go to graduate school to do a master's degree the very next year and was accepted.

Intending to return to her high school teaching job after finishing the master's degree in a year, she decided instead to go on for a doctorate when several professors offered encouragement and financial support:

I was incredibly lucky. I guess I have been throughout my entire career. I was a kid off the farm and I didn't have any way of knowing very much about the world or what people did in the world and I certainly didn't have any reason to believe that I had any particular talents in [her field] or in anything else. And there were people all along the way that believed in me enough to encourage me to go on...

Legacies of Mentors

The strong influence of major professors as role models and mentors was mentioned by three College D participants.

One participant gained valuable insights about enacting the faculty role by doing his doctoral work with the person in his field who was "probably the best known in the United States":

...[He] was very active nationally and internationally, so I certainly saw the value of research and new knowledge to establishing one's position. He was also very outward oriented...He was in Washington every other week and served on a whole variety of panels. A lot of people from industry came by the lab and talked about various ideas with him, and sometimes with the students. The outreach role was very apparent. He was certainly very committed to doing research for the public value worldwide and is still a strong promoter of doing research for a reason, and that's for solving public problems.

Another College D participant said her doctoral adviser's example and encouragement were instrumental in her choice of an academic career:

I think you just need someone in front of you all the time who's doing a good job and who's happy. And my adviser was a very good role model for me. He always seemed to enjoy what he was doing, despite all the proposal writing and paper writing and teaching and managing a research group. He always had a good outlook. When it came time to think about interviewing the year before I received my degree, I thought about academic jobs and industrial jobs and I just saw in front of me the profession that I've always sort of been involved in, which was academics. I was a student for so many years, [and] I enjoyed the university

atmosphere and there was no question in my mind at that point. I didn't interview industry or any other positions for that matter.

Having gotten married just before entering graduate school and becoming

a father a year later, one College D participant came close to quitting school

because of the financial strain. Instead, he skipped the master's degree and

went for the Ph.D., and was well-supported by his major professor:

> My adviser was great. I wasn't working on any kind of team. I was kind of doing my project in isolation from other people. I felt like he was on my team...I worked really hard in graduate school...I had a demanding major professor...Research was the most important thing you do and you were expected to do a lot of it. He had a slavedriving major professor who was a National Academy of Sciences member and a really big time scientist who came in every night to see that his graduate students were in, and my major professor came in half the nights to see that his graduate students were in, so he had it tempered somewhat.

Before becoming a faculty member, this participant had a postdoctoral fellowship

experience with a "big league scientist" who also had a major impact on his future

career:

> He's a lot like I am in terms of he does science because he finds it fun...and I spent two and a half years there, which were really excellent years. He was the best person in that field in the world. We had people troopin' in from all over the world so it was really, truly a big league science experience...and I considered it a real privilege to work with someone who was of that caliber and every day was fun...He would sit down with us at least one hour a day just to talk...He never got mad...[His name] way of working was he worked 8 to 5 and when he worked, he worked, and when he played, he played, and his motto was, "Let's work smart, not necessarily as hard as we can, but let's work as smart as we can. If you work smart there's more time to play." And that's something that rubbed off on me...It was almost reluctantly that I started applying for [faculty] jobs.

Collective Influence of Faculty Members

Several College D participants recalled the positive influence of a number of faculty members, either in helping them decide to enter Ph.D. programs or in guiding them through the graduate school experience.

One participant named several faculty members who offered encouragement after he did well in their classes. The most influential of these he calls "one of my real mentors" for helping him decide to pursue a doctoral degree. This participant had been a high school teacher and found he enjoyed college level teaching as a graduate assistant:

> I decided I was going to get a doctorate degree and look for a university job...Of course, I had been teaching and I liked the research aspect that goes on at a university, so it was sort of like the perfect job...Like baseball players say, "I get paid for [doing] what I like to do."

One participant talked about the "excellent faculty" in his doctoral program and the impressive example they set "both from the standpoint of their research and the way they presented it in teaching, the excitement of [name of discipline]".

A female participant said she was "saved" by two faculty members when, halfway through the doctoral program, her major professor died:

> ...and they did a better job of socializing me to what it means to be a faculty member...When I would go to scientific meetings, they were really good about introducing me to everybody they knew, and dragging me to committee meetings, just as an observer, to see what kinds of things they did...The two that I finished with were much better in terms of mentors, in terms of the discipline and making sure that I had a better understanding of all the politics and all the other things of which I was probably pretty naive.

Another College D female participant said several professors were

mentors who "helped me understand what being a faculty member was like":

> My major professor and [she names two other faculty members in her
> discipline] took a real particular interest in me...and made opportunities for
> me to do things that increased my confidence in myself as a human
> being...My major professor was in [another country] for the last year that I
> was in graduate school...He taught the graduate courses in [name of
> subject]...and, for the year that he was away, I taught that [course]
> sequence so I actually, while I was...still a graduate student, actually
> taught other graduate students...

She recalled having "a tremendous amount of interaction" with the faculty

members in her graduate program:

> ...There was never more than three hours of my time spent in the...building
> that passed without one of my professors giving what I would call, and I
> don't know how to describe this but, sort of picking on me...you know,
> coming to check to see if I was getting anywhere on a certain problem and
> sort of teasing me and stimulating me to pursue it, to persevere, to try
> harder, and asking me a question that might get me off of dead center,
> which I thought was wonderful...It was a terrific environment...It was clear
> that the faculty really cared about our development and it was also pretty
> clear that they weren't going to let us fall between the cracks unless we
> chose not to work.

Another graduate school experience that assisted this participant in understand-

ing the faculty role was the requirement that all doctoral students give presenta-

tions at three stages of their research -- the research idea, the formal proposal,

and the initial data analysis:

> That was part of the process of helping us come to understand how faculty
> work with graduate students, what it means to do research, and what it
> means to try to communicate your ideas to your colleagues.

Learning From Negative Experiences

A number of College D faculty members cited negative experiences prior to or during graduate school that helped clarify their values and beliefs by providing examples of what they didn't want to do or to become.

When one male participant's drive for research success conflicted with family needs, he and his wife "had a values talk":

> ...I decided at that point to temper my competitiveness, or my drive, and say it's not worth it to only try to excel academically and we had another talk when I finished [graduate school]. But...if you're going to be in the game and be successful in the game, you have to put out at a certain level and so what I told her is bear with me.

Another male participant completed a master's degree as an advanced ROTC student and spent two years of military service in a research laboratory. The stint convinced him "the military was not for me", and also caused him to rule out industry as a future career choice:

> I had the good fortune of being a contract officer...What that meant was that I worked with several industries on contracts...and found out how they work, and I think it was that period of time that convinced me that academia was where I wanted to be...I guess in my mind industry was too economically oriented and product oriented and I felt like I wouldn't have the freedom to do what I wanted to do.

He went on for a doctoral degree and, although he did not have an opportunity to teach then, he had taught for a year during the master's program and enjoyed the experience:

> We had our own class. We wrote our own exams and we had laboratory and recitation all built together, so we were responsible for some 20 students for a year...I enjoyed seeing students learn...I can always remember talking about [a subject area] and that is a difficult concept for

students to see. As soon as they saw it, then it was like a green light came on and that was kind of fun.

Another College D participant interviewed 13 industrial companies and had several job offers but became increasingly concerned "about the directed role of the research for a product goal" and uncomfortable with the thought of "not being able to do my own thing". His major professor told him about a faculty opening and he decided to apply for it:

> ...I liked the idea...about being able to do things independently. So, much to the surprise of my wife, I decided to become an academic.

Several participants talked about graduate school faculty members they considered to be poor role models. One participant assisted with lab sections of an introductory course taught by a particular faculty member:

> ...the guy who taught the course was not very good and I knew it. It was very embarrassing to me to have him teach a class that I was a part of when he was so lousy, and so there were times that I tried to gently challenge him ...I went up to him one day and said, "Isn't there more you could be giving us?"...In my graduate experience, I had some really good teachers too...My biochemistry teacher was extraordinary...He really understood what he was talking about. He was organized. He was very articulate..He was able to communicate...

Another male participant said his introduction to the competitiveness among the all-male faculty at his chosen graduate school was "a real eye-opener for me":

> The department was staffed by young alpha males -- these kind of strutting, big time, "Got to get the grants, got to publish" kind of guys with a hard attitude. The orals and preliminary exams were really difficult...this is a highly competitive environment...But anyway, it is so interesting to talk to them now because...here are these same people who, at that time, were...what you would consider to be sort of American male macho types...roosters...and now when I talk to some of those guys, they say,

"Well, you know, our students aren't interested like you guys. Now they are interested in what's politically correct"...And they are having to deal with these changes. It is very funny...It would not be fair to say that any of those people were my role models, but they sure gave me pause for thought. Because there were definitely times then when I realized, wow, they take a hard and tough attitude about academia...they are not even hiding the undercurrent of competitiveness at all. They just let it come right to the surface...I think it just made me realize one strategy, made me think about what one strategy that one could adopt in a faculty position.

A female College D participant originally majored in physics but changed

academic fields after she "suffered plenty of sexism":

I moved on to biology mostly because of the sexism of my major physics professor, who told me, "Well, I can see that you could get a Ph.D. in physics and you're good enough to get a Ph.D. in physics. However, how will you feel when, having wasted all this time, you'll be changing the diapers of your children and washing pots and pans?"

She was encouraged by others to enter a new field of biology and, after

completing a master's degree, was offered a laboratory position at a university.

But she felt inferior to and distant from the male scientists with whom she worked:

...At the time, at least the conscious image that I have of myself is that I was just a grain of dust...I thought I didn't know how to think about science...And one of the men...kept telling me that I as not stupid, but that I was lazy and I thought so highly of him, I mean, he was God...The men I worked with didn't interact very much with me.

After interacting with doctoral students in the laboratory, she decided that

perhaps she was as good as they were and could get a Ph.D. She not only

completed a Ph.D., but landed a prestigious postdoctoral fellowship as well:

It was a very good lab...So, what I'm saying is that I just made tiny moves...I never thought I knew where it was that I was going...I made decisions in a very unconscious manner, not really knowing what it was I was doing, and telling myself constantly that it was something else that was going on...I think that I never dared to see myself going where I was for fear that something would strike me, somebody would strike me down if

I saw myself as too big a figure, or if I let it be known that I was seeing myself as too big a figure.

She related this lack of self-importance to being brought up in a culture with a strong sense of hierarchy and authority, in which "the books know what's right and not you." And, during the doctoral fellowship, she again found herself working with a dominant man who did not encourage her. She talked with difficulty about the seven-year postdoctoral experience, which evolved into a "very creative relationship" and also an intimate and emotionally complex one with major clashes and unresolved conflict.

Learning to Be Autonomous

This same participant, having given of herself for the sake of a man's career, said she "saw the light" and decided to move on:

> ...and finally, I decided to look for a job and, in fact, I took forever to accept one because I was still so unbelievably scared...The decision I made when I came to MSU was not to be...it was nothing to do with being a faculty member. It had to do with the independence, finally being my own agent. I feel that I never really chose to be a faculty member.

In contrast, another female College D participant seemed to have a much stronger sense of herself. She refused to conform to the cultural norms of her graduate department:

> I wasn't really interested in serving on any committees in the department as a graduate student. I didn't belong to the graduate student organization. I flatly refused to attend coffee at 10:00 every morning...It was part of what you were expected to do...The chair actually called me into his office at one point and stressed very strongly it would be a good idea if I came to coffee in the mornings, because we have these interesting discussions...I just didn't have time...My major professor used to attend all the time, but it was just too boring for me.

Two male College D participants had major professors who were fairly nondirective and allowed them to learned aspects of the faculty role largely on their own initiative. The participant who was turned off by the "alpha males" in his doctoral program chose an adviser who was supportive but left him alone to discover his own professional identity:

> He was a hands off, you know, here are your resources, here is your laboratory setting...you use your initiative to craft a program and I will be there for you...More of a sink or swim attitude, which sort of reinforced this whole competitiveness thing...I think he was an accomplished researcher in this specific area and well recognized... that's why I chose to go to work for him because, in fact, I got advice from people who said, "Go to the best place you can and work with the best person that you can and that will rub off on you, too." So that's what I did. He had good facilities and good support and a lot of fresh ideas. He was always thinking and doing new things.

Another College D participant commented, paradoxically, about the "strong influence" of a Ph.D. mentor who allowed him to work independently:

> He didn't run a lab like a machine. He gave you free reign to solve problems. That suited me. I liked the freedom. I work much harder if I'm doing what I want to do, in contrast to being told what to do.

Following completion of the doctorate, this participant got a postdoctoral position with a well-known person who had 10 or 12 other postdocs. He recalled, "We didn't seem to be competing with each other. Perhaps everyone had an idea of where they wanted to go."

College E

College E is made up of disciplines in engineering. Most of the eight College E faculty members who participated in the study made the decision to

become faculty members at the end of their graduate and post-graduate training, as they weighed the pros and cons of various options in academia, government and industry. Only one participant worked in industry before deciding to join the professoriate. All College E participants talked about people who were influential in their educational advancement or their academic career.

College E participants had varied opportunities during and outside of graduate school to enact dimensions of the faculty role: 1 taught undergraduate courses at a nearby university while working on a master's degree; 1 was a teaching assistant and became a temporary instructor; 1 was an instructor at several junior colleges and, in graduate school, became an instructor and managed a research grant; 3 were teaching assistants with partial responsibility for courses, and one of them later developed and taught a graduate course as a postdoctoral fellow; 1 was a research assistant and did no teaching; and 1 did not mention having assistantships or other appointments during graduate school.

Parental Support

Two College E participants mentioned their parents' strong encouragement of academic achievement. One participant talked about his parents' support of their children's education and how it affected him:

> They woke us up two hours before an exam and they would bring us food so we would have nourishment to study, I mean, all the extra things, and if you're a decent human being, you don't want to let them down. If you're able to perform and do well, you know, you do it. At some point it's hard to tell why you're doing it. You like to do it. There is success involved. Who doesn't like success?

Another man's high school educated parents told him he was going to college and saved money for his college education from the time he was seven years old.

High School Influences

During high school, this same participant worked for a man who helped him choose a professional field:

> I was a clerk in a TV repair shop and [one day] my boss asked me what I was doing. I said I was filling out an application for college and didn't know what [field] I was going into. My boss filled in [name of engineering field] on the form. He liked me so well, he put me in his will.

Throughout the interview, this participant emphasized that he has always been ready to grab opportunities that presented themselves.

Another College E participant decided during high school to pursue a career in engineering. At that time she had no thought about becoming a faculty member and had not yet selected a field of engineering:

> I liked math -- I loved math -- and I had no idea what an engineer was, but that sounded like a good thing to do because I knew they used math and that's the only thing I knew about engineering.

None of the other College E participants talked about making pivotal career decisions or having other experiences during high school that affected their career paths.

Undergraduate Experiences as Catalysts

Two College E participants were profoundly affected by individuals whom they encountered as undergraduates.

One participant was the leader of the student chapter of a national professional organization whose president happened to be the president of a university near the participant's undergraduate institution. He recalled:

> So I got to know him [the president] through the professional society and, when I finished my [bachelor's] degree, one of their faculty had resigned, kind of at the last minute, and he needed somebody to teach, especially the freshmen and sophomore level courses...and he knew about me and I knew of him and he just called to ask if I would be willing to do that on a temporary basis...So I started teaching after my bachelor's degree. And, with a teaching schedule, it was also easy to take courses. So I decided if I was going to remain in teaching...I needed advanced degrees. So I took the course work for my master's degree.

Another College E participant decided as an undergraduate that he liked universities and wanted to become a college professor, largely because of an exceptional role model he encountered in the junior year:

> I really admired the guy...He had a nice relationship with students. He was quite famous. He had done some pioneering work...He was really well-known and he was a good teacher and the class was fun...I looked at him and I kind of looked at his relationship with students and looked at his work and I thought, that's what I wanted to do...I felt that here was somebody that was doing something that was making a difference. It was being published. People were using it...And it wasn't just that because, if it was just that, then I would have gone to a research institute. But it was the fact that he was sharing it with us and that, in turn, all of us could go out and kind of be an extension of him...There is this kind of double victory in accomplishing something and also teaching someone else to accomplish things...You know, when I went into engineering, I was planning on designing bumpers or something...That's what I thought I was going to do for a living. And to really see that I could go on to graduate school and could learn how to be creative and to do things that had never been done was very exciting.

Career Growth as a Motivating Force

Although many College E participants considered jobs in industry at the time they completed their Ph.D. programs, only one actually worked in industry before becoming a faculty member. And, after experiencing the industrial environment for three years, he was ready to try academia:

> The thing with [industry] was the relative inflexibility about time. I was expected to be there certain times whether I was thinking productively or not, and they didn't seem to care much what I did outside of those times. And moreover, in industry, I tended to work always on other people's projects. I'd get a good idea, but somebody else didn't like that idea. So I could never really develop my own ideas. I certainly envisioned universities to be different...I envisioned the flexible time and ability to work on projects that I wanted to, and that turned out to be true.

This participant's understanding of academia was based on his graduate school experiences and proved to be incomplete once he actually became a faculty member:

> I didn't understand the faculty role at all...As a graduate student you have no idea what's going on. In fact, you probably have a lot of misconceptions...I saw professors coming and going, but I never saw them in faculty meetings or I never saw them in confrontational roles with administrators...It was sort of an ideal situation...I always viewed profs as interacting with people [students] like myself...There are so many people with major problems — academic problems, personal problems — it can bog you down.

Legacies of Mentors

Unlike other colleges, all but one of the College E participants said there was no particular individual who influenced their decisions to become faculty members, or mentored them into their first academic positions. However, one

participant was very conscious of the ways in which his mentor had shaped his own approach to the faculty role:

> ...students tend to behave very much like their advisers because that's where they learn...I don't think a lot of people realize just how much their adviser influences them...My adviser loved to teach, even though he was a really good researcher...and he used to write out all of his notes very, very carefully. He never winged it. Every single lecture was written...and he would hand it out to the students...I write out every single word and I hand it out to the students...And the way I write on the board is very similar, and it is because I thought he was a good teacher. I learned from him. I appreciated his style and I adopted it as my style.

This participant discussed the difficulty he had in grasping the idea of original research, and recalled a remark his graduate adviser made that moved him off dead center, whether intentionally or unintentionally:

> And at one point, he actually told me...to just get a master's degree and go get a job. He said, "I think you will be a good engineer, but you are not going to be a researcher"...What it did was, it kind of made me mad, because I hadn't failed before...I wasn't going to quit. I kept working at it...After that, things just started flowing...[Now] I just kind of do what my adviser did with me, which is to try to be a colleague to the student as best you can and not try to tell him what to do. At the same time, not just leave him out there flapping around either. It is kind of tough. But that's the fun of research, is turning a student into a colleague.

Collective Influence of Faculty Members

College E participants were motivated to achieve academically and, after experiencing success in educational environments over the years, many decided to continue pursuing the academic life as faculty members. As has already been demonstrated, many encountered faculty members and administrators who were instrumental in their career advancement.

The College E participant who started teaching after completing his bachelor's degree said that, in retrospect, he never really considered career options other than becoming a faculty member. At the time he was completing a master's degree, his brother was a doctoral student at another university and told him about an opening there for a research associate:

> At that time, I hadn't finished my master's thesis yet, but I'd finished my course work and had the teaching experience and...decided that a university position was attractive, or I enjoyed it. I liked the teaching and so I decided I would pursue a Ph.D...I think it was an opportunity to have some exposure to research activities and I enjoyed research as I enjoyed teaching. And from there, I guess it is kind of a natural evolution to be a faculty member, doing what you like to do.

Another College E participant became involved in an interesting research project while getting his master's degree and, when the professor with whom he was working offered to extend his assistantship through a Ph.D. program, he continued his studies:

> It was just comfortable to stay in graduate school, so I just stayed on and did my Ph.D. and then the job market was pretty bad in [the year] I was looking for a job. Industrial jobs were difficult to get...I still probably would have preferred to work at [name of company] but, again, the industrial market being pretty bad, I joined the faculty.

After interviewing for research positions at about five companies during his last year of graduate school, another College E participant was encouraged by several faculty members to interview for a few faculty positions:

> I guess probably out of ignorance I just hadn't made it [the professoriate] an objective or something...I didn't really have preconceived notions of what it would be to be a faculty member and, in our profession, a large majority of Ph.D.s go to industry...Well, it turns out that as I was getting out [of graduate school] was when the recession...hit and I had two job offers

in industry and then job offers at two universities and, just looking at the possibilities and whatever, I decided to come here.

As part of his doctoral program, this participant had been required to teach and found it gratifying:

> ...so I taught a couple of times and, you know, I enjoyed the interaction with the students and I think I got along pretty well with them and then, the second to the last semester I was there, I had about half responsibility for a course, along with my major professor, so I lectured about half of the time, prepared all of the homework and part of the exams and did a lot of the grading...and I guess at that point, kind of upon having my eyes opened...I said, "Gee, now I'm interested in it [a faculty position]".

Another College E participant had a job offer in industry and one in a government agency at the time he completed a master's degree, but he wasn't interested in either of them:

> I liked the academic environment, so I decided that I would go on for my Ph.D. and come to MSU...If you wanted to get into the academic area, even back then, it was pretty essential that you have a Ph.D...I guess at that point I was interested in research activities, discovering new things, and I was also, although I hadn't had a lot of experience, I was interested in doing some teaching.

He was given a teaching assistantship at MSU and, at the time he completed the doctorate, was able to move into a faculty position in the same department:

> I worked [as a graduate student] with a faculty member to help him with his teaching and it just was a coincidence that that faculty member retired at the same time that I finished my Ph.D. and so, it was kind of like I was predestined to be here in this [faculty] position...I never strongly considered going anywhere else because the department head had discussed this [taking over for the retiring professor] with me ahead of time...That was back in the days when the department head made the decisions...so, in my case, this position that I'm I now was never advertised at all. I just sort of moved into it.

Learning From Negative Experiences

Another participant also progressed from being a doctoral student to a faculty member in her graduate department. However, the story of her path to the professoriate had more plot twists and turns than the tales told by male colleagues. She began by saying, "I literally had no guidance as far as career path, so it was rather a rocky road to this point".

As an undergraduate, she majored in an area of engineering with the intention of working for a company. She liked school but recalled that, at the end of her senior year:

> ...I sort of became paranoid that I didn't really know anything and engineering is a very intense program -- very, very intense -- and you don't really have time to put all these pieces together so, at that point, one of the faculty had an assistantship for a master's and so I decided to get a master's and I literally wrote out the application on the last day that they were due in the Grad School office and I decided to do this in May and I started in June.

The decision was motivated in part by difficulties she had encountered as a woman interviewing for engineering positions:

> I had a very hard time interviewing for jobs. I don't think I was taken too seriously at that point...I think largely because I was the only woman in my class, in a class of 50, and I was very shy myself, so I'm sure it was a combination of me not coming across as a real go-getter, too.

While pursuing a master's degree, she worked for a consulting company but found that it was poorly managed. She left after completing the degree:

> I quit a year to the date that I started but I didn't have a job and this was recession time...and I didn't know what I was going to do so I worked for the summer...where I went to school...for one of the faculty as research help type thing and I thought about going back to school and I'd been

looking all over the country for jobs and I couldn't find anything and so I thought, maybe I'll get a second master's in math and teach.

To find out if she liked teaching, she taught at two different junior colleges for about a year before deciding to return to school for a doctorate. She asked an MSU faculty member to recommend her for a doctoral program at another institution:

> ...I asked for a letter of recommendation from someone from MSU who was at [name of university] on sabbatical when I was getting my master's and so he said, "Fine, I'll send you a letter, but I wish I knew you were going back for a Ph.D. because I'd like you to come here."

After the doctoral program proved to be a poor fit with her professional interests, she transferred to MSU to work with the man who had served as a reference for her. A year later, he left MSU for a job in industry university.

Learning to Be Autonomous

At that point, this participant learned to become autonomous. She was appointed as an instructor and took charge of a grant project her adviser left behind:

> ...Officially, it [the project] was under somebody else, but I was the only one who knew what was going on so I did all the work on it and I wrote the report for the contract on it and then, when I was working in [another department], there were several proposals that I wrote under the name of my major professor. He basically signed it. So I was able to get probably a lot more experience than most people of writing papers and that sort of thing.

In addition, she taught two senior level classes on her own and was a teaching assistant for several laboratory sections in another engineering department. Her decision to become a faculty member was "sort of an evolving thing":

> The amount of freedom that you have...I think that's probably what I like the most about it. I decided I wouldn't be happy just teaching only. I probably could get by doing research only, but [in] the places that you do research only, it's dictated what you have to do. In a faculty position, you're pretty much your own boss...To some extent, you have things you have to get done...but you have only yourself to blame if things don't go right. And I like that a lot. I like the flexibility that you have. A university campus is a really nice place to work.

The freedom within academia to pursue one's own scholarly interests persuaded another College E participant to join the professoriate. After completing doctoral and postdoctoral studies in a highly research oriented environment, this participant weighed the various options within academia, industry and government:

> Each of them has a good thing and a bad thing about them, and the thing that I liked most about academia was the kind of freedom that you have to select a project that you want to work in...So it wasn't really a decision that I really was itching to teach and I wanted to go to a university. I knew that I didn't mind teaching...Now, I didn't have firsthand exposure to the nonacademic life, so it's not a fair comparison probably because I don't know what it would have been like but...I was very concerned about going to a nonacademic environment. Would I be happy if somebody said, "You have two days to work on this problem and then you have to work very fast and you can't really ever solve any problems"...I know now, because I have colleagues who work [in nonacademic settings] that their research is a very different style. We have time in academia to spend on the problems. They need quick answers a lot of times.

Section 2: The Process of Entry and Induction Into the Professoriate

Upon completion of advanced degree requirements, prospective faculty members begin the process of searching for, selecting and entering a first faculty position. During this process, their view of the faculty role is shaped by other

experiences and individuals they encounter on the pathway into the
p rofessoriate.

This section discusses ways in which the 41 participants obtained their
first faculty positions, how they came to understand what was expected of them in
the role, and how they determined whether they were meeting those
expectations.

Thirty-four of the 41 participants -- or 83 percent -- entered their first full-
time tenure stream faculty positions at Multidimensional State University (MSU),
the institution in which the study is based. Discussions of the circumstances
under which they entered the professoriate clearly demonstrate the effects of
boom and bust cycles on academic employment opportunities. While some
participants observed that "universities were expanding quite dramatically" at the
time they were hired in the early '60s, others hired in the late '70s were acutely
aware that "the gates [of academia were] starting to close". As prospective
faculty members, many participants assessed the degree of fit between their
professional interests and their first faculty positions in the context of other
positions available at the time of employment.

Several senior male faculty members entered the professoriate at a time
when department heads hired whomever they wanted, with or without
departmental faculty approval and without being required to conduct national
searches, adhere to affirmative action guidelines or comply with other regulations.

Some senior faculty members spoke with regret of career decisions made with little regard for the impacts on family members. In contrast, junior faculty discussed challenges they faced as part of dual career couples in the current academic market, or as parents who wanted to spend time with family. A number of participants encountered prejudice, discrimination and disadvantage related to their race, religion, and gender.

Many were well-mentored during graduate and post-graduate studies and entered the faculty role with a clear sense of what they thought was expected of them. Their academic values and the ways in which they shaped their roles often were patterned after mentors or a composite of faculty role models.

Once in the faculty role, some participants had difficulty determining whether they were meeting expectations. They were uncomfortable with what they perceived to be the expectation on the part of their academic departments that they would be self-directed and operate autonomously in shaping a role for themselves. While they valued academic freedom and had their own professional performance standards to which they held themselves accountable, some participants wanted more specific guidance and direction than they received from either the departments or the universities about promotion and tenure requirements, grant proposal writing, and other information about "how to play the game", as one said.

In this section, participant responses are reported by college under the following topic headings:

1. Finding a Job Through Mentors
2. Recruited by Departments
3. Individual Initiatives
4. Learning to Assess Expectations
5. Feedback from Chairpersons and Colleagues
6. Student Assessments
7. Learning From Negative Experiences

The first three topics pertain to ways in which participants found their first

full-time faculty positions. The last four topics relate to ways in which participants

came to understand role expectations as new faculty members.

College A

College A is a mixture of disciplines in the social, biological, and physical

sciences and engineering. Of the 11 faculty members from this college who

participated in the study, two obtained their first full-time faculty positions through

the influence of mentors; four were recruited by departments; and five went

through fairly standard processes of applying for open faculty positions.

Finding a Job Through Mentors

Two College A participants found out about their faculty positions through

mentors. One participant's major professor attended a professional meeting and

talked with a colleague whose department had an open faculty position. The

position requirements closely matched the participant's experience and interest:

> [The position] was very similar to what I had trained for and I remember
> saying that, when the opportunity came to apply, I couldn't have been
> much better matched in terms of my desires and background to the facets
> of this position.

Although the job was located a long way from where the participant had grown up and gone to school, he was excited by the professional opportunity and felt it was the right position for him.

A more difficult career choice was faced by another participant who, at the time he completed his doctorate, was offered two different positions by mentors at the same institution. Two mentors wanted him to take a district extension position, and the head of the department in which he had earned his master's degree wanted him for a faculty position. It was a choice between doing extension work, which he had experienced in graduate school and really loved, and using his doctorate in a faculty position with a 100 percent research assignment and responsibility for one course. He decided to take the faculty position and, a year later, negotiated an assignment that more closely fit his interests in outreach:

> I said to [the department chair]...I would really like to emphasize extension and he said, "Well, the funding is such that it would be better to have you research the first year and we'll see after that"...[He] said you will go further professionally if you concentrate on your research, particularly early in your career and, although in general that's true in [name of] profession, I don't think that's the way it ought to be...A year later I said to him, "I really like extension. What I really like is teaching and working with industry clientele [and] extension agents...and I really would like to go on extension." So the following year then I went on 50 percent extension.

Recruited by the Department

Four College A participants were recruited for their expertise after completing a doctorate. One participant had interviewed for and turned down several job offers in his field and didn't get the one he wanted. However, the

head of an expanding program outside of the participant's graduate department

offered him a six-month position:

> [The participant's academic area] was one that wasn't covered [in the
> expanding program]. There was money from the Provost for a six-month
> appointment...I thought it was a short-term opportunity to contribute a little
> and learn a lot while I was looking for a job...[It] gave me some time. Also,
> I was learning a new field which I didn't know hardly anything about. I had
> had a couple of courses in [this field] but I really didn't know anything
> about it...I didn't even comprehend at that time how much interaction there
> potentially was between the two different disciplines.

The temporary position evolved into a full-time tenure stream position which he

has held for some 14 years.

Another participant was recruited by his graduate department into an

academic specialist position after he completed a master's degree. He took over

the course load of his major professor, who went on a sabbatical. After the

professor returned, the participant continued to teach the courses and worked on

a doctoral program in another department:

> I survived on year-to-year appointments, which were hard to get...You had
> to work hard. I made about a third of my salary in grants...So then, when a
> [faculty] position came open, it's my understanding that there were around
> 30 applicants. Three applicants got interviewed and the voting was
> substantially in my favor.

At the same time, this participant had an offer in another state for what he

called "my dream job", but no appropriate position could be found for his wife:

> There's no question we're a two wage earner family and employment is a
> family decision, not an individual decision, so that made it very difficult to
> accept that position, even though I was chosen, I was offered good money
> -- much more than I made here.

In contrast, a more senior faculty member recalled making the decision to leave a job in the federal government for a university position with little input from his family:

> First of all, I have to admit that, at that day and age, there wasn't a lot of reflecting on what's going to be better for the family and, among the regrets of life is that, for some reason, I never got smarter about that side of things earlier...It just seemed to me that I really needed to reinvest in myself and come up to speed academically...I went out and bought a home sight unseen for my wife...Unfortunately, it was on a small lake and it's a beautiful setting north of [name of city], and it terrorized her for the two years we were there. We almost lost one son in a drainage ditch, too, so she had reason to be terrorized...But she was always supportive of me doing things.

This participant said the three individuals who recruited him to their university were "aggressive". They invited him to come to campus first as a consultant and, he recalled, "...once you contribute your ideas and they're willing to take them, you're almost hooked".

Another College A participant was recruited away from a federal government research position to a university faculty position that offered opportunities to teach, which he had enjoyed in graduate school, and to be involved in extension, "which I really had known nothing about in the past". This participant was not aware of other things new faculty members are asked to do:

> I remember being given all the housekeeping details...everything from [judging] high school speaking kinds of things to representing the department on Saturdays at some vocational program to running all these little chores...But, I didn't worry about that. I mean, you do it and after awhile you work your way out of those...About once every three weeks, four weeks, I had to make a radio presentation and it really frightened me and I was absolutely petrified of doing it. It was one of those little chores that...were all part of the land grant factor and its responsibility.

These early faculty experiences instilled in him a kind of outreach ethos that he finds missing in younger faculty "who are becoming much more narrow in their focus". He laments that all faculty members no longer share in these responsibilities:

> I feel that, as a land grant faculty member, that the strength of this institution is largely reflected in the ability of its faculty to be responsive to the questions and needs of society. We have faculty members in our department who shudder at the thought of thinking of being asked a question on the telephone about something. I mean, this telephone rings here a lot...They don't have this service component that I think is essential for a land grant faculty to have. I really feel strong about that...

Individual Initiatives

Five College A participants went through fairly standard processes of applying for faculty positions advertised through their professional associations, but the job market was different for each of them.

Two participants each interviewed for and were offered three academic positions. One participant selected the university with the best research facilities, even though the position had a heavy teaching load. The other participant said:

> I guess I selected MSU for positive and negative reasons...The positive reason was because it had a reputation as a strong...program and the negative being there were reasons that I preferred not to attend [sic] the other two schools where I had job offers.

Another participant saw an MSU job advertisement and thought he should apply because the university was in his wife's home state. And his major professor had been an MSU faculty member, so "it only took two phone calls and

they knew what I was about." The MSU department in his field was ranked among the top five in the nation and he took the job when it was offered.

One College A participant left a tenured high school teaching job to take a lower paying, temporary nine-month faculty appointment, the only one he could get at the time. The decision was especially difficult because he had a family with three children:

> When I think back on it, I wonder if I was nuts because it was quite a risk. [L.W.: Why did you do it?] I just had to make a commitment. If I was going to try this other career, I had to break into it. It was a time when university positions were closing down...As it turned out, [the university] was just being conservative and they actually offered me an extension of the contract on a year-to-year basis. I probably could be there yet today if I wanted to be. But, while I was there, this position opened up...

Another participant had been in a postdoctoral position for less than a year at the time a faculty position was advertised that was "exactly what I wanted, and I felt like I couldn't not apply". Although she felt her background was perfect, she was fourth on the list of candidates. The first two interviewees washed out, the third turned down the job offer, and she was selected for the position.

Learning to Assess Expectations

Faculty members in College A have appointments with percentages of their time formally assigned, on the basis of funding sources, to teaching, research and/or extension (public service). College A participants came to know what was expected of them in their new faculty positions and whether they were meeting expectations through feedback from department chairs and colleagues, from peers at other institutions, and from students.

Although some expectations about the mix of activities are inherent in College A faculty appointments, individuals have considerable latitude in shaping roles for themselves. A number of participants in this college talked about weighing what they knew about departmental expectations against their own standards.

After trying to interpret rather vague departmental performance guidelines, one College A participant came to realize that he was expected to be autonomous and establish his own goals:

> This department, I think, had some of the philosophy that we are going to hire a head and...point them and say, "North is your region, your area, your responsibility. Now you determine what you want to do...You look at the road maps. We are not concerned too much about...whatever highway you take. Rather, we want you to get there. We want you to do the job, and you are responsible for how well you do it"...And that's an oversimplification, but...the burden really came back to me. How can I justify to myself that I am doing something that is worthy of support and continuation of effort? And I have liked that philosophy. So I became my own goal setter...there was a tremendous amount of freedom in this department, I think in this university, but there is also a tremendous responsibility that is imposed by yourself on yourself to achieve and to accomplish...And if you are a person that can't be self-starting and can't set your own goals and can't evaluate and regulate your own time, then you are going to fall through the cracks real quickly.

He was able to "hit the ground running" because he came into the faculty position from a federal government research position and, he said, "...I brought a lot of stuff with me. I initiated a lot of research that I kept going on for the next few years."

This sense of being expected to be a self-starter was stated in similar words by another College A participant:

> ...my perception was that a faculty member who had a Ph.D. should be a self-starting individual, establish a research program, gathering the information, and teaching a class. At no time did my department chairman say that you should be in class...At least my perception was that expectations of the job [were that it] be done properly and be done right and just go and do it.

This participant had joined one of the top ranked departments in his field in the nation and admittedly felt "intimidated by these old professors who had these strong reputations". He had an internal need to work "twice as hard and twice as much" to prove to himself and to them that he was a peer.

Several others sensed that, having received a doctorate, they were expected to be sufficiently prepared for a faculty position and they took on the faculty role with little doubt about what they wanted to do. One participant who entered a position with nearly total responsibility for research said:

> So, I came in with the expectation that I was supposed to establish a research program and bring the funds to do it and publish...What really counts is your research, and you have expectations about what makes a good project or doesn't make a good project, what it's going to take to accomplish that.

Another College A participant had an appointment with 50 percent responsibility for teaching and 50 percent for research:

> I more or less picked up the responsibilities that [name of person] had, so I knew what the teaching responsibilities were and so that was relatively easy to fit into that mold. The research was very much of my own doing and I just developed an independent program and it was just following along interests of mine and I was successful in attracting funds to be able to support the program.

Another participant called the role of faculty member "an amazing appointment" in which "you almost get to write your own ticket as to what you

want to do, as long as you are good at it". Although he paid attention to feedback

from off-campus clientele groups and from students, he claimed to never worry

about receiving tenure:

> I never worried about a job and I never worried that I had to stay here or
> that they would unemploy [sic] me. I did what I thought was useful and
> what I was getting positive feedback [for doing]...And if I spend my time
> trying to mimic what other people think I ought to do, I will not be as
> effective as if I do what I know my best is...I did not look over my shoulder
> all the time to second guess the thing...And when they decided they liked
> my skills and they wanted to keep me, I said, "Fine, then I'll stay." But I
> considered that as much my choice as their choice.

But one College A participant was more troubled by the prevailing

presumption within academia of competency in all dimensions of the faculty role

among doctoral degree holders:

> ...the assumption is made in this department, and I'm going to bet
> throughout the university, that if someone has a Ph.D., they automatically
> know what to do when they come to the university...what your
> responsibilities and liabilities and all that stuff are and, quite frankly, I don't
> know how I came up with that knowledge. I know that there were many
> surprises along the way...I had a few problems with graduate students
> because I didn't make some guidelines clear at the beginning...I and my
> major professor got along very well and things just kind of happened, but
> he never sat down and had these discussions with me...I guess I assumed
> the world was that way...I guess it is surprising to me that the university
> functions as well as it does...I didn't realize what was going on for two or
> three years and I guess at one point I just suddenly realized the reason I'm
> walking around confused all the time is that, how you operate here is a
> secret and you have to join the club to figure [it] out...Everybody is busy.
> Nobody has the responsibility to orient new faculty...New faculty come in
> and sink or swim based on probably luck part of the time and persistence
> part of the time.

Feedback from Chairpersons and Colleagues

A number of College A participants commented about the extent to which they received advice and assistance as new faculty members from department chairpersons and colleagues.

One participant recalled receiving very little direct feedback about his performance, which he interpreted as a positive sign:

> About the only thing that I could really see is that I never really was criticized by anybody or called on the carpet for anything...I was given raises very year and I think that was pretty much commensurate with performance. That's probably the best indicator.

Another College A participant recalled that, when he asked the right questions, his department chair was very helpful. But most of the time he assumed he wasn't meeting expectations and had to continually prove himself:

> I always assumed that I was not there yet and I needed to work harder. And I suspect that my family has paid a tremendous price for that. I have a daughter who has some problems, and part of that is that, when I came here, I really wasn't part of that family very much...And I would say probably for the first six to eight years that I was here, I still felt like a guest and like I still had to prove myself...until finally I'd made professor and I thought, well I must be there now.

His insecurities stemmed, in part, from being an applied social scientist in a department of "people who consider themselves to be hard scientists". He felt the need to gain recognition for the kind of contribution he could make to the department.

Another College A participant expressed a similar frustration about entering a faculty position with primary responsibility for applying knowledge by working with clientele groups rather than conducting original research. It took ten

years for him to feel as though he was satisfying his own expectations and those

of colleagues:

> I got a rather slow start professionally. I was somewhat frustrated by the
> visibility factor...I didn't have a separate [research] project that was mine.
> You can get lost in the woodwork in that kind of position, and my salary
> and promotion showed it. I was ultimately promoted throughout the ranks,
> but it didn't come as fast as I would have liked...You get visibility fastest in
> this area of science – almost any area of science -- first by research. I had
> no research responsibility.

> Still another participant in College A said he "paid the professional price" in

terms of salary increases and promotions by listening to mentors in extension

who told him not to emphasize writing. Defining an appropriate role for himself

continues to be an issue for this tenured professor:

> So one of my real challenges is to find some kind of a mix that will
> work...It's always a balancing act, of which activity to use...in the more
> recent years, I've tried to write more things -- things that are useful for the
> extension clientele rather than just...the articles that are supposed to be
> academic.

One participant felt the two department chairpersons he has worked with

have been "very objectives oriented" rather than being flexible enough to take

advantage of opportunities. He said performance expectations were unclear,

unrealistic and "weren't well thought out":

> Everybody must have goals above and beyond their required goals.
> Those required goals aren't real well enumerated, except you know what
> they are. You'll publish, you'll do extension, you'll do all this stuff...Our
> tenure criteria are vague...There are different strategies [for allocating
> time] but it's not clear which is preferred.

His department has assigned a mentoring committee to each untenured faculty

member, including himself. The committee of three senior faculty members

provides him with guidance and "a little buffer to the chair".

Another untenured participant in College A has a three-member mentoring

committee with whom she meets about once a year:

> ...and part of their responsibility is...just to make sure you are aware of
> what is going on and also to be able to represent you to the faculty at
> large. When conversations or discussions come up, there is somebody
> who is supposed to know what [you] are doing, which is kind of a good
> feeling.

In addition, she meets with the department chairperson for an annual review and

gets a sense for "what would be considered on target", and she talks to

departmental colleagues about their professional accomplishments at the time

they were tenured.

Student Assessments

A few College A participants talked about the importance of positive

feedback from students to their self-assessments as new faculty members. One

said:

> The feedback I got from the students basically indicated to me whether
> their perception was that they were learning, whether I was doing a decent
> job...In general, students were unanimous in [name of the] evaluations. It
> is my perception they call it the way they see it and, over the years, I've
> gotten letters and comments from students about [the] quality of teaching
> and so on.

Learning From Negative Experiences

None of the College A participants talked about having any particularly negative experiences at the time they were securing and entering their first full-time tenure stream faculty positions.

College B

College B is a collection of disciplines in the arts and humanities. All five participants from College B obtained their first tenure stream faculty positions largely through their own initiatives at times when the academic job market was somewhat restricted.

Finding a Job Through Mentors or Recruited by Departments

None of the five College B participants found jobs through graduate school mentors, and none talked about being recruited by departments for their particular expertise.

Individual Initiatives

The five College B participants exerted considerable initiative to overcome the limitations of the academic job market at the time they were entering it.

One participant "patched together" three part-time teaching jobs after following his wife to her first position. He said the different classroom experiences allowed him to hone his teaching skills, develop instructional materials and increase his self-confidence. When three positions in his academic

specialization opened up in one year, he applied for all of them. The position he

is in now was most appealing to him:

> This was...a department that had really bottomed out and that was...much more exciting than going to an established department where they were concerned that I maintain the status quo. Here it was exactly the opposite. They were ready for a change and wanted some direction and I think most people would feel that that's [a] more challenging prospect than just taking over the reins for somebody else.

Another participant completed his Ph.D. program at a time when faculty

positions were available but "you could see the gates starting to close as far as

jobs went". Having interviewed and been turned down for one job, he took the

next job that was offered. The department did not have a doctoral program, but

the undergraduate students were good and "the people I met were nice," he

recalled:

> I know a lot of people who went to better schools and didn't get tenure and then were out on the streets. I was grateful to have a job. I was very grateful to have a job. I had a pregnant wife and no alternatives so it was a job.

After attending two national meetings of professional organizations,

another participant began to realize the "tremendous competition" for the

available faculty positions. He consciously developed a marketing plan, following

his initial application with mailings announcing exhibits of his work in order to

keep his name in front of the department chair and the search committee chair.

When he was asked to interview for the position he is in now, he decided to rent a

car and explore the area rather than relying on someone to drive him around:

> ...and I found out later on that I was the only candidate that had done that. And I wasn't doing it consciously to set myself apart, but it showed them

something about me that the other candidates didn't show. And it was very useful because I stayed after the formal interview process had ended. And I was able to drive over to the library and take a longer look there and I [wrote] a letter thanking people for my interview that showed I had really examined the campus and the area...That was something I wanted to do for me and it turned out to be a good decision in terms of showing them something about me that they liked.

Although he and his wife had grown up in another state and the position required them to move away from family members, he was excited about joining "a large university with a strong library". The two female participants in College B also made favorable comments about the prospect of working at a major research university with an attractive campus. But both were unmarried and concerned about the social climate of a place where they did not know anyone and where they had been given temporary faculty appointments. One said:

I was on pins and needles that whole [first] year because I was trying to finish my own dissertation work and my father was dying and I had all kinds of personal stuff going on that year, too. Plus, my degree is in [name of area] and this job is [other area] and that is...two whole different degree programs...So I wasn't sure I could handle it or if I wanted to stay here, but things eventually fell together so that they chose me through the national search and by the time that whole process was over, I knew that I really did want to stay and I've been happy with my job here ever since.

This participant was attracted to the position because it presented an opportunity to "broaden my horizons" and to work closely with public school teachers.

The other female participant was busy completing her graduate work at the time she applied for a few positions at "places that I felt I wouldn't mind moving to and that sounded like good schools". She was uncertain about an academic career, in part because of the competitive, territorial attitudes of faculty in her graduate program. When she was offered a temporary position at MSU and saw

that "faculty in different areas respected each other", she felt ready to make the move.

Learning to Assess Expectations

College B participants came to know what was expected of them in their new faculty positions and whether they were meeting expectations primarily through feedback from department chairs and colleagues, from students and, in one case, from a negative experience with top level administrators. They talked with people, observed the culture and, ultimately, made a decision to stay or leave their first faculty positions on the basis of their own values.

Feedback From Chairpersons and Colleagues

Many College B participants talked about being "so bombarded" by their teaching loads that they had to "just plunge in" and work hard. All five participants felt appreciated and supported by departmental colleagues.

One participant benefitted from having people in the department who engaged in "sort of a mentoring process":

> Several people were very delighted I accepted the job and told me to do whatever I wanted to do...I felt from that point on that I had at least some degree of support.

Another participant became friendly with several people who had served on the search committee for his position:

> ...I think they felt a responsibility to sort of, now that they had selected me as a colleague, to help me understand where I was performing well and where I could do things better. And I got some good guidance from a couple of colleagues. And that was very important to me.

Every few weeks, this participant also met with the department chairperson, who

had taught courses in the same area prior to the participant's arrival, and got "a

sense for how I was progressing". Mostly, he worked hard and observed the

culture:

> I consciously did not insert myself in any of the small or large controversies
> that came up at all for at least the first year, because I just didn't know
> what to say, first of all, and I had to figure out what the different needs of
> the department were and so I really didn't have much to say about them.
> That's the best advice I could give anybody who is taking their first
> academic position, is just keep your mouth shut and keep your eyes open
> and you'll be a better faculty member ten years later because of that.

This pattern of paying attention to the departmental culture and seeking

guidance from the chairperson was reversed for another participant:

> There was one older guy there who hired us and he hired us because he
> thought we were kind of young hot shots that would help him retool. He
> wanted to learn from us...We were up on the latest stuff...Three people
> came in when I did, three out of seven, and two who were there had just
> come the year before and they were bright, young, just out of grad school,
> an exciting time...

A female participant temporarily assumed a position that had been

vacated in anger by someone who took all the course syllabi and student records.

But departmental colleagues gave her their syllabi and "were more than helpful".

She frequently asked for feedback from the department chairperson, but still did

not feel she had enough guidance:

> Nobody ever sat me down and said, "Look, here is what you need to really
> improve in this area"...I remember thinking I could have probably used a
> little more feedback in that first year as far as, I wished that somebody had
> come and watched me in classes...I was kind of reading between the lines
> more than anything else.

She also read a lot in the department's curriculum library, talked about

grading policies with the director of undergraduate studies, and put forth

considerable effort to learn a new area while also trying to complete a dissertation

and deal with personal issues. When her temporary position was posted as a

permanent one, she applied and was called into the chairperson's office:

>...and [he] said, "I think you should apply for other positions, not because
>you are doing anything wrong, but because it is my perception that some
>people in [her area] want a real statistical research type and I'm afraid they
>are really going to go for that...In fact, he used words [to the effect that] "I
>don't think you have a snowball's chance in hell of getting this job back"
>[L.W.: He said that?] Yeah. And so...that was really, really a shock, but at
>the time I wasn't sure I wanted to stay here...I wasn't positive that I was cut
>out for the school. And I thought, if they really wanted a statistical
>researcher, I'm not the person...as it turned out, one of the two other
>people that they interviewed for the permanent position...had done some
>pretty fancy statistical research and she turned everybody off so much
>around the school when she came to interview that, even the person who
>really had wanted a researcher said, "No, this won't work". And they were
>stuck with me. I don't think it was grudgingly either, I mean, I think...they
>decided that they could keep the expertise in [her area] instead of working
>for research expertise at that point.

She did not take the lack of complete support in the department as a

rejection because she, too, was sorting out the pros and cons of the position and

whether it fit her professional goals. She decided she really liked the place:

>I think it is such a great atmosphere to teach in because there is a nice
>blend of, at least in my environment, a nice blend of freedom to do the
>things that I want to do, enough student contact, enough opportunities to
>do research. I mean, it has the resources of a major research university
>without the snottiness that I see in a lot of other places.

The other female College B participant did not have annual reviews for the

three years spent in a temporary position, although she asked for them. But she

sought feedback from a young, newly hired woman and other women faculty

members in the department. For the most part, she was too busy working to

worry about her future:

> ...I was so bombarded with all these classes that I had to teach, I wasn't
> really concerned about what to do to get promoted...I didn't even really
> know what tenure meant exactly...They asked me to stay in the temporary
> position another year and I was so happy not to have to look for another
> job, I just took it in a second with no questions asked, other than salary
> and things like that...

By the time it became a tenure stream position, she was more savvy about

assessing career prospects at other places. With offers for positions at two other

universities, she was able to negotiate a better position at MSU.

Student Assessments

This same participant felt she was accomplishing something valuable

because of feedback from former students:

> ...I had a student that came back the other day to visit me. He was here
> the first year I was here and couldn't believe how the program had
> changed...So that was really positive, you know, and some of the students
> that were here the first year are some of my best friends because I knew
> nobody when I came here, and...they talk about the way it used to be and
> they basically praise you a lot, so that makes me feel like you've [sic] done
> some good here.

Two other College B participants received positive feedback from students

about their learning experiences. One participant recalled:

> I'd be asked to go and talk in student dorms, fraternity houses and so on
> and people seemed to like the classes.

Learning From Negative Experiences

However, this same participant experienced a culture clash when he

became involved in civil rights and anti-war movements and began to examine

societal issues in his courses:

> When I was at [name of graduate school] I had certain political views and
> everybody thought I was a conservative thinker. I had the same political
> views at [university where he taught] and I was leading the revolution, and
> that tells you more about the two schools than it tells about me. Those are
> the kind of standard, liberal, civil rights, anti-war views people had in the
> late '60s and I began teaching [name of course] where we looked at
> questions of war and morality and civil disobedience and we also started
> looking at the nature of the university and education, and [were] critical of
> a lot of the stuff that was served up as education...It was good stuff. It was
> exciting. It was interesting. Students were receptive to...questions that
> mattered to them and so I spoke at teach-ins and stuff like that, but it was
> nothing to get all that excited about, but at [name of university] they got
> very excited...

In fact, the university refused to give raises to the faculty in his department

and the chairperson resigned in protest, causing the dean to take over. When the

participant and eleven colleagues circulated a pamphlet arguing for reforms in the

university's general education program, people petitioned the Board of Trustees

to have them fired.

He attended a national professional meeting and decided to interview for

other positions that were posted. A few weeks after interviewing with faculty from

MSU, he was offered a one-year temporary position:

> Now I had a tough decision. I had a two-year-old [child] and I had a tenure
> stream job at [name of university], [I] just got my Ph.D., finished my thesis,
> and...I could see the handwriting on the wall. Jobs were starting to dry up
> and, if I were to come here, I wouldn't have any benefits and so on and if I
> came here for one year...then I would have been out...So I went to the
> dean, who was also our chairman at the time...and I told him what the

situation was and his advice was to go...It was good advice. [L.W.: Was it well-meaning, or just to get rid of a troublemaker?] No, he liked us. In his heart, he knew we were good people and good teachers and smart...and so I came here and, afterwards, he got me an official leave of absence so I'd have benefits...So I came for a one-year job and then they asked me to stay.

In commenting on the different academic environment at MSU, he mentioned that, during the first year on campus, he debated the university president on Vietnam War issues in a public forum. He observed, "I could say whatever I wanted and nobody cared."

College C

This college is made up of disciplines in the social sciences. The seven faculty members from this college who participated in the study obtained their first full-time faculty positions through extremely varied circumstances that reflected changes not only in the academic job market but also in the climate for women and minorities.

Finding a Job Through Mentors and Peers

Two senior male participants found jobs through connections with mentors and professional peers under dramatically different circumstances.

As mentioned previously, one participant was a doctoral student when he took a temporary faculty appointment filling in for his major professor, who had accepted a Fulbright but died at the beginning of the leave. The department conducted a national search for the tenure stream position and hired the participant. In reflecting on the pros and cons of taking the position, he said:

Part of it was undoubtedly inertia. I was here, my wife was settled into a teaching job she liked...and I just liked being here. I had no problems with MSU and, to me, changing that for something unknown was kind of silly, and there weren't jobs all over the place.

In retrospect, he realized it took about ten years before he was an accepted

member of the faculty because he was identified as a student.

Although another participant was recommended by his major professor for

several positions, he recalled that trying to get the first faculty position was "one

of the most frustrating experiences of my life":

I happen to be Jewish, and [in] the first five interviews I could have had a job if I would say I was a Catholic [or some other religion]...we didn't have the Civil Rights Act and I was unprepared for that, psychologically and emotionally. And I became very, very discouraged.

However, he wrote about the experiences to a fellow graduate student

who was a faculty member at a southern university:

So he said, "Let me talk to the dean". And so I ended up at [name of university]. They didn't care what I believed in as long as I was a good teacher and a good researcher and a good faculty member. They didn't even ask me about my religion. That was kind of interesting for a southern school. So that taught me, don't believe in labels and all this bullshit about north versus south. It is an individual matter. I was treated royally by this redneck institution...[They] gave me all kinds of opportunities to grow and develop...

The question about obtaining the first faculty position was also particularly

significant for a female participant. It wasn't until well after she had received a

Ph.D. and held a part-time faculty position that she encountered a colleague who

helped get her faculty career on track.

At the time this participant was starting field research, she married a fellow

doctoral student who took a faculty position 300 miles from campus. She spent

the summer doing field work and then followed him to the university, where she

taught part-time for about 13 years, got several major research grants and

published papers. Gradually, she came to realize that her career was being

sacrificed:

> ...it became very clear that as a faculty spouse I was sort of next to
> dirt...which meant that, as long as I was there, there would be dissonance
> between how I was perceived in the rest of the [academic] world as a
> colleague and how I was perceived there...the honest truth was, I was
> cheap labor...I was essentially subsidizing a [husband's] career and I
> started to apply to other positions, to regular positions, and we talked
> about commuting and all the rest of that...I was just starting to put feelers
> out and...I ended up on the short list [for one position]...I think I was
> making it clear to [her husband] in fact, that I was a marketable
> commodity. I think he started getting very scared because he had a very
> nice cushy time there...

At that time, her marriage ended and she pursued a full-time faculty job in

earnest. She was offered and accepted a one-year sabbatical replacement

position and recalled:

> One of the people in the department is [name], who was a fairly activist
> feminist researcher. I hadn't known her before. We all sat down -- they
> took me to lunch -- and we were talking and finally she said, "[name], I've
> been trying to figure out your vitae. What happened?" And I explained,
> and she said, "You have got to make that very explicit. I know when I
> looked at your vitae, I looked at that..and said, 'This is someone who
> ended up as a faculty wife and got hurt by that,' but most people...look at
> that and say, 'Well, she must be incompetent and that's why in all those
> years in living in [name of place] she was never given a full position.'" So
> the next year, when I did my applications for a regular position, I included a
> paragraph essentially explaining that, and that's the year I got the position
> here.

<u>Individual Initiatives</u>

The other four College C participants landed faculty positions through fairly routine application and interview processes.

One participant described himself as "one of those rare people that went to a conference and found a job". He drove with fellow graduate students to a national professional meeting, where he ran into a faculty member from MSU who recognized his name as one on a list of candidates the department planned to interview:

> I think he helped me get an interview. Unfortunately, he wasn't here for my interview...At the same conference, he met somebody and got a leave of absence to work for a research firm...And he and I still are good friends. We're working on a project together now.

This participant also interviewed for a position in his home state and at several smaller schools, but he was attracted to MSU because the doctoral program in his field had a national reputation. Another participant selected MSU on the basis of the support available for the graduate program in his field:

> I got out [of graduate school] in '75 and it was probably the last year or two of the boom of hiring in [his field]. I think I had seven job offers...It was very clear to come here because it had a free-standing graduate program...that did community research.

In contrast, a junior male faculty member said that, in his specialization, only a few entry level jobs were available at the time he was looking and "this was basically the best job in the market, in terms of the reputation of the department and the university". Still, he would have preferred a situation that offered better career opportunities for his wife:

...the administration here and in the department made absolutely no effort to help [his wife] as a spouse...The notion of a two-career household was very foreign to the people we spoke to. There's a lot of rhetoric but, when you get right down to it, my wife needs a specific position and all they can do is write a polite letter to a department asking if they will hire [her] and the department gets five letters like that every other week...It remains an issue. The first time I get an offer in some big metropolitan center where we know my wife will get the job that she wants, we'll leave.

The other female participant in College C accepted a faculty position at a university "near the national social policy makers", after interviewing for four or five positions and rejecting those in "obscure places". She stayed at the university for 12 years before joining the MSU faculty.

Learning to Assess Expectations

College C participants came to know what was expected of them in their new faculty positions and whether they were meeting expectations primarily through feedback from department chairs and colleagues, from students and, in one case, through a negative incident at the university. Several talked about having their own understanding of the role, based on previous professional and graduate school experiences. As social scientists, many of these participants were adept at mining their departmental cultures for behavioral cues and figuring out survival strategies that fit their own value systems and sense of what was appropriate.

Feedback From Chairpersons and Colleagues

One participant said his own understanding of the pathway to a successful career and the departmental reward structure were well-matched:

I knew that, for my own professional advancement, regardless of where I was, I should focus on publishing and not teaching – that, if I wanted to have salary increases and professional mobility, that was just the way it was. In addition, here at this department, it's made quite clear to you in no uncertain terms that, as long as students aren't organizing in open mutiny, they don't care at all what you teach and how you teach. I was given absolutely no assistance or guidelines for instruction. I taught the first term I was here and I was completely left to my own devices. I had to ask for a syllabus of the class I was going to teach. It never occurred to anyone to provide me with the syllabus.

His performance feedback comes in the form of an annual review conducted by the department chairperson, and an "extremely crude" annual salary award procedure based of the number of publications each individual had in the past year.

In contrast, another participant viewed his role as being an undergraduate teacher because that's the dimension in which he was most successful. He found out the departmental value system operated on a different standard:

I wasn't particularly involved in a lot of research in those days, and I wrote very little the first five or six years. And that was reflected in [my] not getting promoted when it was up or out time...I was given tenure but not promoted...I felt that, given the feedback that I had been getting and the success I had been having in teaching, I thought I could override any deficiencies I had in research and writing. No one took me aside and said, "Hey, you ought to be publishing more".

Ironically, this participant had been socialized into the professoriate as a graduate student in the same department. A female participant had at least a vague awareness of the importance of research to a successful academic career. She recalled that, as a new faculty member:

I used to sit in my office sometimes with the door closed my first year and think, "What am I supposed to do? What exactly am I supposed to be doing?"...I didn't have a clue. I had a tiny clue. I knew you were supposed

> to do research on something but...to create a research program seemed like an overwhelming task. But I started a small research team and then it got larger and then I collaborated with a friend from graduate school...A senior woman [faculty member] was very encouraging, suggesting processes, allowing me to network, suggesting people on campus to talk to.

In hindsight, she believes both institutions -- where she went to graduate school and where she was first employed as a faculty member -- could have assisted her in understanding aspects of the academic career. However, she has come to see this lack of institutional assistance as a kind of Darwinian principle operating throughout academe:

> It would have been very useful to have an orientation program but...I have come to suspect that a part of the academic game is shaking out the people who can't figure out how to play the game...So I don't think there's any strong desire on the part of the powers that be to make it any easier...I'd never written a grant [proposal] in graduate school. I was supposed to do this to get money as a faculty person. Well, how do you do this? It seems it would be much more efficient to teach people how to do it in graduate school.

This participant became an astute observer of the academic scene and found ways of working the system to her advantage. Before receiving tenure, she was given advice in a midway-to- tenure review and she also attended promotion meetings of other faculty members:

> ...I would go to these and listen to the discussion and hear them say, "Well, my gosh, she hasn't taught anything in three years, what is the matter with her?...So you pick up what their biases are -- not necessarily what ought to be, but what the local culture thinks are appropriate. So I learned how to do the appropriate amount of service...I have never done anything that I didn't want to do in academia, and part of the reason why...is because I made it a point to volunteer for the things that I did want to do so that I was always active...I have a lot of energy and I want to work for the community to make it a better place, so I'd pick and choose...So it

isn't as though I didn't do anything. I did a lot, but it was all things that I chose.

Another participant talked about shaping a role for himself involving service to the community outside of the university. Because his work generated "lots of writing" and also "lots of money" and supported "lots of students", he never worried about being awarded tenure:

> It's nothing I worried about...When I read the faculty handbook about what it says a faculty member is supposed to do, it seems to me that what I do fits...A lot of my colleagues only do one or two of those things...They're only teachers or they're only researchers...I think almost none of them are involved in service of any kind, what I call service. What they mean by service is being on the faculty senate. I mean being of some use to the society...I think it's probably more in line with what this institution means by service. I don't think they mean service on university committees, or being on your professional association's committees...I think they mean figuring out ways to produce a better automobile, or helping the legislature or something out there, not in here [academe].

Having held part-time faculty positions for many years, a female participant had a clear sense of what she wanted to do when her temporary two-year assignment at MSU was renewed and then became a full-time tenure stream position. The department expressed its approval by unanimously voting to award her the position. She spoke about finally being able to involve graduate students in her research because she could plan to see them through their graduate programs.

One participant was hired into an outreach unit and learned from the head of the division about "the external role of the university...the land grant concept stuff":

Our job in extension, what we would call lifelong learning, was to work hard to establish relationships with a wide variety of groups so that they would pressure the legislators down in [the state capital] to take care of us.

Learning From Negative Experiences

However, this participant found it difficult to support the university after its

administration permitted a high level government official to block the entry of a

black student:

> After this terrible thing...well, my attitude toward the university changed. Nobody protested from the faculty and the administration. And I learned that this was such a major philosophical problem, I concluded that I could not be happy there and be a productive scholar, nor could I go around the state singing the virtues of [the state]...And I learned something from that. When your personal values are so in conflict with the organization or institution, you've got to leave because you cannot support [it] and do a good job.

At about the same time, he was invited to deliver a paper at a conference.

An MSU faculty member who was in the audience offered him a job on the spot,

but the participant refused to leave the other university "in the lurch", although his

conscience told him to leave. Several people from MSU continued to pursue him

until he agreed to accept their offer for the following academic year.

Student Assessments

One participant talked about entering a department in which everybody

was busy doing their own thing and there was "not a real support network"

available. However, he received support for his teaching through a seminar

series offered by a faculty development unit on campus. And he talked about the

significance of student feedback for him as a new faculty member with no previous teaching experience:

> ...you get more feedback from the students than you do the department...I felt people were raising issues in class and, more importantly, coming up after a class and...there were several people that came by and said, "I'm interested in this. Can you tell me more?"...As far as somebody saying, "You are really doing a good job here," it is more informal feedback from students...We don't have here, and never have had, a systematic way of looking at teaching...If you don't have complaints and are in the average range [in student evaluations], no questions are asked.

College D

College D is made up of disciplines in the physical, mathematical, and biological sciences. The 10 faculty members from this college who participated in the study obtained their first full-time faculty positions under widely different conditions in the academic marketplace.

Finding a Job Through Mentors

Four of the ten College D participants found their first academic positions through the influence of mentors. In fact, one participant was in the enviable position of never having looked for a job. He recalled this experience in the manner of a storyteller, opening with a beguiling statement, "I'm here because one of my colleagues in this field had a beard":

> ...This job was open about a year before I finished my degree and the department here wanted a person who was then in New York City. You've got to remember this was in 1967 and the Vietnam era was scaling up heavily and so this person [with a beard] from New York City walks on this campus and the dean did not find him meeting the image of what he thought should be on this campus...So he wouldn't approve the department's recommendation to hire this guy. So then my major

professor, being sort of a key person nationally, got a call and [was] asked if he had anyone else who might be possible for this position, because they were worried if they didn't resolve it soon they would lose the position. So at that time, that's when my name was mentioned and the department wanted to interview me right away. So I interviewed here and then they wanted me to make a decision right away, and at that time I had not even...there were a number of requirements at [name of university] I hadn't even fulfilled, including the language requirement, which worried me the most.

He was concerned, too, that by taking the first job offered to him, he would miss out on the opportunity to apply for other positions that would become available at the end of his doctoral studies. A bit of wanderlust weighed in on the negative side as well when he considered whether to take the MSU job:

> ...was this a good enough place to take the risk, to go ahead without seeing what the rest of the world had to offer?...I also had a strong desire to get out of the country...that would probably be the strongest issue on the con side...and my wife very much wanted to do that. In fact, she only agreed to come here for five years originally...People my age were dissatisfied with the United States...I don't say that was behind my particular view, but it was certainly not uncommon for people to want to get out of the country.

Yet, he decided to accept the offer and has been in the position ever since. At about the same time, another College D participant entered the academic marketplace and received job leads from several faculty members in his graduate program:

> When I was finishing in '66 you could go a lot of places. There were lots of jobs for people...Out of the four schools that I interviewed with, I felt that MSU was by far the most prestigious school and it would provide me more opportunities to grow, and that was the major reason [for taking the position].

A senior participant entered the market more than a decade earlier, at a time when faculty positions in his field were scarce and most doctoral candidates

took positions in industry. He decided to enter the professoriate "almost by

accident" when his major professor called his attention to a faculty position at

MSU:

> I had been interviewing industry for a position...and I became more and
> more concerned...about the directed role of the research for a product goal
> and became more and more uncomfortable with the thought of not being
> able to do my own thing and then I heard that there was an opening at
> MSU...and I had interviewed, at that time, 13 industrial companies and had
> a number of job offers. So I came here and, at that time, MSU was very
> different from what it is now. It had much higher teaching loads. It was
> less prestigious...but I liked the idea...[of] being able to do things
> independently. So, much to the surprise of my wife, I decided to become
> an academic...

Another College D participant achieved considerable notoriety in his

professional field through a postdoctoral experience. He and his postdoctoral

mentor challenged a rival science group that was engaged in fraudulent research,

exposing them during a session at a national conference:

> The room was just packed and word had gone out that there was going to
> be this big confrontation between these two big guys and we just blew him
> away at that meeting. I gave a paper that really put the nails in the coffin.
> People were standing in the hallway, you know, trying to see into our room
> and...I have never given a talk better than that. I was so proud to do this
> talk and it was something that drew a lot of attention to our work and,
> secondarily...I got to be known by a number of places and so, when I
> started applying for jobs...when I said finally I was interested in jobs, six
> jobs opened up that I was qualified for and I applied for them and got on
> the interview list of all six.

When all six universities offered him positions, he had the confidence to

negotiate the best position for himself. He took the one at MSU because it

offered an opportunity to work in a new area of specialization and "be one of the

new leaders in it".

Recruited by the Department

Two female College D participants had other plans at the time they were requested to interview for positions at MSU. And each had quite a different view of the prospect of going to an unknown place.

One participant had applied for a position at the prestigious institution in which she was a postdoctoral fellow, as well as for positions in other places. She never considered applying at MSU until she was pursued by a professional colleague whom she had never met:

> I had never met him but I knew his name...He was in the same field as I was and, when I came to visit...what happened is that this was the best time I had of all the places I went to. You know, I gave my talk at [her postdoctoral institution] and nobody talked to me. They knew who I was...it was beyond them to show some interest...and I came here and we had this discussion about what it is that I want to do and...we had a two hour discussion. This was the best thing I had ever had.

Another compelling aspect of her campus visit was the need expressed by female graduate students for faculty women role models. Her decision to take the MSU position was difficult and continues to be a source of inner conflict because of the location:

> Who ever heard of [name of city]? I think it's a hard place for a single woman because life here is organized around families and it's quite isolated.

Another woman who had been requested to interview for an MSU position saw the ensuing job offer as an adventure into the unknown at a time when she was eager to expand the social confines in which she was raised and discover a different part of the country:

Growing up in the environment I did was very interesting in that there are very well-prescribed roles that people play...and if you're a man, the expectations are quite different from if you're a woman, especially in my generation...For me, in my time, it was practically unheard of that a young woman in my position would, first of all, go to college and, second of all, do something as dastardly as going on to get a doctorate. I remember my undergraduate college roommates telling me that I absolutely could not go on past the master's degree because, if I did, no man would ever marry me. And I remember lying in bed all night long thinking this through very carefully and deciding that I was going to do what I wanted to do, what for me felt like the right decisions...I needed to be in an environment where I felt like I could become a whole human being, who was valued for what my mind is able to do as opposed to someone who was put in a particular position because she happened to be female...

Having done the dastardly deed of getting a doctorate, she opted to take another risk by accepting an academic position far from home. She fully intended to return to her home state after a few years but, instead, chose to defy conventional wisdom once again:

...I did not count on meeting a very nice young man who had been hired the same year that I was hired in the [name of department] and we got married the next year and I've been here for 27 years.

Individual Initiatives

Two other female participants in College D were married at the time they entered the academic market and talked about how their spouses' preferences entered into their decisions.

One participant had a job offer from an industrial firm, one from a university and had been called in for a second interview at another university. At the same time, an MSU faculty member with whom she worked as a graduate student "started wrangling around here for a position to see if he could keep me

here". As she weighed the pros and cons of the various options, she was drawn

to the university that had offered her a faculty position, but her husband "flatly

refused to move":

> ...so I gave up the other positions that I had, but I used them as bargaining
> tools to get what I wanted here [at MSU]. Because this started out as an
> academic specialist position, but nontenure stream, and I put a deadline
> on it, that I wanted it to change [to tenure stream] within about three years.

Another woman was a postdoctoral fellow at the time she began applying

for faculty positions. She interviewed at five institutions, received several job

offers and chose MSU. Her husband was a student at her postdoctoral institution

and was opposed to moving:

> ...and that was certainly a concern of mine, that my entire personal life
> would be sacrificed for my career, but eventually he decided that, if I was
> going to go to a place and not like it, I'd be moving anyways in a few years
> so he transferred to MSU and finished his degree here, but there was also
> the concern of whether he would be able to find a job...he's also continuing
> to live the life of someone taking a back seat to another's career...I don't
> negotiate very well. I just want more of my own way, I guess, and that's
> something that we both agree on, that I usually get my way. Well, it seems
> like there's always someone who does and, in this case, I do.

Her selection of MSU was based on a "gut feeling" about the interpersonal

dynamics in the department:

> ...compared to other institutions that I interviewed, the people here were so
> much more sincere, I thought, and the faculty in [name of department] just
> seemed much more open-minded...regarding lots of things which I would
> hope would include the fact that I'm not a typical [name of discipline], being
> a woman and there not being many of us, and also I just don't think I'm
> much of a conformist in many ways and I worried about the type of
> department that I would make my home in. I knew that everything always
> looks rosy when you interviewed, but I didn't know how it would be after a
> few years...My gut feeling about this place was really good, and there were
> a few young people here already who seemed to be thriving, and they
> immediately took to me and seemed to encourage me and want me to

come here. It just seemed like the human element was more present in this department than I've seen in lots of...departments.

After a few years, she found out that all the faculty members were not as open-minded as they seemed during the interview, as discussed later in this section.

Two male College D participants entered faculty positions at different times and under totally different conditions in the academic marketplace.

The senior faculty member completed his doctoral degree at a time when "the Sputnik affect was still being felt" and university science departments were expanding rapidly. He was attracted to a position at MSU in a new department that brought people from two disciplines together:

> It was an exciting opportunity and I grabbed it. There were no negatives [about the position] or real problems.

In contrast, an untenured junior faculty member had been in a postdoctoral position in an MSU department for several years when a tenure stream faculty position opened up. When he was offered the job, he was relieved to have some job stability and to be able to establish his own program. Later in the interview he said:

> I'm extremely pleased that I'm working here because, quite honestly, a lot of colleagues my age are either not working at what they originally intended to do, or they are underemployed. And they are still sort of living on postdoctoral soft monies, years after they got out of their Ph.D. programs. So I'm very glad to be working here.

Still, he accepted a nine-month academic appointment knowing full well that, given the nature of his discipline, he would be working twelve months of the year.

Learning to Assess Expectations

College D participants came to know what was expected of them in their new faculty positions and whether they were meeting expectations primarily through feedback from department chairs and other unit administrators, from colleagues, and students. One participant learned through several negative personal incidents to sort through her own and other's expectations and determine what she could live with, literally and figuratively.

Several talked about entering faculty positions with their own understanding of the role based on strong relationships with mentors from graduate school and postdoctoral experiences. One participant commented on the contrast between his own self-confidence entry into the faculty role from a "big league" postdoctoral experience and the less focused approach of those without such an experience:

> ...There's some people who don't have good mentors and those people [mentors] never really get into your head deeply, like, "I want to be like them...now I feel like I've been shown the kind of excellence that can happen in these areas and I buy into it and I want to work hard to be that kind of person," and I guess I feel a little sorry for some people who go through graduate school and never meet someone who does that to them...Maybe some people work really hard on their own to break into that [mindset] but I was kind of brought along by mentors...I see a real difference between people who have what I consider really good postdoc experiences and those who don't.

Role models showed another participant the importance, in his field, of having academic appointments in two departments:

> I have always thought that people in the applied sciences are most successful in research universities if they're well-connected to the basic science field that underpins that applied science. In my general area I can

point to other examples...my own boss [major professor] got his degree in [names two disciplines] so I had all those examples right in front of me of the most successful people in the field...and they all got their training in the basic sciences.

Feedback From Chairpersons and Colleagues

This participant decided to take the MSU faculty position largely on the

basis of being offered a joint appointment in the two departments of his choice.

And, once in the position, three colleagues were particularly helpful in

recommending pathways to success:

> My first year here [the chairperson of one department] sat me down and told me what it took to be successful, and one thing he said is, "You've got to establish your own niche." That was useful because my view of [name of the applied department] at that time is that they probably had too many collaborative projects. People in the department would get together and do a project and the publication would have three or four names on it and, for a young person doing only that...you couldn't establish your own niche. So I saw that the most appropriate thing was to do a balance of things that allowed you to establish your own niche but then to work with other people as well.

A more senior colleague in one of the departments advised this participant on

handling certain outreach dimensions:

> ...early on I remember there were a lot of requests for radio interviews and he told me once that the way you control these things is you should do good enough not to be fired but not so good that you're asked back again...and I knew what he meant by that.

And the director of a major research component of the university gathered the

first year science faculty together and told them it took three things to be

successful:

> ...where you publish, how much you publish, and how much money you bring in...I've always remembered that. It made an impression on me,

obviously, and I've quoted it many times. I quoted it to one senior faculty member in this department who was incensed by it. He could not believe that was said. That person very shortly after that became disillusioned by the university and left. I think it's a good thing to keep in mind...It keeps you on track. As a new faculty member, you don't have a lot of concrete things to go on. You have your experiences and what you perceive those around you expect.

With two departmental colleagues pointing out "things that they thought I should change, or things that I should be aware of in terms of tenure and promotion", another participant felt she was reasonably on track but was still surprised the first time she saw the promotion and tenure documents:

> ...when they handed them to me and told me, "There, you have to fill these out because you are now going to be reappointed"...that came as a real shock because there it all was in black and white and they could have given it to me the day I walked in the door...So now I make sure any new faculty member that I'm on the search committee for gets a copy of that document the day they walk in the door.

In contrast, another participant was among a group of new faculty members hired at the same time. They socialized with each other and shared perceptions:

> ...it seemed to me that I learned early in the game it was important to know the politics of the department and know who the big players were and what was expected of you and that kind of thing...because someday they were going to decide whether or not you were going to get tenure...Somebody in the department should know your work. Those people who work by themselves sometimes don't have an advocate and, when it comes time for the committee to make a decision, they don't have anyone to ask, other than the candidate himself. I worked very closely with several people in the department and so people knew my work and, actually, I didn't have any problem getting promoted and getting tenure.

The rules of the game are less clear for a recently hired untenured faculty member. This participant has a formal appointment with responsibilities for

teaching, research and outreach. The department has implemented a mentor

program in which two tenured faculty members are assigned by the chairperson

to guide each new faculty member through the tenure process. Both of his

mentors are basic researchers:

> One of them has already told me that I should try to drop that [outreach appointment], which is ridiculous...that is part of my job...I think it was quite clever on [the chairperson's] part. He was giving me a signal about what he thinks is important. That's the way I interpret it. I could be wrong, but I think in terms of what he thinks is important, he is saying, "Let your research form your program and let everything else follow from that." And that's what I'm going to do. And that's really the only way you can do it anyway, because the truth is that research keeps you up-to-date, keeps you fresh, it keeps one at the cutting edge and, if you are going to be a good teacher, you are going to have to have to be up on those sorts of things and not be stale. And the second thing is, to do any kind of outreach or extension work, you have to have research grants to support it, because there is really little in the way of resources for that kind of activity otherwise.

As this participant continued to reflect upon how he understands what is

expected of him in the faculty role, he seemed to contradict earlier statements

and evidenced considerable confusion about the prevailing performance

standards within his department, and whether they matched the university's

changing reward system:

> I think the truth is that those people [mentors] and my department chair have the expectations that I'm the expert. I'm the one who is going to be able to make those decisions [about the role] and then later on they are going to have a look at that in annual evaluations...but there's really not a lot of feedback coming back from that...So, I just adopt the standards which I see other people using. The problem is, I think those standards are changing, but it is still nebulous. The research, publish or perish, get research grants treadmill is still everybody's mainstay but, at the same time...you know, this whole initiative with lifelong outreach, how do we fit into that? And it is really not clear...in my attempt to do those things, I don't really know if, for example, I develop a program that helps people

> learn now to [do a specific thing]...will [name of administrator] recognize that as an outreach activity, or will he say this is not what [he] had in mind? And the second thing about that is, how would that be rewarded, because that is not a high yield, big grant dollar or big publication activity? It is a low profile, working with grassroots, nonrevenue yielding activity, and it takes a lot of time.

The issue of shaping a faculty role for himself that would meet expectations was much on the mind of this young faculty member as he struggled to hang on to a position in a tight academic market while, at the same time, observing a conflict between the kind of faculty behavior the university says it values and what it actually rewards:

> ...you hear so many different things from people for priorities...the other thing that is getting a lot of emphasis and reemphasis now is undergraduate teaching, which I agree with completely. I hear way too many stories about undergraduates who are really not happy with the quality of their courses...We can't put up with that but, if we're going to teach more, then something else has to give because you can't do everything. If you are going to teach more, then you can't do outreach [because] you can't be gone. If you are going to teach more, then you can't do research, because that is so time absorbing, and so it...raises all kinds of issues...what happens in this department, and I'm sure everywhere else, is the people who are really good researchers apply for other jobs and then they can leverage better situations for themselves here. It is very common. "What can we do to make you stay?" "Well, I want a better salary." "Okay, we'll give you a raise." "I want better lab space." "Here is better lab space." "I want a technician." "Okay, here is a technician." But if you just teach, that will never happen. [If] you apply for another job, they'll say, "Go ahead."

Two senior faculty members from College D recalled having heavy teaching loads as new faculty members and, one said, "I didn't have the guts to get nasty about it". Neither of them disliked teaching, but they worried about it cutting into the available research time. Both of them learned how to manage their time from colleagues, either by observing them or receiving their advice:

> I did live in the lab — every night and Saturday also. That's true of most everybody, and is still true...About 60 hours a week is the expectation. If you're going to progress in the scientific world, a 40-hour week at the university is unheard of. In graduate school that was [also] the case.

The other participant was advised by departmental colleagues to think strategically about a research program:

> ...even in those days, tenure was certainly not automatic and I was embarking on a very ambitious research program that might have long-term success but [the] short-term chances were rather slim...They made it clear that, if you spent five years without any publications, you weren't going to spend the sixth year or seventh year here...So I carried out two research programs, one of which was, I'd have to say, a sure thing...We would be almost guaranteed of getting some results and getting some publications and having success at something I knew how to do as a graduate student...At the same time, I started on a high risk program that actually didn't come to our first publication until I was here for six years.

Three female College D participants found varying degrees of support in their academic departments, and faced their own particular challenges with being women in their chosen professional roles. One married another faculty member who had several years of faculty experience at another institution, so he was "much more savvy about the system" and served as a mentor. And a few other faculty members occasionally talked to her about what was expected of new faculty members in the department. However, the challenges of being a new faculty member were complicated for this participant by the responsibilities of parenting:

> I had a really rather interesting first few years here, in that [we] got married at the end of my first academic year. I finished the next academic year, had our first daughter in November of that next year, went back to work the spring term and discovered I was pregnant again. So I took off at that stage of the game. I stayed home with my children for four years.

Another participant had "unbelievable support from my chair and from others" while she struggled with "what it was to be a woman in science, to do research for myself" at a time when there were few women role models. Although she felt diverted from academic tasks and had a sense of not meeting expectations, the chairperson was reassuring:

> I remember [after] what I thought was my worst year...ever, he managed to tell me in my annual meeting that I would always be a valued member of the department and, even if I published only one paper per year, I would always have an impact and, you know, it was an extraordinary thing to have...so I have received a lot of support and...little by little, there were more women in science.

A similar sense of needing to figure out a role for herself was reflected in another female participant's observations:

> Nobody shows you anything. You just start doing and then, when someone says something to you, you change your ways if it turns out they don't like the way you're doing it. No one said, "This is what we expect of you as a teacher. This is what we expect of you as a researcher." It's like a game. You're supposed to figure it out and that's part of whether you're worthy of getting tenure or not, is whether you can figure it out...It's a shame in a way. I think a lot of people fail because they don't know what [the] expectations are.

Determined to survive in academia, this participant drew on her "obsessive personality", sought advice from her doctoral and postdoctoral mentors, and "bounced my ideas off of some of my younger colleagues". When senior colleagues failed to tell her what was expected, she chose not to approach them:

> I didn't want them to think I had problems, so I wouldn't have gone to them...And, even when I had a severe health problem my second year – I was so ill that my physician told me I might have to quit my job and be hospitalized – I wouldn't tell anyone. I didn't tell anyone because I was afraid they would think I was weak, and my husband was furious with me because I wouldn't tell anyone why I was not myself. I just kept on...I was

teaching that quarter when I was diagnosed with...Epstein-Barr syndrome and they were alarmed anytime they thought someone had it and I just was determined that I wasn't going to believe the doctors who said, "You can't put yourself through any more physical or mental stress right now"...I got through it and I'm fine now, but...I don't feel that people in academics are very sympathetic to their colleagues and everything that happens to you, whether it's you're getting sick or you have some sort of problem with your research or your teaching, it's all viewed as a failure...It's sort of a negative reinforcement approach...Anytime things are going extremely well for you, you don't seem to hear anything. Nobody comes up to you and says, "Congratulations, great job". But when something isn't going well, you hear little digs or you hear people saying things...never to your face about yourself, but you hear the little hall or water cooler gossip about someone not doing very well...So that's kind of that negative reinforcement approach...You're afraid people are going to have an impression of you that isn't quite positive.

She experienced a more direct negativity when, at the same time she found out about the illness, a senior colleague chose to give her some ostensibly well-meaning advice:

One of the faculty members here, for some unknown reason --to this day, I don't know why -- decided to take me aside and tell me that I wasn't going to get tenure. He just said that he was worried about me...He said it in a way [like], "I really would like to see you get tenure, but I don't think you're going to get tenure," and he compared me to one of my friends, who's on the faculty here as well. This friend and I started here at exactly the same time and [in] exactly the same area of [name of discipline] and so there's a lot of pressure and a lot of competition...He [senior colleague] pointed to this male colleague of mine...and said, "He's gonna make it because he has what it takes" and I think he was, without saying it in so many words, he was saying that this guy in some ways plays dirty pool. He's not very nice. He's not sympathetic. He's hard. He's not afraid to be more aggressive. And he said that I was too nice...I was astounded. I couldn't believe it. I almost quit my job here...I wasn't gonna quit my profession, but I almost quit my job and looked for another university because I think I could have easily found one. And it was that and the illness...that made me approach my job differently. I think I'm a lot tougher now...I recognize that there can be an unbelievable level of discrimination against women that people don't even consider as discrimination, which is, "I don't think you're gonna make it because you don't look the part" or something like that and I think that's what I experienced because this was a very old

colleague and he's on his way out. He was bothered by my presence. He was bothered by my approach to science and he just couldn't wait to tell me that this just wasn't going to cut it.

College E

The eight College E faculty members who participated in the study are in engineering disciplines. In obtaining their first faculty positions, several had assistance from mentors, three were recruited by their departments, and half took the initiative in investigating positions at various universities.

Finding a Job Through Mentors

One participant's mentor got a call from a colleague at a particular institution about a faculty opening there. The mentor told the participant to apply for the position because he knew several faculty members there and it would be a good opportunity. Meanwhile, the participant heard about an opening at another institution. He applied for and was asked to interview for both jobs, but disliked the conservative culture of the place his mentor had recommended and the "cutthroat" academic environment of the other institution. He decided he did not want either position and, instead, applied for an MSU position he saw advertised in a professional journal. During the interview, he was offered the job:

> ...they offered me the position while I was here [interviewing] and I just took it...It was really friendly. There was a faculty member in the department that...when I interviewed, said, "Have you ever written a proposal?" I said, "No. My adviser writes the proposals. I just sponge off of him." So he said, "If you come here, I'm going to take you to Washington and we're going to write a proposal together"...I really liked that, you know, this faculty member taking me under his wing...And it turns out I worked with him for several years...I liked him, I liked the people I

met...It was a pretty campus...I don't recall having any negative thoughts...I didn't mull it over too much...I didn't really want the hassle of looking for a job...I just wanted to become a college professor, that's all. And I wanted it to be at a major university...A lot of people were going after a very small number of positions, so I didn't have a whole lot of options.

The options were somewhat better for another participant, in part because he was actively considered positions in both industry and academia. In fact, he hadn't really thought about becoming a faculty member until several faculty members in his graduate department recommended that he interview for some positions. He ended up with two offers from industry and two from academic institutions, and "the salaries were all about the same". So he selected the MSU faculty position because he was raised in that part of the country, and because the department made him an attractive offer:

> They gave me a good startup package to come...I don't think there were any glaring negatives that almost swayed me away. The department chairman was very encouraging, too, when I was looking...He was very helpful...I had a good visit here...It seemed like they [faculty] were genuinely interested in what I was doing and genuinely interested in the things I thought were important, which I guess were teaching and research ideas...I do remember that they said teaching was important here...that was something that stuck with me and still sticks with me.

Recruited by the Department

Three College E participants were recruited for positions by departments, and two of them moved into faculty positions after finishing doctoral degrees in the same departments.

One participant actually was recruited by two institutions and chose the position in a department that was developing a new specialty in his academic area.

Another participant was offered a faculty position in the department in which he was a doctoral students and, at the time, he "never strongly considered going anywhere else". In retrospect, he regretted not having applied elsewhere because, he explained, "...I really didn't have a good measure of my worth".

At the end of her MSU doctoral program, a female participant applied for a number of positions at other institutions and had several job offers when her MSU department began to recruit her:

> I was sort of tempted to go [to a national research lab] for a couple of years and then still think about a faculty position in a couple of years and then I started thinking that...I was older as far as starting out as a new faculty...so I thought well, maybe I better go ahead with the faculty position. At [name of other university that offered her a position], I'd be the only woman...it's quite male dominated and I thought that, for a place to start out...I really thought I knew people [at MSU] and I knew what to expect from people, that being the only woman on the faculty here might be a little bit easier to get started...to get my feet on the ground...and if I felt like was doing well, then that would be the time to go on...[name of other university] is rated higher than MSU, so the pressure there would be theoretically more than here.

Individual Initiatives

While employed as an industrial researcher, one College E participant began touring areas of the country that he liked and investigating universities. During one trip, he happened to visit MSU:

> ...I just accidentally passed through [name of city] and I liked the university very much and the community very much...Then I went home and read

about it. And the university had a fine campus and the [name of] building looked nice.

Upon further investigation, he found out MSU had an available faculty position in his field. It was a nine-month appointment at a salary more than one-third lower than the one he earned in industry. But the freedom and flexibility of academia appealed to him and he decided to change career paths.

After sending out "a whole bunch of resumes" another participant accepted a job at a university close to the one at which he did his graduate studies, which allowed him to continue interacting with graduate school colleagues. He joined a newly created department that was not very strong, but he enjoyed the fact that many of his colleagues were young and friendly.

Another participant sent a letter asking about position openings to an MSU faculty member who had reviewed the participant's journal article. The man wrote back and said MSU had an opening but, at that time, the participant was committed to a postdoctoral position. When he decided to conduct a "full-fledged search" for a faculty position two years later, the MSU faculty position was still open. He interviewed for it, as well as for a position at another university, and got offers from both institutions. Although he liked the location of the other university, he found himself gravitating toward MSU:

> The main thing that came back at me was that the people were extremely friendly here. I think that's the biggest thing that I noticed, just the working environment seemed to be very nice and friendly...My wife was nice enough not to put any pressure on me. She said, "Whatever you think is most important for your researching career, we'll do that".

The MSU department provided his spouse with job leads and she had interviews lined up when she came with him for a second interview. The department paid for the visit and also arranged for them to meet with a real estate agent. Given such a display of interest, he decided to accept the MSU offer:

> Generally I didn't think, research wise and academic wise, MSU was as strong as far as a place that I would like to go to but it looked like the potential was there to become a lot better than it currently was. So I thought that maybe I should go to a place where my efforts will make a big difference, as opposed to a place where they had a lot of people already that were good and strong.

Learning to Assess Expectations

All but one of the College E participants said they entered their faculty positions with a good understanding of what was expected, based on graduate school experiences and faculty role models. However, determining whether or not they were meeting expectations was more problematic for some than for others.

One participant knew he was supposed to be a good teacher, write proposals and publish papers, and the question of whether he was meeting expectations was never an issue for him:

> I didn't care. I never asked what the expectations were. I never expected that anybody would think I wasn't good and I did what I felt like doing, which was to teach as well as I could. I just decided on my own how much time I was going to put into teaching, how much time I was going to spend...in fact, I immediately volunteered for various committees and things...I just thought, in three years they will decide if they like me or not and, if they don't, I'll go someplace else...I've strived to do the best I can and that's the end of it.

Another College E participant held teaching and research positions at other institutions before moving into his first full-time tenure stream position and felt, "There probably wasn't too much about the position that I didn't already have a pretty good idea about". He was straightforward in his approach to assessing whether he was meeting expectations, citing "two basic measures":

> ...the student evaluations [are] a pretty good indication of how you are doing as a teacher. And in the research end, it is basically, can you write proposals, get contracts funded, get research done and reports completed. I think the measures in research are fairly easily defined. Teaching [is] less so because, I think [name of student assessment form] scores are certainly only one measure on whether you are effective as a teacher.

Still another participant learned from graduate school role models that "the important thing" was to be good in research and not put too much time into teaching:

> It's very easy for a new faculty member to spend all their time preparing for courses. I think keeping that balance is the most difficult thing and, fortunately, I was prepared for that...So I think the division of time between teaching and research is most critical and you don't learn that when you move to a new place. You have to sort of learn that as a graduate student because, by the time you come to a university and then start learning, it's too late.

Three College E participants had a fairly strong sense of what was expected of them in the faculty role, but struggled with the issue of whether they were meeting expectations. One said that determining one's standing among peers is "probably always an issue". Another participant said he knew that the faculty role involved research and teaching. But his doctoral program was in a research institute, where he had no exposure to undergraduate teaching, so he had "no particular example" to follow:

> I had to teach myself...I sort of make it up as I go along really...What usually happens is you have so little time...you go into a class and you start teaching...I really don't know how it works out. I'm not conscious of how I do things, I just do them...I do know that I'm a lot more patient than a lot of people that I know around here...I sit with students for hours and hours and they keep asking questions and I don't know how to kick them out the door...I figure they're here because they need help so I should help them.

He finds it difficult to keep his sense of responsibility to the students from impinging on his research time, and feels that, "I never meet my own expectations – very rarely does that happen". The female College E participant expressed a similar sense of having "a pretty good idea before I started" of what the faculty role entailed. Although she recalled being told she was doing well, she had a difficult time developing a sense of her own competence:

> ...I never knew quite where I stood compared to people on the same level...That was always sort of a question I had...I felt like I was doing all of the things that were expected, but it was difficult to figure out if I was doing more than what was expected or nothing great.

Feedback From Chairpersons and Colleagues

Of the eight College E participants, six mentioned feedback from the chairperson and/or colleagues as a significant factor in assessing whether they were meeting expectations.

One participant noted that, in contrast to his department's current policy of assigning mentors to all junior faculty members, he received no assistance and had to learn through "trial and error". He learned about whether he was meeting expectations during annual reviews and reappointment discussions with a review committee:

That's how I found out they were looking at productivity. I didn't understand the process for reappointment or promotion.

Similarly, another participant said new faculty members in his department now receive more guidance than he did. He experienced an abrupt awakening during the annual review at the end of his third year:

> ...I don't think I was very well guided as to exactly what was expected of me as far as number of publications and number of research dollars and number of graduate students until about the end of three years. Then I had a meeting with our department chair...I came out of the meeting and remember being quite scared. He said, "You need to have two or three more publications and generate several other research grants if you want to be promoted"...So my weakness was in research, and he was very supportive. He gave me a term off of teaching so I had...a good solid chunk of time where I could focus entirely on research...So I think, in retrospect, there may have been a little lack of communication between me not worrying about what I needed to do exactly, or not knowing what I needed to do, thinking that I was just kind of cruising along, and the department chairman not really guiding me very carefully, saying you need to make strong progress in these areas.

The female College E participant engaged in an ongoing dialogue with departmental colleagues "about what they had when they got tenure" and asked during her annual review with the department chair whether she was "on the right course". Another participant's assessment of whether he was fulfilling expectations was based primarily on feedback from the department chair, "...and that was something of a challenge because that particular individual had high expectations for himself and others".

Section 3: The Process of Faculty Role Continuance

This section discusses the faculty role as it is presently perceived and enacted by the 41 participants in this study. Central to the discussion are

participants' decision making processes regarding the professional activities they engage in and their allocation of time to and among them.

Participants were nominated for the study by administrators who saw their role performance as commensurate with the faculty exemplar description presented to them by the researcher. While administrators considered nominees to be highly productive in all three role dimensions -- teaching, research and public service -- the individuals' own commitment to and participation in each of the role dimensions was not clear prior to the field interviews.

In an attempt to capture as much as possible of the participants' thinking about their roles, the researcher did not show the faculty exemplar description to the participants, and did not hold them accountable to the particular standards of exceptional performance put forth in the description. For example, "exceptional public service" is characterized in the exemplar description as "the successful extension and application of knowledge to address the needs of people at local, state, national or international levels through activities that build on the faculty member's professional expertise". In this view, public service involves the extension of a faculty member's scholarly expertise to audiences outside the university. The examples of exceptional public service given in the description are "consultation, technical assistance, policy analysis, program evaluation and public information".

Recognizing that at MSU, as at most higher education institutions, the public service dimension is a kind of catchall category for faculty activities that do

not clearly fit into either the research or teaching category, no attempt was made to impose the exemplar description of public service on study participants. Instead, the researcher attempted to find out what the individuals themselves thought of as public service. As expected, some saw it as service on committees at the levels of the department, college, and university, or service to professional associations (e.g. serving on committees; editing journals; reviewing articles; organizing national meetings). Other public service categories that emerged during the interviews were: judging student competitions; conducting programs for youth on academic careers; public exhibits; recruiting and advancing women and minorities in science careers; writing departmental newsletters; helping K-12 teachers access university resources; giving presentations in K-12 classes.

Participants were asked whether they thought of their activities in teaching, research and service as linked in certain ways or as discrete activities. By probing for this kind of understanding, the researcher attempted to discern how multidimensional performers construct their roles to make performance across the dimensions possible, since the consensus in the literature is that such simultaneous performance is only accomplished by a few "triple threat" faculty members located at highly prestigious institutions.

In this study, a number of participants indicated that enacting the multiple dimensions of the faculty role was not a burden or a formidable obstacle. Instead, they were attracted by the variety of performance opportunities available in a multidimensional role. Some had previously experienced and exited from

more one-dimensional roles -- for example, high school teacher, government researcher, and policy analyst.

About 88 percent of the participants in this study saw the three dimensions as linked. In discussing these connections, they used words such as "integrated", "intertwined", "blended", "overlapping", "interrelated", "mutually supportive", and "complementary". Although they rarely gave equal time to the three role dimensions, they felt a kind of "synergy" emerging from the interplay among dimensions. The different ways faculty members think about the linkages among teaching, research and public service are further explained in this section.

The symbolic interactionist framework undergirding this study holds that individuals make meaning of their world through an ongoing process of interpreting physical, social and abstract objects in that world. In this regard, time can be construed as an abstract object manifested in more immediate short-term aspects such as course schedules, proposal deadlines, and meeting appoint-ments, and more long-term aspects such as career goals and professional contributions. By inquiring into time allocation, the researcher attempted to uncover how individuals interpret such an object of importance in the world of all working professionals.

Many faculty members experience stress from ongoing time pressures. Participants expressed feelings of frustration or futility at being asked to fill out forms which require them to break their activities into categories and report the percentage of time spent on each. They consider data from such an arbitrary

exercise to be inaccurate and meaningless, since they don't think of what they do in terms of a standard 40-hour work week that can be neatly divided into separate tasks. As one participant explained:

> I always thought it was funny when they hand out these things [forms] each term. You are supposed to put down what percentage of your time you spend doing this, what percentage of your time is spent doing that and...most faculty members I know, if you do it that way, your time comes out to 130 percent or something...But these things [forms] all act like we spend a 40 hour week around here. Nobody I know spends a 40 hour week. [L.W.: What's the norm?] Well, based on my experience...I'd say the norm was 60 [hours a week].

Responses to the inquiry about whether or not participants collaborate with colleagues or other professionals, how these relationships come about and their benefits and drawbacks indicate the significance of social objects in faculty members' worlds. Contrary to a common conception of university professors, these faculty members do not labor alone. All of the 41 participants collaborate with others, to a greater or lesser extent, and most do so with other faculty members. One participant said he only collaborates with graduate students.

Participants were questioned about how they go about evaluating their own professional performance in order to identify "significant others" whose voices they might listen to, as well as more abstract objects such as values, beliefs and priorities used to shape their faculty roles. In keeping with the symbolic interactionist tenet that a role embodies a normative "ideal conception" of what one ought to do, participants were asked to describe an exemplary faculty member and to state whether or not they saw themselves as fitting their own

description. Their responses identified abstract, social and physical aspects of the role that guided these individuals' own behavior at the time of the interviews.

Self-assessments of the degree of fit between the ideal conception and actual performance reflect internal validation processes through which individuals either modify the existing role, reject identification with a role, and/or discover a new role. At the time of the interviews, several participants had taken or were in the process of taking on new administrative roles and were having to either significantly modify or actually reject the faculty role because of the overload of trying to perform both roles at once.

Unlike the previous two sections in which participants' graduate school and new faculty socialization experiences were reported by college, this section presents data according to three primary multidimensional faculty role types that emerged as data were analyzed. Each role type embodies a set of values and beliefs that forms a normative view of what a faculty member should do and impacts the way in which the role is enacted by individuals in the category.

While all 41 participants in this study have engaged in all three role dimensions, they have different views of the relative importance of each dimension, different ways of defining the dimensions, and different levels of commitment to enacting the dimensions. Based on interview responses, each participant was placed into one of three primary role types: researchers, teacher-scholars, and integrators. Of the total, 9 (22 percent) were classified as

researchers, 15 (37 percent) as teacher-scholars, and 17 (41 percent) as

integrators (see Table 2).

Table 2:   Multidimensional faculty role typology by college.

College	Researchers	Teacher-Scholars	Integrators	Total
A	1	3	7	11
B	0	2	3	5
C	3	2	2	7
D	2	5	3	10
E	3	3	2	8
Type totals	9	15	17	41

In this section, a composite description of each emerging role type is

presented, supported by quotes that articulate the essence of the role. The

following topic structure frames the discussion of each role type:

1. Decisions About Activities
2. Time Allocation Issues
3. Relationships Among Role Dimensions
4. Collaborative Activities
5. Describing Exemplary Performance
6. Self-Evaluation of Role Performance

Multidimensional role types are discussed in the order of: researchers, teacher-

scholars and integrators.

<u>Researchers</u>

Nine participants were categorized as fitting the researcher role type based on generalized inferences drawn from interview data on faculty role construction (see Table 3). Of the 9 researchers, 5 were full professors, 1 was an associate professor, and 3 were untenured assistant professors.

Table 3: Salient characteristics of researchers.

Total: 9

Role Framework: Research is primary source of financial and intellectual capital to support teaching and public service activities.

Core Belief: Generate knowledge of potential use to society.

Motivation: Intellectual stimulation and peer recognition.

Activity Selection: Focus first on own research agendas and prefer to teach graduate level courses related to their research.

Major Challenge: Aligning what they want to do in research with what others are willing to fund.

Time Issue: The need to focus on deadline driven, short-term research rather than problems with longer-term solutions.

Underlying the professional behavior of these 9 researchers is the belief that their fundamental purpose is to generate knowledge that may be useful to society. They are motivated primarily by the internal reward of intellectual stimulation, and the external reward of positive peer recognition.

Decisions About Activities

Researchers see the pursuit of knowledge as what they should do and what they want to do. They select research topics largely on the basis of their own scholarly interests and, therefore, value the freedom and flexibility academia provides to pursue their own intellectual agendas. At the same time, they are realists who fully acknowledge that what they want to research must be aligned with what others are willing to fund. Gaining outside funding is made easier by the fact that their research interests often are centered in areas of real world need and, therefore, are aligned with the public service dimension.

Researchers tend to be driven by a self-perpetuating desire to establish and maintain a niche for themselves within the scholarly community that gains them national or even international recognition. As one participant said:

> Once you set a pace for yourself in research, you don't want to slow down because you want to establish a certain reputation in the field, and people expect a certain amount of productivity from you.

It is generally understood in academia that faculty members have degrees of freedom within certain boundaries to, for example, select a research specialization or choose which textbooks and topics to teach in a course. However, they also operate within a university organization that awards tenure and promotion based on certain performance standards, and within college and departmental cultures that have their own performance priorities and values. In some colleges, faculty are given formal appointments with percentages of their time assigned to various role dimensions. Therefore, a discussion of the

processes individuals use to make decisions about the activities they will engage in must be placed in an organizational context (a more extensive discussion of organizational impacts on faculty performance will be developed in the following section).

The effect of departmental cultures and formal appointments on individual decisions about role activities was most apparent in interviews with the three nontenured assistant professors in the group of nine researchers. They clearly were drawn to the faculty role because of a strong preference for research activities rather than teaching. And each of them perceived that departmental expectations for performance leading to tenure also gave priority to research.

The nontenured College C assistant professor perceived that the academic profession in general and his department in particular place little value on teaching:

> I knew for my own professional advancement, regardless of where I was, I should focus on publishing and not teaching, that if I wanted to have salary increases and professional mobility, that was just the way it was. In addition, here at this department, it's made quite clear to you in no uncertain terms that, as long as students aren't organizing in open mutiny, they don't care at all what you teach and how you teach. I was given absolutely no assistance or quidelines for instruction. I taught the first term I was here and I was completely left to my own devices. I had to ask for a syllabus of the class I was going to teach. It never occurred to anyone to provide me with the syllabus. I think, in part, it reflects the standing of instruction in the priorities of the department.

He often teaches undergraduate courses with up to 75 students in large lecture halls. In these classes, he said, only about ten percent of the students are very

good while there are "enormous amounts of students who have no business in college and...who haven't been educated appropriately for college".

It is not surprising that this faculty member finds it difficult to relate his responsibilities in undergraduate teaching to his professional agenda:

> I enjoy writing and the different aspects of research. I love doing my field work...and I enjoy going to conferences, and it so happens that's really what the profession at large values. That's good for me. If tomorrow we turned into a teaching profession, I would leave the profession. I don't dislike teaching, but it's what pays the rent so I can do what I want to do.

Similarly, a nontenured assistant professor in College E said she wouldn't be happy if the role involved teaching only, but that she "probably could get by doing research only". However, she prefers to do research in a university, where "you're pretty much your own boss", rather than take a research position in an organization in which "it is dictated what you have to do." At the start of the academic year, this faculty member establishes goals for papers and proposals she wants to write, with the ultimate goal of getting tenure:

> Most of my nonteaching time is spent directing graduate students, writing papers and writing proposals. That's aside from departmental meetings and committees and stuff.

Her department decides the percentages of time that faculty members should spend, on average, in various activities during an academic year (i.e. 43 percent research; 42 percent teaching; and 15 percent service). While this formula is "sort of an informal thing", she said departmental raises are based on it.

The faculty appointment of a nontenured College A assistant professor formally assigns 90 percent of her time to research and the other 10 percent to

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teaching. She teaches one course every other year for upper level undergradu-

ates and graduate students, and teaches occasional graduate seminars. The

role is clearly one she knows well:

> ...with a 90 percent research appointment, in some ways that's easier because, when you're a grad student and a postdoc, that's what you're doing. So, in some ways, it's more of the same...So I came in with the expectation that I was supposed to establish a research program and bring the funds to do it and publish. So that was my vision of what was appropriate...What really counts is your research, and you have expectations about what makes a good project or doesn't make a good project, what it's going to take to accomplish that.

Most of the six other faculty members in the research group indicated their

selection of activities was based on a combination of what they found interesting

to do, primarily in the research dimension, and what they should do, generally in

the dimensions of teaching and service, (e.g. committee assignments or outreach

activities such as public speaking).

Time Allocation Issues

Researchers are highly organized and focused on their own agendas.

They set goals and priorities for themselves and work efficiently to meet them.

As one professor explained:

> I look back on the last two weeks or month and ask myself what I've accomplished. If it's just wishy-washy stuff, then that's wrong. It motivates me to do something different.

Time is a constant issue for these faculty members and one they readily

discussed. A well-established College D professor with a distinguished career

said:

> The biggest problem I think is the time pressure...there is not sufficient time to be reflective about things. One of the things I'm looking forward to in retirement in a couple of years is the opportunity to do research only...and maybe get a chance to relax a little bit, reflect on things more than is possible with the demands on a faculty member's time.

The only solution he has found is to meet deadlines and resign himself to never being caught up on all responsibilities. Several participants in the research group made references to being deadline driven or crisis oriented and talked of work weeks that extend well beyond the standard 40 hours. One senior professor in College E said the tacit expectation within a research oriented institution such as MSU is that faculty members spend 50 to 60 hours a week at their work:

> ...that is something that the university -- the administrators -- also accept and expect. For example, our college has a formula for determining the teaching load and they feel that a research active faculty member should teach three courses a year under the semester system. And they feel that teaching three courses a year is 45 percent of your time. And they're subsidizing you for doing research another 45 percent of your time, and 10 percent is for public service. So, if three courses is 45 percent of your time, I don't think anybody can do a good job. So that's a problem and they, themselves, say, "Yeah, the average faculty member doesn't spend 40 hours a week."

Another College E professor said he was fortunate to be able to function well on only five or six hours of sleep a night. He perceives his sense of time as different from that of others with whom he works:

> I deal with people in state government a lot and I'll call someone on the phone and say, "I need to talk about such and such." They say, "Let's put it on the calendar for one or two weeks from now." Why do that? Why not now? So often we can solve something now, rather than delay. A lot of people who claim to be busy are postponing things so they will have something to do in the future. I solve things immediately and get involved in new things.

This participant also acknowledged that he values work more than many other people do, and he considers the time spent working to be a blessing rather than a burden:

> I fit into a small group that loves what they're doing and would do it even if they didn't get paid. I get a lot of personal satisfaction. I really love my work and it's a dominant part of my life. I can tell people that and they think I'm a workaholic. I would be careful in classifying [people] that way. It implies being driven and is an escape type of thing. It's a demeaning term. My motivation is the joy of the product.

Four participants found time management issues becoming especially acute since they took on certain additional roles. One nontenured female faculty member had a young child and chose to protect her time by limiting committee assignments to those within the department or to temporary search committees:

> It has been complicated since I've had a child...I feel like I miss the luxury of being able to work as late as I want, whenever I want. [L.W.: Evenings are out?] Not totally out, but they have to be balanced against my husband and what time he has or what evenings he needs to go in [to work].

Another female faculty member was elected to serve on a university judicial panel that consumed many of her evenings and weekends. She feels that university administrators do not make allowances for the excessive time requirements of particular committee assignments and the burden they place on faculty members who have not received tenure, which she had not at the point she was elected to serve.

Two tenured male professors had assumed administrative responsibilities that exerted tremendous pulls on their time. One received a major federal grant to establish a research center and said:

It does change your life. Now I'm responsible for keeping a large group of people from 12 departments and [people] outside of MSU on track and meeting all the requirements of [the funding agency]. Before, it was my own lab group and interacting with people in two departments...I never wanted to not be active in my own research, but it is harder to carve out time for my own research now.

The other professor is an administrator in another campus research center and also has difficulty finding time for his own research and writing. He coordinates the graduate program in his academic department, serves on graduate commit-tees and teaches one course a year, but most of his time is taken by routine meetings and crisis-oriented administrative responsibilities. He said, "The question really becomes, 'How much am I going to do and in what role?'"

Relationships Among Role Dimensions

It is evident from the way in which faculty members in the research category talk about their work that research is the core dimension. They see research as the primary source of financial and intellectual capital to enrich their teaching and public service activities. One participant explained the prevailing view most clearly when he said:

The researcher is driving the discipline. My research has driven my activities in instruction. The ideas originally came from my research, but then I was willing to take them down to the instructional level and willing to take them out as far as application. Some people don't care to do that. The main problem is that it is extremely time consuming. If you want to have any depth in your research, that takes almost one career in itself, and then you need to find additional time for the others.

The issue of time pervaded the discussion of relationships among the role dimensions. While all nine researchers saw linkages among their teaching,

research and service activities, the need to allocate time among activities sometimes forced them to look at the dimensions more discretely. As one participant said:

> My research and my giving papers and all of that keeps me current in my field in a way that I couldn't get just from looking at the scholarly literature, and that gets related to my students, and I guess it's conveyed to the students all the way from the introductory classes to the graduate seminars. So, in that sense, I can't make a distinction. On the other hand, they are certainly discrete activities and I have to take time to work on research vs. writing a final exam.

Most researchers saw their relationships with graduate students as involving both the research and teaching dimensions. They enjoy working with graduate students and perceive these relationships as mutually beneficial, in that graduate students keep researchers up-to-date with the literature and, once they enter professionals positions, help link them to new research opportunities and prospective graduate students.

Researchers clearly prefer to teach graduate level courses that are closely related to their own research. For example, the nontenured College A faculty member with a 90 percent research appointment said:

> ...I'm lucky that the teaching I do has been upper level undergraduate or graduate and so most of what I'm teaching is relevant, you know, I'd want to be keeping up in those areas...I would probably feel differently if I were teaching an undergraduate introductory course that I didn't feel was as relevant...

Likewise, the nontenured College C faculty member saw a direct link between doing research and teaching graduate level courses, but saw his responsibility for teaching undergraduate courses as "only using up capital". He said:

On some level they're compatible and complementary. Obviously, to the students you want to bring state of the art knowledge and I think it's important, particularly for graduate students, to be confronted with and put into contact with the actual research that is happening today...For undergraduates, the fact of the matter is that I don't get anything out of my teaching for my research.

Only one researcher mentioned that sometimes, when he teaches advanced graduate courses, "things come up that feed the research", but he did not offer a specific example.

The public service category is defined differently by various researchers and, as might be expected, the tenured senior professors seemed to have a more well-developed sense of how to integrate the service dimension with other scholarly activities. One distinguished College D professor adamantly denounced efforts to divide the faculty role into categories:

...I do not like the categorization of a faculty member's work into teaching, research and service because they're artificial categories that overlap so strongly that they shouldn't really be said as separate entities...The research I do is teaching...I've put out 46 or so Ph.D.s over the years. These are the people who are the leaders of the future...and so our education of them is extremely important and that's research, that's teaching. I do very little independent research. In fact, I really can't name any research I do independently from my students or postdocs...And then the outreach part of it, service part of it, falls into several categories, as I see it. One is we have an outreach to our profession. The ties to the profession are nearly as strong as the ties to the university...That's one kind of outreach...It shouldn't be the only thing we do, but it's one of the things. A second kind of outreach I see is somewhat self-serving in a way. It's for the future and that's to try to outreach to people who are going to be our clients in the future, the people in K-12...So we have a lot of volunteerism going on in regard to interacting with secondary school teachers and other teachers...It's an outreach to try to get them [teachers and students] a little excited in the field of science, so that's done without any thoughts that there'd be any credit [rewards] given for it...So there's that kind of professional outreach to the young people who are going to be the students of the future. And then the third kind of outreach is with

regard to the people who are already professionals in our industry, collaboration with industry, both teaching and extension courses.

He and several other faculty members talked about turning out good graduate students who go on to have successful careers as something they do both as a service to their profession and as a resource for themselves in generating future research and maintaining their professional stature. In this view, professional service and public service are synonymous.

The three female faculty members in the researcher category, two of whom are nontenured and one of whom just received tenure, viewed service on committees within the university as fulfilling their service responsibilities. Although the College A faculty member meets several times a year with clientele groups that fund her research, she wasn't sure how to classify such activities:

> [L.W.: How do you view those activities? Do you view those as service?] I don't know. I suppose you could, but they're really, in a lot of ways, entwined...I may go up and give a presentation to [specific clientele group], but there's a lot to be gained from interacting with the people, too, in terms of what are the problems they're facing and what's happening out there in the field that I don't really separate the two [service and research] that much.

The nontenured College C participant initially drew a distinction between consulting, which he sees as the extension of his expertise to help organizations function better, and outreach, which he sees as "taking education out of the classroom into the community, giving a talk at the local Elks Club, or getting interviewed by the local TV station". But he conceded that there are "a lot of grey zones" among the categories:

> For example, I was commissioned to write a report on [name of area] and I was quite handsomely paid for it. They financed a trip for me to [location] and I was able to do my own research and the result will be published as a chapter in a book. And it so happens that I get credit for the book as extension, but that's perfectly synergistic with my research.

Unlike many of his departmental colleagues, his own involvement in consulting activities flows naturally from and is essential to his interest in applied research:

> To me, as some who sees my ability to consult with the U.S. government in the area of [his specialization] as an integral part of my research, it's a constant reality check. If what you're doing has absolutely no interest in the real world, how valuable could it be?...Obviously, for some people, they would have to make more of an effort to tailor their research in such a way that it's appealing to the world outside but I virtually don't have a choice. If I want to get to [place where he does field work] more than once in a blue moon, I have to find people to finance it.

Collaborative Activities

While the nine researchers in this study want to establish their own scholarly niche and gain a national reputation, they often do so by working with, not in competition with, others. All of them regularly engage in collaborative research and/or scholarly writing with colleagues on and off campus. Even the three nontenured faculty members collaborate with others. As the nontenured College E faculty member said:

> It's nice for a new faculty [member], especially if you're teamed up with someone who is well-established. It allows you to get in the door a little bit easier as far as funding goes, but it's not something you want to rely on. But it's okay to do it a little bit because you can learn a lot from the senior faculty person. It's very beneficial.

For the most part, these researchers select collaborators who have mutual research interests but expertise that is different from their own. Said one participant:

> It's a chance to interact with people and exchange your ideas, do things that you couldn't do alone because of expertise or facilities or time or whatever.

Another participant said his collaborative relationships with people from other countries expose his graduate students to new ideas and methods. And several participants talked about using connections with former graduate students now working in other universities or industries to develop collaborative research projects. One faculty member said it is increasingly common for people in his field be involved in joint research with people in industry, and sometimes former students can be the key to unlocking the door to these relationships:

> In most cases the research originates in the university...[but] we're not set up to do industrial research so we try to find a partner out there who has some interest in carrying out some of the research. I've got a program going now — I have a call in to a former student at [name of company] — where we have some great research going on and we started work here and were really looking for an industrial partner. We had to contact several industries before we found one that was sufficiently interested to carry on joint research...

Another researcher frequently mentioned the "interlocking networks" of people he draws on in writing grant proposals and conducting research. These scholarly networks include people he went to graduate school with as well as his former graduate students who are now professionals. He summed up the sentiments of many researchers in this study when he said:

There are a lot of people that are great at what they do and they like to go in a room and think and sit down at a computer and write and crank out an article a week or whatever they do. I'm somebody that I like to work with other people and consequently, I don't subscribe to the notion that coauthored pieces are less valuable. I think they can be more valuable for an individual's development if they are truly coauthored.

Describing Exemplary Performance

As described by the nine participants in the researcher group, exemplary faculty members are excellent researchers who are well-known in their fields -- maybe even nationally or internationally recognized -- for having created knowledge that makes a contribution to society. They also perform well in other dimensions of the faculty role. One participant said an exemplary faculty member is:

> ...someone who has devised or arrived at a particular knowledge that's the result of their imagination. That subject matter ideally improves the advanced state of knowledge and has real societal value (those two may not always come together)...My ideal faculty member has contributed to knowledge and uses it in an outreach mode and [in] teaching...

The ideal faculty member sustains a high level of productivity over time and continuously seizes opportunities. However, faculty in the research group also believe exemplary faculty members are team players who are oriented to working with others, rather than prima donnas who pursue their own scholarly agendas in isolation from, and often in competition with, others. They are able to put aside their own self-interest for the greater good of the department, the university and/or the profession. One researcher said:

> I think an exemplary faculty member also is honest and responsible in dealing with their colleagues, in the same way that they're honest and

responsible in dealing with students...They should be able to...essentially work against [their] own self-interest when it's necessary to work for a program or a department or whatever.

Exemplary faculty members are able to talk about ideas and share their intellectual excitement with others, including students. They are committed to serving as role models and mentors to students, and are "able to socialize people into the craft" as one researcher said. In the words of another participant, an exemplar is:

> ...somebody who can serve as a good role model for students and colleagues, who's active, who's a good teacher, a good researcher, involved in the profession, who gives good advice to students and colleagues...There are some people who are involved in these things but nobody wants to be around them because they are obnoxious. They think too highly of themselves.

Finally, an exemplary faculty member is someone who not only has a high level of expertise in a particular field, but also applies that expertise in working with others through outreach or teaching. One faculty member who engages in applied policy-oriented research said:

> [An exemplar has] the ability to interact with practitioners in an academic way. I think there are a lot of people that can interact with practitioners and can go out and pal around and commiserate and tell war stories, but to interact in an academic way is to say, "Here is how you can go in and understand what it is you do in a way that will aid you in making changes."

Self-Evaluation of Performance

In terms of whether or not they considered themselves to be exemplary faculty members, the three nontenured faculty members in the research group agreed that the exemplary description they put forth provided worthy goals to

strive for but that it was too early in their careers to make such a judgement of themselves. Of the six tenured faculty members, only one said he considered himself exemplary. One female faculty member does what she thinks should be expected of all faculty members and, therefore, does not consider herself exemplary. One male faculty member said he would always say no to such a question, while another faculty member said he never classifies himself but is satisfied with what he does. The other two faculty members in this group described themselves as "good" and "competent".

In assessing their own performance, researchers generally seek feedback from a combination of sources. Those "significant others", as one participant called them, are different for each participant.

One faculty member has a sense that he is doing well when he receives positive comments from his department chairperson and dean, as well as requests to do things from people off-campus. Another faculty member said that, if he waited for rewards from the department or university, he probably wouldn't be a faculty member; instead, he looks to other sources:

> So, feedback that I get from the agencies that I work for, the students that I have, the people I write grants for, the journals that I publish in, all of those things say that I'm doing a good job...I guess my reward structure has been external...If I want money to go to conferences, if I want a summer salary, if I want to have stature in the field, I need to get out of the university...I need to have a reputation that exists beyond MSU.

One of the junior faculty members in this group said that assessing her own performance was "something I've struggled with quite a bit". When she attends professional meetings and talks to people about what they're doing, she

invariably ends up feeling inadequate in comparison to them. She relies on

feedback from others to break out of her own negativity, but has found it difficult

to come by:

> I rely probably mostly on feedback. It's very difficult to get feedback and
> that's the only way I know...it's far more difficult for me to tell myself that
> I'm doing a really good job. To get feedback in this position, you have to
> do things really, really, really well because they don't really give you that
> much feedback otherwise.

Ultimately, most researchers hold themselves accountable to their own

high standards of performance and to their own internal sense of whether they

are making scholarly contributions to their fields. As one participant said:

> It comes down to what significant advances have I accomplished. I think
> always that the most important thing is to have a vision of what is
> important in the future and I think I'm pretty good at it. Then I would
> evaluate whether I provided important ideas in my field.

And, in the words of another researcher:

> I've always been a strong believer, in both my teaching and my research,
> in having for both myself and my students a high level of expectation. I
> feel that you get what you ask for...I get a lot of satisfaction [from] seeing
> people put an effort into succeeding.

Teacher-Scholars

Like the researchers, the 15 teacher-scholars are intellectually curious and

excited by ideas. But they are equally interested in the intellectual development

and professional growth of students. The teacher-scholar was aptly described by

Nelson (1981) and quoted in Rice (1986, 13) as someone who is:

> ...a widely respected scholar excited about learning and capable of
> communicating this excitement to others, a teacher deeply concerned with
> the welfare of students and eager to have them learn and grow, one who

teaches imaginatively both by books and by personal example, a demanding yet compassionate person who respects the moral worth of students and their potential for growth.

Of the 15 teacher-scholars, 9 were full professors, 3 were associate

professors, and 3 were untenured assistant professors (see Table 4).

Table 4: Salient characteristics of teacher-scholars.

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Total: 15

Role Framework: Research and public service activities are sources of real world experience that enrich classroom instruction.

Core Belief: Use knowledge to educate students who will make the world a better place.

Motivation: Transmitting their intellectual passion to students and leaving a legacy of productive scholars.

Activity Selection: Plan other professional activities around teaching responsibilities.

Major Challenge: Maintaining a balance between their own intellectual development and the professional development of students.

Time Issue: Counseling and advising students with whom they have no formal advising or graduate committee relationship.

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Underlying the professional behavior of the 15 teacher-scholars is the

belief that their fundamental purpose as faculty members is to educate students

who will make the world a better place. Teacher-scholars are motivated primarily

by the internal reward of transmitting their passion for intellectual pursuits to

students, and by the external reward of producing proteges who contribute to

making the world a better place.

<u>Decisions About Activities</u>

In the view of teacher-scholars, teaching is what they are paid to do and is

what distinguishes the faculty role from other types of intellectually driven roles.

One College A professor who has an 85 percent teaching appointment and is

very dedicated to the teaching role said:

> Teaching is number one with me because that is what I'm paid mostly to
> do and that is what I most enjoy and I like to think that's the main reason
> I'm here. So that to me is my highest priority.

> A College A assistant professor also said "teaching is the number one

thing" for himself and for his department. He believes the taxpaying public

expects university faculty members to place the highest priority on teaching:

> I think whenever I talk to taxpayers I'm real comfortable saying it [teaching
> is the top priority] 'cause it's the truth and, boy, if I were a taxpayer and I
> found that wasn't true, I'd be real frustrated because, in general, what I
> paid for is the young adults of this state to get a good education so they
> can go out and make the world better.

This sentiment was echoed by a senior professor in College C, who believes in

reciprocity between faculty members and those who pay their salaries:

> I have a damn good job because a lot of folks in this state work awfully
> hard to pay their taxes so I can enjoy a marvelous standard of living...I
> have an obligation to them. I think that I have to be accessible to the
> students.

> Teacher-scholars desire to be helpful to students, and commonly remark

that people who don't like students and don't want to teach shouldn't be working

in a university. They willingly participate in student recruitment and mentoring activities, and frequently counsel and advise students, even those with whom they have no formal relationship as advisors or graduate committee members. A College D professor recalls being reprimanded earlier in his career when he placed what he saw as graduate students' intellectual needs ahead of collegial relationships:

> ...I was not the kind of [graduate] committee member who would sit by and let a student get into trouble because everybody on the committee is letting them go in that area...At first it got me in a little trouble here because some of my colleagues complained...I was reprimanded quite strongly by a department chairman, maybe about the fifth year I was here, for something called "graduate student interference" and that was after the graduate students would come and talk to me. They didn't seem to respect their major professors as much as they should have after that, and I was told to be very careful about this because I was damaging the trust in certain graduate students' professor relationships. And I just stood up and said, "Well, I'd rather do what my conscience demands that I do than to see that trust be damaged five years after they're out of here with a Ph.D. and have a career that's not going where it should be." And so I do speak up...

This professor has lunch with students almost every day. He said, "I put people really high [on the priority list]. My door is always open."

A College E assistant professor has found that "the research things which are open-ended tend to slip and suffer" because he is conscientious about fulfilling teaching responsibilities and has difficulty turning away students who need help:

> If somebody [a student] comes outside the office hours...I'll accommodate them...There's other faculty that don't do that. I say, well, the guy must need help, or the girl must need help, or they wouldn't call me on Sunday wanting help. I just can't get myself to tell them no.

This perception of caring more about students than other faculty members do was shared by a number of teacher-scholars. A College D female associate professor said:

> I probably care more about my own students and other people's students than a lot of people do, and I consider that very important for a faculty member.

Five of the 15 teacher-scholars are women. Four of them spoke about wanting to be role models and mentors for women and minority students who might have a difficult time seeing themselves as professionals in fields traditionally dominated by white males. A black professor in this group is trying to find time to recruit minority students into her college and to help diversify the curriculum. She even considers her activities in national professional associations as a form of role modeling because she is demonstrating "there are people like me" in the profession.

Time Allocation Issues

Teacher-scholars plan other professional activities around their teaching responsibilities. They take teaching preparation very seriously and rarely miss a class session. A College B professor is a prototypical teacher-scholar in that he continues to be excited about teaching after several decades in the classroom, and devotes a lot of time to course preparation. His attempts to commit the 8 to 10:30 a.m. time slot to his scholarly writing succeed only about half the time because, he said:

I've got to work on my classes and that's because, a lot of times in my teaching, I try to do new stuff. I 'm always kind of dancing on the edge. There are very few courses I teach where I really have a command over the subject matter and I have to prepare a lot. Usually what I do is stuff I don't know all that much about. [L.W.: So you may be teaching the same course title but the contents are always changing?] Oh yeah, yeah and so I'm always kind of on edge. Maybe that's what they [students] take for enthusiasm. It's not enthusiasm. It's fear. I don't know what the hell I'm going to say and I'm really...I mean I think that might generate a certain kind of excitement because...this could go badly, you know. This could go wrong and I've got to be on my toes.

As with researchers, time management is an omnipresent issue for teacher-scholars. Only one senior professor in College A said time was not an issue for him, perhaps because he has been in the role long enough to be comfortable with the amount of time required to do the job. He said:

> ...I guess maybe I don't value my own [leisure] time as much as some other people do and I spend the time it takes to, hopefully, do a good job of both the teaching and the research, and so allocating time has never really been a problem. I've never really run short. I've been able to meet all obligations.

At the other end of the career continuum, an assistant professor in College E said he, too, spends the time it takes to do the job, which requires well more than 40 hours a week. When asked about how many hours he works, he said:

> I don't know because I don't count them. That's part of the problem, you see, which impacts everybody's family life at some point, because you don't count because you think all of this should be done. I'll give you an example. Yesterday was a Tuesday and it was a nice sunny day. I play on a soccer team here [and] I figured that's the best day of the week I've got to go and exercise. So, I went and exercised and, as a result of that...I came back here and, Wednesday I had a mid-term exam [to give]. The exam was half-made. I came here and stayed until two in the morning to have it ready. If it takes until two in the morning you do it. You don't think about it. That's what it has to be.

On the other hand, several faculty members in this group have placed a priority on spending time with their families and have found ways to do so. One College E associate professor spends several half days a week at home with his young child and then works nights and weekends to stay on track. A College D professor learned from his postdoctoral mentor how to "work smart" so there is more time to play:

> ...and I try to work smart on research all the time...I told people at MSU [who hired him] that I wouldn't be in the lab most nights, that my system was I was gonna be home...I've been able to achieve balance in my life. I have a good family life. I've gotten to see my kids.

Since teacher-scholars tend to put teaching responsibilities first and often make time to talk with students, even those who drop by without an appointment, these faculty members often struggle to find blocks of time for research and other scholarly activity. This struggle was particularly evident in interviews with the three nontenured faculty members in the teacher-scholar group.

A College B assistant professor enjoys the course she teaches that is run much like a business, with paying clients, budgets and deadlines. She challenges students in this class to produce a lot of work in a short time because she knows that will be an important skill when they enter the professional world. But this kind of teaching expands beyond the boundaries of a class session and consumes a lot of her time. Now, after several years in the position, this nontenured faculty member is learning to define her research and set priorities:

> ...I'm just as busy as I [always] was, but I'm not doing as many free things. It's like I'm firming up and saying, "No, I don't have time. I'm focusing on this." And I direct them [those making requests] to other people.

A College A assistant professor is particularly disgruntled with "meeting o'mania", which is what he calls the tendency to have meetings for just about everything and the expectation that, if you don't have a class to teach, you should be free to attend. When he needs a block of time for thinking and writing, he works at home:

> There are times when you want to think about something when you can't think very effectively here [the office] because someone will come in and somebody will call and there's always a reason to do something else...I find if I've got four hours to work at home, or five hours, that's more valuable than any eight hours in here in terms of accomplishing thinking related, writing related work...That's the place to really get the big thinking done and kind of chart the future and delve into an issue, that kind of stuff.

Relationships Among Role Dimensions

All 15 teacher-scholars saw their activities in the various role dimensions as linked, but they viewed these linkages in various ways. The majority of participants in this group think of teaching and research as closely coupled, primary activities, and see service as peripheral. What characterized them as teacher-scholars is the emphasis they gave, during the interview discussion, to their interactions with students and how those interactions affect their selection of activities, their evaluation of themselves as faculty members, and their definition of exemplary faculty role performance.

Two College D teacher-scholars have well-defined public service/outreach activities that are closely linked to their scholarly research and teaching activities and, therefore, they work across the role dimensions. As one said:

...everything sort of just flows into one big ball, which is probably good. I think the interactions are very important. To have things in discrete little segments of time would be, probably, not very effective. It might be efficient, but it is not going to be very effective in terms of tying everything together. And I think there is less stress if you can figure out how it all fits together...each part feeds the other part and so each part ends up being a little bit better because of this integration of the whole thing.

Three participants in this group fulfill the public service dimension of their role by engaging in applied research and policy-related outreach activities. Each of them sees these activities largely as sources of real world experiences that can be drawn upon to enrich classroom instruction. As a College C professor said:

...they [professional activities] all run together. The whole purpose is to enable me to bring back into the classroom all kind of exciting experiences...So most everything I do fits into a general plan to benefit the university and to enrich the teaching experiences.

Two teacher-scholars -- a College A professor and a College B assistant professor -- are highly teaching oriented and committed to service in the form of committee work within their departments, colleges and the university. They spend less time on their research programs than on other activities. The nontenured College B faculty member is struggling with how to categorize her professional activities to build a case for tenure, and is confused by the blurred lines between paid consulting and research in her field:

...I really didn't know what research involved [when she first was hired], you know, how I would be rated for what I was doing...because in my area I can get paid for my research, too...if I say that my research is going to be...certain types of projects...with the computer or whatever, I could also get paid for that and a lot of faculty do have a problem with that [being considered research], that it's just community work and it's local or whatever...

Eight teacher-scholars are highly research oriented but, unlike participants in the research category, they consider research to be as much or more about teaching future researchers as about discovering new knowledge. Several of them acknowledged that their way of thinking about teaching and research as tightly coupled, synergistic activities is not shared by all colleagues, particularly departmental and university administrators. A College D associate professor expressed a prevailing sentiment of this group when she said:

> ...I don't think you can compartmentalize the various aspects of this job. There's something that I think is a myth in academics and I hear it all too often from the administration and that is, research vs. teaching, that they're not the same. I have, right now, eight Ph.D.s, three undergraduates and a postdoctoral in my group. Those people require so much of my time and it isn't time that we're spending writing papers together. I'm teaching them. I'm going to the blackboard just like I go in the classroom. I consider the 30 or 40 contact hours a week that I have with my research group mostly teaching...And [the] service side...the things that we talk about in committee meetings are of utmost importance to those other two [teaching and research] so I don't see how they could be separate either...So, if people decide that they should only be one type of person and two of those should take a back seat to the other one, I think they're missing the point.

While these teacher-scholars consistently refuse to think of teaching and research as mutually exclusive, or zero sum, activities, they sometimes talk about one dimension driving the other. For example, a College E professor expressed the view that a faculty member must be an accomplished researcher in order to be an effective teacher:

> My experience is that it is more likely for a good researcher to be a good teacher than for someone who doesn't do research to be a good teacher. ...I keep seeing all these studies on teaching vs. research and that's not been my personal experience. My personal experience has been that most faculty members are good at both or good at neither....There are a

few that don't fit that mold, but the majority do...I can't imagine how I'd know what, in teaching a course, was important and wasn't important if I didn't do research. I wouldn't understand the field...I'm very skeptical of people that just go in and deliver a lecture and call that a career.

On the other hand, a College D professor spoke about how a particular teaching assignment has profoundly affected her research program:

I was assigned to teach [a particular subject] and that has had a very important impact on some of my research and it's an awesome task to teach [this subject]...Sure, you can take an old textbook and teach the students what the old textbook says. That's easy. But, if you try to follow what those fields are doing, it's unbelievably time-consuming [and] demanding...Because I teach [this subject], I go to certain types of [professional] meetings that I wouldn't go to otherwise, and I've really become a [specialist in this subject].

A different way of thinking about the close connections between teaching and research was expressed by a College E associate professor. He drew a distinction between "teaching" students, which he perceives as more of a classroom or course related activity, and "educating" students, which he considers a broader term encompassing research activities:

I feel that our first priority here is to educate students and I consider research just a tool to educate the students so that, to me, research should be a priority because that's how we educate graduate students for advanced degrees...I think some people may...do research to prove what big scientists they are but...what do we do here? We give the most important work, which is the laboratory work a lot of the time, to the least qualified people, who are beginning graduate students. We put them on a project that's very important and we say, "Go to it." In all honesty, we probably could take the grants that we get and hire advanced engineers...and then really do the research, but then you're not educating students...

Similarly, a College D professor considered himself "fortunate to be an educator", which to him meant, "I need to have people become the best things that they can

become and that's the way I approach my day". Besides being an educator, this

faculty member thought of himself as "a big league researcher" and considered

that a full-time job in itself. His faculty appointment is evenly split between

research and teaching, but he puts four times as much effort into research:

> The thing that saves me is teaching one or two courses a year. When I do
> it [teaching], I really do it ...Right now, I'm in stride with my research...that's
> what I'd place a high value on in the university. Is service equivalent to
> profound research? No. That [viewpoint] upsets some people...Some
> research should be evaluated more highly...I question the whole land grant
> thing. I'm not sure I believe it totally, that we exist primarily to serve the
> clientele...The whole extension system is questionable...my applied stuff is
> for really rich growers and we help them make much more profit. We're
> serving really big business people...who get cheap research.

Likewise, a College C professor thinks research is her "primary

professional activity" and spends most of her time doing research "because that's

what I want to do and I feel what I do [in research] is important". But, throughout

the interview, she also expressed a strong commitment to teaching at least one

class every term, to developing new courses when students express an interest

in certain subject matter, and to getting doctoral students through their Ph.D.

programs. About the relationship between research and teaching she said:

> ...through teaching we often recruit research assistants, so I talk about my
> research in class and they get excited about that and they say, "Can I
> come work with you?" And they work on the [research] projects as
> undergraduates. Some of them...even become interested in a grad school
> career because of it.

<u>Collaborative Activities</u>

All 15 teacher-scholars said they have engaged in collaborative scholarly research or writing activities. But, in contrast to the high level of collaboration among those in the research group, the teacher scholars' levels of collaborative involvement ranged from four who said most of their research is done alone to one who said, "Most everything I do in research is done with somebody else". The latter participant said:

> It's true that there are a lot of empire builders [in the university] who don't want involvement with other people. Most of us here [in his department], myself included, are contrary to that mode. We see what we do as very tied to what other people do...

A College C professor limits his collaborations to coauthoring papers with graduate students because, he said:

> I've got my own agenda [and] things I'm interested in...Obviously, I talk with lots of colleagues, but I'm not very strong on collaboration. It is very time consuming...I don't have time because my days are filled with other kinds of things that I enjoy doing more than arguing about how to cross the t and dot an i...

Likewise, a College D professor said that, while he does "bounce ideas off of other people", he is "sort of a loner" when it comes to research and writing. A College E professor has been part of an interdisciplinary research center on campus but the majority of his work has not been collaborative because, he said, "the push toward collaborative research" was not operating when he was socialized into the faculty role:

> ...I took my cue from my advisor a lot, and my advisor lived in a world where he was the principal investigator, the individual investigator. That

was the mode that he operated in and that's the mode that I have predominantly operated under.

A College E associate professor has several joint projects in which he does his own research and then meets with the other faculty members to exchange ideas and coauthor papers. He said these collaborations have definite benefits:

> ...there's a great synergistic effect as far as progress and understanding and knowledge exchange and those kind of things...because we teach each other...It makes it easier to obtain funding [when] you have interdisciplinary projects. It makes the overall project more attractive to external [funding] agencies...

But the drawback for this faculty member, and many other faculty members who collaborate, is the frustration caused by working with people who think and write in a different way and at a different pace.

An important element for effective collaborations cited by several teacher-scholars was that of compatible personalities. A College B professor who has coauthored several books said, "I think you have to like the other person and be able to get along with him or her". Part of getting along, for this professor, is being able to accept criticism about the work from the other person or persons. A College D professor has collaborated with other researchers because he likes them and finds it fun to work with them:

> I tend to gravitate toward certain kinds of scientists that I see characteristics and traits in them that I really like and admire and there's some of the birds of a feather thing...I tend to gravitate towards people who get excited about science...

A similar attitude was reflected by a College C professor, who conducts research with a group of people she was in graduate school with because they have complementary interests and skills and because "we liked working with one another".

All five women in the teacher-scholar group engage in collaborative work. Three of the women are in so-called hard sciences in which the traditional norm of working alone has begun to shift to more interdisciplinary approaches. One College D associate professor eloquently expressed both the conventional standard and the shifting paradigm in science research:

> ...in science, there is a hierarchy of what is considered the pinnacle of research and the pinnacle of research is basic research that you do by yourself and that's what gets the most accolades...So they [applied and collaborative research] are definitely, in the pecking order, not what gets the highest accolade and, to a certain extent, maybe not even the same amount of respect as the single man working in his laboratory, burning the midnight oil and working with one graduate student or something -- the physics model of science...Collaborative research is starting to get more important and it is starting to gain better respect and people are paying attention to it I think, number one, because the federal government is funding those kinds of initiatives. And they've made it very plain that they are going to fund interdisciplinary research and you can either jump in the boat or not.

This faculty member has had no problem jumping into the collaborative boat with another female scientist. They bring a complementary set of skills to bear on an area in which, after five years of working together, "we are starting to make some really interesting contributions", she said.

Another College D female professor began collaborating with a woman on campus after they both served on a graduate student's committee and

discovered mutual interests. Unlike some faculty members who disliked having to compromise with collaborators, this College D professor said she learned a lot from the process of negotiating with someone of equal power and status.

Collaborations between people of unequal rank may not be as beneficial for the more junior faculty member according to a College D assistant professor, who said that the "pecking order" dictates the more well-known of the collaborators will get most of the credit for the work. But she felt collaborations were, on balance, productive partnerships for both herself and her students:

> Normally, you don't know some aspect of the work, which is why the other person is helping you and vice versa, and your students benefit tremendously. They get to see other facets of the field that you're not capable of teaching them. It's even better if you send students to the places where your collaborators are and they can see firsthand what's happening.

An assistant professor in College B mentioned that her collaborations benefit students in terms of broadening their view of types of employers to consider in job searches after graduation.

A College A professor does some collaborative research with former students and recently coauthored a textbook with one. He routinely publishes between four and six scholarly papers a year with multiple authors and believes, "There's credibility in numbers of authors." One the other hand, a College A assistant professor whose studies are often politically sensitive said governmental agencies want to be able to hold an individual accountable for the research results:

> One of the things that worries me sometimes about collaborative efforts is...somebody has got to take charge, or the buck will stop with them, or

whatever and sometimes I get concerned with collaborative efforts that it's just kind of an excuse not to...take the blame, or take the heat...I think if the university doesn't have people who can say, "The buck stops here," they have a serious problem.

Describing Exemplary Performance

In discussing exemplary performance, 9 of the 15 teacher scholars first mentioned a commitment to teaching or working with students before discussing other aspects of the role. All of them referred in some way to the need for exemplary faculty members to have positive relationships with students.

For a number of teacher-scholars, the ideal of meeting student needs extended beyond concern for their intellectual development to a concern for students' personal development and a willingness to spend time talking with and listening to students. As a College A assistant professor said:

> They [exemplary faculty] need to have a concern for students...It's a tough life and people are not immune from life's problems when they're in school. You can't be their buddy, but they have problems and you need to work with them on them.

A College D associate professor felt an exemplar should be accessible and "interested in the welfare of students not only that they teach but also any other student that happens to pass by their door, their lectern or their lab".

For teacher-scholars, being a good teacher involves being enthusiastic about one's field and "good enough" to be solving problems and making a contribution or, otherwise, "you're probably going to go stale". They viewed exemplars as people who worked well with other people -- whether students, colleagues, or off-campus clients -- and were team players with cooperative

attitudes, were generous with their time, shared what they knew with others, and were willing to listen and give feedback to colleagues. As a College D associate professor said:

> I would describe the [exemplary] person as someone who's not so cognizant and keen on the ways to make themselves advanced in their field and to get awards and become famous, who's not so narrow-minded that they wouldn't take on unusual tasks or outreach endeavors...someone who works very hard on their teaching and on their research...and does community service and doesn't shy away from something that they get no credit for, that no one is ever going to find out about, that you can't put on your resume...I don't think an exemplary faculty member is ever aware of what you get credit for and what you don't get credit for...

As examples of nonexemplary performance, several teacher-scholars referred to faculty members who teach "because they have to", who have office hours only at set times, or who "have their loyalty to the discipline". A professor in College A said:

> Now, there are some people that are outstanding researchers but you can't work with them and you can't get any counsel from them at all...and yet they'll have a good reputation. The people that I work with around the country are very cooperative.

Another aspect of exemplary performance mentioned by a number of faculty members in this group was a commitment to serving the university, either through committee work or by being a positive representative of the institution when dealing with the public. Two participants felt that being loyal to the university and conscientiously fulfilling faculty role responsibilities was part of being accountable to the taxpayers who supported them.

Self-Evaluation of Performance

Only two teacher-scholars -- one tenured and one nontenured -- said unequivocally that they were exemplary faculty members. Seven tenured faculty members said they were striving for the kind of performance standards they set forth in the exemplar description, but were hesitant about saying they had achieved the standards; three of the seven made a point of saying there was not one faculty exemplar type. According to a professor in College D:

> I wouldn't hold myself up as exemplary of doing all things just the way they should be done...If everyone did like me, we'd be lacking...I look suspiciously at the idea of all [faculty members] being good at all things...We should all pitch in with service things, but for administrators to demand that of all of us is unrealistic...if you homogenize everyone, I'd fear for that...

Two teacher-scholars -- one tenured and one nontenured -- said there are always people whom they think are doing a better job than they are. And four others appeared to not spend much time thinking about exemplary performance or whether their performance measured up to some ideal standard. As a College B professor said:

> That's not an idea I had thought about before...I'm not self-conscious or reflective about what I do...I don't have a career plan. I don't project what I want to be doing in so many years...

In discussing how they go about assessing their own performance, teacher-scholars tended to talk first about their teaching performance and relationships with students. For the most part, they trust their own perceptions of their effectiveness as teachers, and use student feedback as a secondary sort of measure. As a College B professor said:

> In the classroom, it's whether I think what I'm doing is good, and I can tell when I'm good and when I'm not in my own eyes. That's independent of what the students think. Like this morning, I wasn't real good. I've been better. Some days you're on, some days you're off...Now, I think the students thought it was pretty good, but I know it could have been a lot better. So that's one thing. And I'm interested in what the students think. I'm interested in how into the stuff they are. I'm interested in how good their work is and that's a reflection of what I'm doing and I'm interested in their evaluations...

Teacher-scholars put some stock in results of student evaluations processed by the university, but several spoke skeptically about the meaningfulness of teaching performance data that fails to take into account the many variables that can affect student assessments. For example, a College E associate professor said:

> We do the [name of student assessment] form in our department and mine are usually pretty good, but I'm not so sure that's a real measure of teaching effectiveness. Obviously, if you're easy on a class and you give them all A's, they're gonna write on their...forms, "This guy is the greatest professor in the world"...I like to get a...form that says the instructor was prepared. He presented the material clearly but the homework was too long and the exams were too hard and, if I get...forms like that, I'm satisfied because I think I challenged them...But I think I really go more on how I feel the class is doing as far as motivation and interest.

A number of teacher-scholars discussed their own systems for assessing their interactions with students that went beyond the formal end-of-the-course student ratings forms. Among the criteria used by one College D associate professor were:

> Numbers of students that come by and talk to me on a personal level about the class...The number of students that, after they've had the class, will come and ask me to be on their graduate committee. Numbers of students that come by and make a special trip to say goodbye when they are all finished...

Other teacher-scholars mentioned receiving thank you notes from students' parents, getting letters and business cards from students after they graduate, being able to attract high-quality graduate students, getting students through Ph.D. programs, receiving recognition from alumni, and even being greeted by former students in airports and other public places as forms of feedback that let them know their performance as teachers has been effective.

One professor in College E said he knows he has done well as a teacher because of the absence of any negative feedback about his teaching, as well as by the fact that students prize his course notes:

> My notes are in demand...all my notes are written out very, very carefully and reworked every time I teach the course and I literally have students come by and ask to buy my notes...I get them lined up outside my door saying, "We're not taking the class, but can we buy the notes?"

Teacher-scholars also talked about the importance of receiving positive feedback about their scholarly work in the form of funding from outside agencies, critiques of work entered in competitions, having teachers use their textbooks, getting good peer reviews of grant proposals and scholarly papers, and getting articles published. One College A assistant professor feels good about his applied research when he knows he has been able to "break a logjam" or that he "provided that spark to get things lighted up".

Most teacher-scholars felt it was important to get some external feedback in order to evaluate their own performance. One nontenured assistant professor in College E went as far as saying that receiving feedback from others was the only way he knew how he was doing, because he never felt he was meeting his

own standards. A more senior professor in College D acknowledged that, "...all scientists are neurotic [and], in general, they think they don't do well enough". She constantly strives to be the best she can be and is interested in continually growing and changing. But she is satisfied with her teaching performance:

> I really think I'm a good teacher and I trust that. I don't have a huge amount of question about that.

Most of the teacher-scholars look to their own internal performance standards as the ultimate measure of their work. Even when they haven't been able to get a particular piece published or have received negative reviews on a paper, they trust their own sense of the work's merit. As a College E professor said:

> ...if I get a bad review for a paper, I read it. If the person is right, I say, "Whoops" and I go rework it. If they are wrong, I say, "They are wrong", and that's that...There are times that I do say, "I wish I had published more papers. I wish I would have had more grants," but everybody does that, I think...You know, I think I could have published more papers and gotten more grants if I'd have taught less, or put less effort into my teaching...but I'm reasonably happy with the balance [between research and teaching].

Teacher-scholars hold themselves responsible for passing on knowledge to students and others who might need it, and evaluate their own performance on the level of motivation and competence demonstrated by those with whom they work -- primarily students. As an associate professor in College D said:

> I have an internal calibration for when I know I'm doing well, and I think it's noticing how people are doing around me. If I'm working with people -- and the people are mostly my students -- and they're flourishing, then I must be doing a good job. If they're floundering and they have a bad attitude, I must not be doing a good job. So I use, as a measure of it how people are doing, whether they're performing well. Are they learning the material or not? I hold myself responsible when things aren't

happening...if you don't motivate people and you're not inspiring them, I don't think you're doing your job.

No matter how many years they've performed the role, faculty members in the teacher-scholar group appear to be deeply committed to doing a good job as defined by themselves and others. They are not complacent. One College D professor summed up the prevailing teacher-scholar attitude when he said:

> I feel I want to be a hard worker...It's a real privilege to have the kind of job I do. A lot of people are waiting for jobs like mine. It's a privilege to be here. I'm not just putting in time.

<u>Integrators</u>

Seventeen participants were categorized as integrators on the strength of the interconnections among their research, teaching and public service activities. Of the 17, 13 were full professors, 2 were associate professors, and 2 were untenured assistant professors.

Underlying integrators' professional behavior is the belief that their fundamental purpose as faculty members is to use knowledge to directly benefit society (see Table 5). They are motivated primarily by the internal reward of what they describe as making a difference, having an impact, or being of some use to society.

<u>Decisions About Activities</u>

Three of the 17 faculty members in the integrator group -- one full professor from each of Colleges A, D and E -- were not engaged in all of the role dimensions at the time of the field interviews. However, they were categorized as

integrators on the strength of their commitments to using knowledge in direct

benefit to society, and the closeness of fit with other faculty members in this

group regarding how they think about the faculty role.

Table 5: Salient characteristics of integrators.

Total: 17

Role Framework: Research, teaching, and public service are blended in a unified effort.

Core Belief: Use knowledge to directly benefit society, or specific societal group.

Motivation: Having an impact, making a difference, being of use to society/clientele group.

Activity Selection: Determined partly through interactions with those who need their expertise.

Major Challenge: Gaining acceptance of their work within the hierarchical value system of the university.

Time Issue: Accomplishing more in less time.

Both the professor from College A and the one from College E had

teaching responsibilities for a number of years but eventually dropped them in

order to expand their extension activities. In spite of a self-described "real strong

interest in teaching", the College A professor found it increasingly difficult to teach

courses that were not closely related to his research and extension interests:

> I thoroughly enjoyed teaching. I liked the students and that relationship, you know, and I liked it when they came back to see me and that was great but the subject [he was teaching] was so different that there wasn't a close overlap with extension and research, so that was a frustration...so I decided to deemphasize teaching...

Besides the lack of synergy with his other professional activities, he decided to deemphasize teaching also because of his perception that the college's reward system gives the highest value to research, followed by extension and then teaching. This College A professor sees himself "first and foremost as an extension specialist" and, therefore, selects activities based on the needs of industry clientele with whom he has forged a working relationship:

> You have to develop your network linkages to key people in the clientele you're trying to serve and develop their respect for you. Then you can help them with information...that's a way of leveraging your activities and that is a criterion that I use in selecting activities -- something that will fit well through organizations [with which] I have strong linkages, and it has a big impact for my amount of time, as opposed to going to a lot of individuals.

The College E professor began his career with an academic appointment evenly split between teaching and research and now has an 80 percent extension and 20 percent research appointment. Like the College A professor, he found himself repeatedly teaching a course that did not fit with his evolving research interests, whereas his extension activities could be closely coupled with the changing focus in research. This professor enjoys the flexibility the faculty role offers him to do what he wants to do, within the limits imposed by his designated area of expertise, the faculty evaluation process, and his own sense of obligation to be of service to the academic institution of which he is a part. At this point in

his career, he chooses to focus more on writing for trade publications, as opposed to professional journals, and is taking on more professional speaking engagements and international activities.

The College D professor is in the later stages of a distinguished career as a researcher and teacher. Several years ago, he opted to take on a largely service role that involves making university resources available to a particular professional group engaged in continuing education. His interest in the service role was catalyzed by his involvement in a university task force some ten years earlier.

As stated earlier, the 17 integrator faculty members are distinguished from other faculty members by their strong commitment to using knowledge on behalf of society, or specific segments of society. Integrators use two primary criteria in making decisions about which professional activities to engage in: 1. what they like to do; and 2. what is worth doing. The latter criterion is determined, in part, by requests from those who need their expertise or by funding sources that will support certain activities. In addition, integrators have their own internal standards regarding what is worth doing, based on their beliefs about acceptable academic performance.

A College A professor makes decisions about his activities, in part, according to available research funding. He described academic life as:

> ...sort of a never-never land of opportunity to basically do what turns you
> on and that you can get support for and that you can convince other
> people...is a good, worthy effort. You do that by getting research
> funds...It's very funding driven, but we also decide to do what we think

we'd like to do that's worth doing...It's all fueled by the desire for intellectual stimulation. This is not meant to be self-serving, but intellectual stimulation is what distinguishes these [faculty] kinds of jobs.

Four integrator faculty members mentioned structuring their activities around teaching schedules. One of them, a College A associate professor, said he refuses to go into the classroom unprepared. After allowing sufficient time for teaching responsibilities, he sorts out priorities for research and extension based on a sort of squeaky wheel system:

> I get three or four phone calls and then people are on my case and there's a lot of interest [in a project] and support is there. If I have an idea and nobody else is excited about it, I say maybe the door is not open.

Likewise, another College A professor does what has to be done first, such as meeting a grant proposal deadline or preparing and delivering a lecture. He also places a high priority on responding to questions and needs of graduate assistants, whom he considers an extension of himself in conducting the research program. He has the most difficulty in scheduling time to writing journal articles, which generally do not have deadlines.

The three integrator faculty members in College B each had difficulty finding time to focus on research. They all placed priority on teaching and outreach or service activities. One, an assistant professor, has concentrated on being a "good colleague" by engaging in both outreach and university service activities. She said:

> ...The last couple of years, the public service activities I've taken on were the ones that I thought would do the most good for the most people in the state...and also that would bring MSU into some kind of visibility for [student] recruiting purposes. And, as far as department and college work

goes, I stayed on a couple of committees where I really thought my expertise [was needed]...

At the time of the interview, she was struggling to find a block of time not committed to service for use in launching her research, which felt to her like "a big task to get started on". The College B associate professor in this group also found it difficult to focus on research. He estimated about half of his time was taken up with teaching and much of the rest was spent accommodating the needs of student advisees and K-12 teachers --two groups to which he has made it a priority to be accessible. Of his outreach activities he said:

> I usually go to the things that I enjoy doing. I do enjoy outreach. It's time consuming, but it's worthwhile and benefits our department in certain ways. Word is spreading among teachers in the state that they can look to us for guidance, for ideas. They will call me with questions and that's real important...for them to feel like they can consult university faculty and find out what's going on.

Most of the integrators are well-established in their careers. Their expertise is frequently sought, and they are rarely at a loss for new projects. As a College C professor said:

> I let a lot of activities develop...I do a great deal of consulting work and so I don't decide to do a consult. Somebody calls me and says, "We want you to help with a [specific request], or we want you to conduct a workshop", or whatever. I certainly make decisions about whether I will do things or whether I won't. A lot of that has to do just simply with cost/benefit -- costs in terms of your time and the professional or monetary benefits.

Similarly, another College C professor said:

> You try and do things that you think are important. That's usually pretty easy. I mean, this world is sufficiently screwed up that it's very easy to find things that are very important to work on. You don't lack for work if you're concerned about improving the human condition...

This faculty member chooses projects based on where he thinks he can have the most impact and can still learn something of scientific value that wasn't known before.

Having a positive impact on the well-being of others is also an important value for one College A professor. He decides whether or not to take on a new activity by asking himself: 1. whether he can fit it into his schedule and 2. whether it will make a difference to the institution and the department in which he works. Another College A professor is motivated to continually strive for greater professional achievements by the ego gratification of earning the respect and esteem of colleagues. He said:

> One of the fortunate things is that I enjoy what I do. I enjoy writing, I enjoy teaching, I enjoy evaluating a research project...It is not a task. It is not drudgery. It is not something that I feel I have to do. It is a goal that I set inside and I say, "Now, I'm going to do it"...

Time Allocation Issues

Invariably, integrators find themselves with a long list of possible activities and, as one said, "time is the most precious commodity". While most of them talked about enjoying the flexibility, intellectual stimulation and sense of accomplishment derived from a multidimensional faculty role, some felt overwhelmed by external requests and overextended in too many areas. They grappled with what to say no to and how to accomplish more in the least amount of time. This was the case for full professors as well as for nontenured faculty members in the integrator group. Said a College D assistant professor:

...if you have too many things going on, too many pots on the stove, then it would be hard to satisfy them all, and it is something that I've thought about a lot lately...I think there is a lot of quantity sacrificing quality work. You try to get a lot of different things done, but no one thing is really, really high quality. So it is a hard balance to strike...I would really prefer to be much more narrowly focused so that I could do a really excellent job on the few things that I am trying to do...

Likewise, a College A professor worried about sacrificing the quality of his

work because of too many external demands not of his own choosing:

What happens is that things are thrust upon me, either by the department or the university or college, or your own professional activity, and a few of them you can plainly say, "No, I don't have time". But most of them are suddenly yours and you have to do with them what you can. And so I find myself having to accept work that is not the quality that I would want it to be...in order to get as much out as is demanded of me...

After talking about a colleague who decided to take a 10-month teaching

appointment because he felt his research was no longer making a difference, this

professor conceded he was not ready to give up a multidimensional role.

Consequently, he has been "wrestling with time management" to improve his

efficiency.

An integrator in College D acknowledged that, along with success in her

career have come extraordinary demands on her time and, she said, "...I have to

be very cautious to keep my own agenda in focus..." She has taken on what she

called three half-time jobs that require spending nights and weekends to keep up,

but tries to make sure that all her activities (e.g. teaching, committee work,

professional service) relate to her own research agenda. This professor finds it

difficult to say no, in part because she was raised to believe that:

...one of the things that women are put on the face of the earth for is to be helpful to other people, to sort of keep everything going, and so it's hard for me to be as mindful about myself as I need to be.

A male professor in College B talked about having to take on two full-time

jobs -- one as a faculty member and one as a creative entrepreneur -- because

he feels the university supports faculty in certain areas more than others,

including his own. As a result, he said more of his time and effort is required to

achieve an acceptable level of professionalism:

> ...There are really two tiers of quality at this university. One is very high and the other is very low in terms of support...To get out of that low group, you have to sacrifice other things. You have to sacrifice time with your family. You have to sacrifice money. And, if you're willing to sacrifice both of those things, you can achieve at a level as if you were a quality supported faculty member at this university.

On the other hand, a College C professor believes most pressures he

experiences from his faculty role are self-imposed because of his own need to

accomplish. He finds that making time to engage in activities outside the

university is essential to balancing his personal and professional lives. He said:

> Sometimes I'll get myself overcommitted and all of a sudden I look and say, "Holy smokes". I see colleagues around who say, "No, I don't want to do this or that," so you want to help out and contribute. A lot of us probably get into that trap now and then. A lot of pressure is self-imposed. We have so much freedom in our positions now that, without self-imposed pressure, it would be really easy to not do anything. Friends outside the university have a real difficult time figuring out how somebody who works in a university motivates themselves to do anything...I could say some lofty things about being internally motivated about what I like to do, and there would be an extent of truth to that, but those guys [friends] would just take another swat at the golf ball and walk down the fairway. They respect what I do, but they don't understand why I would do it.

Relationships Among Role Dimensions

The way in which faculty members think about and act upon the interrelationships among role dimensions of research, teaching and public service served to categorize them as one of three primary multidimensional faculty role types identified in this study.

Those categorized as research faculty saw research as the primary source of financial and intellectual capital to enrich their teaching and public service activities. Teacher-scholars tended to think of teaching and research as closely coupled, primary activities with public service as peripheral. To faculty members in both the research and teacher-scholar groups, public service activities tended to be of lesser importance than research and teaching. Some regarded as a form of public service the education of students who would be future leaders of academia, business, industry, and government. Others thought of public education, such as speaking to community organizations and K-12 classes, as service. Those who engaged in applied research and policy-related activities as part of public service saw these activities largely as sources of real world experiences that enriched their classroom instruction. Some faculty in both the research and teacher-scholar groups did not engage in public service per se, but talked about their service on university or professional association committees.

The salient characteristic of integrators was the strength of their commitment to public service and the way in which they thought of it as highly synergistic and integrated with their research and teaching activities. They

frequently mentioned service as the source of real world experience that gave

them professional credibility with the various groups with which they interacted --

such as students, funding sources, government agencies, growers or other

clientele groups. One College A professor expressed the integrator view well

when he said:

> ...If I'm going to do an excellent job of teaching, I feel it's important to stay
> abreast of the literature, to stay abreast of what's going on in the particular
> area that I'm teaching and since I am...teaching students who will be going
> out into the industry, I feel it's very important that I remain worldly to the
> industry, to know what their needs are, and these students...they're looking
> for information that will help them get a job and, in order for me to be in a
> position to assist them, I need to know the industry as well...I find
> interacting with the industry provides many of the ideas for research
> projects, problems that they're having, the needs that they have, and not
> all but a certain percentage of the ideas that I've got have come directly
> from...seeing what the needs are and then being able to come back and
> ...work on it...I guess information from the extension...flows directly toward
> my research program and toward my teaching program. It provides the
> worldliness...and that's why I feel that component is so important.

This real world component of professional activities is variously described

as "extension", "outreach", "public service", and "service" by faculty members in

this study. Their word choice depends partially on their academic discipline, their

academic appointment, and their career stage. "Outreach" is a term used at

MSU only for the past few years and, therefore, lacks a clear definition among

faculty members.

A well-established professor in College C used only one term -- "service" --

and thought it clearly meant "being of some use to society":

> It's [a definition] shared by a group of us in this sort of corner of the
> department, and I think it's probably more in line with what this institution
> means by service...I think that's what MSU means when they mean

service. I don't think they mean service on university committees, or being on your professional association's committee...I think they mean figuring out ways to produce a better automobile, or helping the legislature, or something out there, not in here.

In fact, this professor's definition closely fits this study's faculty exemplar description of "exceptional public service" as "the successful extension and application of knowledge to address the needs of people at local, state, national or international levels through activities that build on the faculty member's professional expertise".

A College D assistant professor used the three words interchangeably, but was obviously trying to sort out possible differences among them in his own mind:

> ...service or outreach or extension has to proceed out of research, first of all for the dollar aspect and, secondly, because you generate new knowledge and ideas [from research]...And I've started to adopt an attitude about what service means...in my opinion, it has to be linked somehow to programming..and not just reactionary – I'll make a trip here, I'll answer these phone calls here...So when I go in for tenure, I'm going to have a package. I'm going to say, "I've developed these extension or service programs. This is it. This is my extension".

When asked whether he thought these words meant the same thing, this faculty member said "service" was most often used by people in the university to refer to activities internal to the university, such as service on committees, whereas "outreach" and "extension" were "intermixed" terms that applied to activities taking place external to the university.

A few integrators, like the College D faculty member mentioned above, had formal extension appointments and percentages of their time were assigned to the three role dimensions based on funding sources. But, for the most part,

they did not think about or enact the role by consciously dividing their time among

separate activities. As one experienced College A professor said:

> I think an effective three-way appointment is one that is not segmented.
> The research that I do complements my extension activity. I hope my
> extension activities can [identify] what research needs are out there.
> There is no doubt in my mind that my teaching style and whatever I do
> while I'm teaching is the result of having given 14,000 different
> presentations at meetings around the state over the years...[And] being
> able to back up what you say by doing it has tremendous credibility.

Even those integrators who weren't formally assigned to public service

activities felt that extending knowledge to some segment of the public was a

natural outgrowth of their faculty role. A College A associate professor with no

formal extension appointment said he does "quite a bit of extension", which he

categorized in the following way:

> That's the applied end of research. Most of my research...is not done on
> university [locations]...It goes directly to the [users]...Extension is teaching
> and extension is research...I'd say half of extension is strictly teaching
> outside the classroom to the toughest students that exist, because they
> are not gullible...they don't accept phony answers...So, half of extension is
> teaching to people who are right on the firing line...It is taking the state of
> the art and bringing it to the adopters.

One College B professor said the interconnections among research,

teaching and public service activities are what distinguish a university faculty

member's role:

> They [professional activities] have to overlap, absolutely have to overlap
> and, to be honest, that's part of the reason I wanted to do creative
> commercial [his specialty]...I would say ten percent or less of the students
> that we graduate from this department in [his field] ever do anything in any
> significant way in fine arts...And over the last five or six years, I have
> started to introduce more real world...problems and real world...concerns
> as elements in assignments as well as in the lectures that I give...you

know, the interaction of service and research and teaching are what make you a university professor instead of a high school teacher.

Whether they call it extension, outreach or service, the integrator faculty members are committed to applying their knowledge and expertise to societal needs. Most don't think of the role in any other way than as an integrated whole. For example, a College C professor directly involves graduate and undergraduate students in his field research on community problems:

> ..three of the seven [research] projects I mentioned to you involve grad students [and] involve undergrads...We have 170 undergrad students a year involved with two large [specific type] research projects...There are grad students who staff them, who collect data, who train undergraduates who collect data, and so on...I don't know how to do this work any other way. It's not because I think it's the best way. I just don't know of any other way so far.

Likewise, a College A professor thinks "getting the word out to the public" through workshops is part of his responsibility as a faculty member for public service. He said, "That's the difference between doing basic research that only one's peers look at, versus applied research which has to be used." This professor said his activities in the three role dimensions produce "benefits [that] are all intertwined".

A College D professor consciously tries to connect her activities in teaching, research and public service:

> I work very hard at trying to make sure that the bulk of what I'm engaged in is in fact helping each other. The curriculum development work that we do shows up in the way in which I teach. Activities that we work on [in her research project] will show up in some version in the courses that I teach...I don't have a whole bunch of different hats that I wear. It's just that one hat is a very big hat.

Similarly, a College E professor said:

The research that we do gets incorporated directly into our classes, particularly in graduate classes, so those two functions are almost inseparable because most of the research we do is sponsored by government agencies ...and they are pretty much problem-oriented type research [projects]...And they have direct applicability then in the classroom in terms of teaching the students what kind of problems are encountered in practice and how to go about resolving those problems. Out of that...association with various sponsors have come public service type activities, for example, short courses...so those are almost inseparable in the sense that they want us to take our research findings and, basically, our backgrounds as teachers and convert that into a technology transfer activity...

One College B associate professor viewed his activities as discrete, in that he was aware of engaging in different things when he did teaching, research and outreach. But he tended to flow in and out of all three kinds of activities in any given day, and clearly saw connections among them. Similarly, a College A professor was aware that teaching, research and extension activities were supported by discrete funding sources, but he also considered the activities to be connected:

Teaching is based, hopefully, on the total person we are. Extension and research are sort of discrete and yet they merge in so many mutually beneficial ways...Extension programs are largely research driven, not only in terms of actual funding but most certainly providing the knowledge and experience base on which an extension program can be generated.

Another College A professor expressed the idea that teaching is based on a faculty member's total life experiences:

I can't imagine not bringing my real world experience into the classroom, and some of those real world experiences come out of my extension work, some come out of my research, and some come out of the act of living, just being involved in things, decision things, activities...

<u>Collaborative Activities</u>

Not surprisingly for a group of faculty members strongly committed to extending their expertise, all 17 integrators engaged in collaborative activities, some at high levels of interaction with other faculty members and with people off campus. A College A professor's comments were typical of the integrators' attitudes toward collaboration:

> Nobody lives in a vacuum...Regardless of what they say about the [faculty] person stuck back in a lab, most of us are working with people. And that's sometimes more difficult, but more satisfying, than the technical aspects of it. Success in relationships is harder than technical success. [But] I think what makes [the role] so enjoyable are contacts and relationships with other people, whether social or collegial.

Two other College A faculty members talked about preferring to work as team members, and mentioned criteria they look for in selecting people with whom to work. One said:

> I want [to work with] other people who are just as good at their expertise as I am at mine and we pull it all together...people who feel like I do, or want to work and who aren't worried about receiving all the personal credit themselves...It's pretty obvious, when you start rubbing shoulders with people, who believes in teamwork and who wants to get their name in neon lights...

The other said he has found it rewarding to work with people with whom he shares mutual goals. As he explained:

> ...You chose those [activities] in which you have a somewhat useful role and if, collectively, you can work together on something and accomplish more than you could as an individual, you know, there's a synergism...

This faculty member often collaborates with younger faculty members and graduate students to help them understand the applied research needs of the industry with which he interacts.

Likewise, a College D assistant professor collaborates "a great deal" because he is able to get more done than if he tried to do everything alone:

> I've thought about this a lot. In the kind of position I'm in, when I have this three-way split [in appointment]...by developing collaborations with people, maybe you could accomplish more than if you don't delegate...You can do part of something and the whole thing will get done because other people are doing their parts.

For two integrator faculty members, collaborations sometimes have meant giving more than they got and, therefore, their participation in collaborations with colleagues at this point in their careers is minimal. The College A professor said:

> I do some collaborative interaction...less than I would prefer. There's an area where time seems to get in the way...It's a matter of taking the time to get involved in collaborative activities...In some cases, [that] means giving more than you get to assist them [collaborators], and I have no difficulty doing that except I find my day is full now and so I don't go out looking for additional things to do...If there is a weakness in my program at this point, it is the extent to which I have collaborative activities.

The College E professor recalled a previous collaborative experience:

> I guess it began about five years ago and it was quite a major program that we had...I mean, these were top notch extension programs that were put on. Each year we did ten locations around the state and I pulled all of that together because there is no one else in that group that will...It was a very worthwhile effort, but exhausting and time consuming. And so I finally decided, at the end of the third year, I wasn't going to do this anymore...And at that point the whole thing kind of fell apart...Recently, at least, I haven't found myself in a place where there's anyone that I can cooperate with or work with closely where there's an equal sense of responsibility for the relationship...

However, he does work closely with a county extension agent and about four professionals in his field around the state, in addition to coauthoring publications with graduate students.

A number of integrators acknowledged finding it difficult to negotiate differences among fellow professionals with diverse perspectives, personalities, and work habits. Said a College D professor:

> I think any time you have caring, passionate human beings that are engaged in something as intense as the work that we do, it's hard. How you preserve everybody's sense of worth, how you create an environment where everyone feels like they are heard and yet an environment in which everyone recognizes that the buck stops somewhere...someone has to make a final decision and, as a group arriving on who that is is sometimes problematic. More often than not, it's me...I think it's [because] I'm sort of the conciliator. I can usually find a way to get warring factions together.

A College B associate professor also used a military metaphor, as well as a marital one, to explain his view of collaboration:

> The drawbacks obviously are it's hard sometimes to compromise with other people...It's hard to find the perfect person and so it's like a marriage. You live with it and work on it...I see the same thing in committees. I'm chairing one where my point of view is shared by one other member, and the other half of the committee does not share that, and so it's a constant battle.

Mutual trust was a key ingredient of successful collaborations for a College C professor who collaborates "a lot":

> When you do this kind of work with people, you really have to trust them and they you because...it's probably going to occur in a setting in which you don't mutually monitor each other, because these projects get so big and so spread out.

Another aspect of collaborator compatibility mentioned by a College A faculty member was respect for the intellectual capacity of those with whom you work. He described his interactions with another faculty member:

> [We] happened to be on a committee together the first year I was here. [We] fought terribly. He appeared to me at the time to be this smart alec, arrogant little stinker. I truly love him...He has a marvelous mind and he's absolutely unintimidated by anything or anyone...and once you get past that kind of facade, there's a brilliant mind there. I just love his mind.

Integrators appear to be intellectually generous. They want to share their wealth of knowledge and their excitement about ideas with others. One College C professor estimated that half of the work he had done throughout his career has resulted from collaborations with faculty colleagues, graduate students and off-campus professionals. He said:

> All the people who collaborate get equal credit for what they do...a shared wealth in a sense. Intellectually... one of the real exciting things that we do, I think, is work with colleagues on projects where we exchange ideas and try to develop things and write together and it's a nice intellectual interaction.

However, integrators mentioned barriers to collaboration in addition to the previously discussed issue of negotiating personal and professional differences. A veteran College A faculty member talked passionately about his career-long commitment to public service and his concern that the university fails to recognize and reward young faculty members for engaging in public service efforts. He said:

> I like that kind of opportunity to do something with an outside group that brings the university into a close relationships with an industry in the state, with an association in the state. I think that is really where the university makes a major impact...I really enjoy doing those kinds of things and so I

take every opportunity to speak and work with and be on committees that are involving lay organizations or other groups in this state...If we have three parts of this university – we say we do teaching, research and service -- service is just by far the stepsister in that three-part family...

Another College A professor said he works a lot with faculty colleagues but the university bureaucracy is an obstacle to formal collaborations:

Unless they [collaborators] are within the [same] department, it is hard to share the budgets...In terms of collaborating formally through contracts and proposals, I'm willing to do it, and I think all the people I work with are willing to do it, but it is often logistically more difficult than it is worth.

A College C professor had two primary concerns regarding collaborative research:

Junior [faculty] people who collaborate in this kind of research run the definite risk of having the work attributed to the senior member...[And] if you collaborate across departments, all this stuff ultimately has to be hung in one department. Who gets the kickback of the funds?

About ten years ago, a College E faculty member helped to establish a research consortium with another state university and a state government department. He said the collaboration avoids duplication of effort and makes maximum use of the faculty expertise at each university, but the distance between institutions is a barrier to holding meetings and conducting joint research projects.

Describing Exemplary Performance

The consensus among the 17 faculty members in the integrator group is that exemplary faculty are those whose efforts are focused outward toward contributing to the "good of the order" -- which they talked about as their students,

their academic units, the university, state taxpayers, clientele groups, and society as a whole – rather than inward toward their own professional advancement or aggrandizement.

Integrators used various words to describe exemplary faculty members, such as "humane", "absolutely competent", "straightforward and honest", "collegial", having a "holistic perspective", and "balanced". And integrators said the work of exemplary faculty members has "impact", is "useful", "has helped make a difference", assists society, and helps people identify and address their problems.

A College A professor in this group described an exemplary faculty member as:

> Somebody who's willing to work hard for other people and, I suppose, somebody with a small amount of passion in their belly...A person who sees themselves as a resource to others...willing to give of their experience in that capacity.

Most integrators spoke in depth about exemplary performance and talked about all three role dimensions. One College A professor said all three dimensions should be given equal weight when judging exemplary performance, while other faculty members in College A thought exemplars could be selected on the basis of one word. For one professor, the word was "impact":

> I believe that every faculty member should have an impact and, if they're not or don't have an impact, then I don't believe they're doing their job.

For an associate professor, the word was "teamwork":

> ...an exemplary professor has to be able to do teamwork. We have to develop a new understanding and a new dedication and a willingness of

personal sacrifice to work in teams...I always have a lot of respect [for] the no name team that wins the championship, because everybody does their role quietly. So I think teamwork is going to be essential, [and] interdisciplinary work...

Having the characteristics of "a statesman" was emphasized by a College D professor in her description of an exemplary faculty member:

I mean, not only do you judge an exemplary faculty member by the quality of the research that they do, but you also have to judge their contribution to the life in their department, to the undergraduate program, to the broader mission of the university, and I like to see a faculty member who takes responsibility for contributions in all of those areas. I think a university is only as good as its faculty, and the faculty has to be interested in the decision-making within the department...the committee work in the department and the committee work in the university as a whole and then, of course, all of us belong to a profession that connects all universities and, within that profession, there are certain responsibilities that I think an exemplary faculty member has to take seriously...

Likewise, the idea of being "collegial" was mentioned by a College B assistant professor, who described what she meant as, "...helping to carry the load of whatever is going on at the university and...a willingness to have a holistic perspective of academia and the whole university and whole society..."

A number of integrators expressed the idea that the kind of institution in which a faculty member was employed should have a bearing on the description of exemplary performance. For example, a College C professor said an exemplary faculty member at MSU was "someone who does a lot of all three of the standards that we hold near and dear around here". Elaborating on this idea, he said:

I think you have to distinguish [among] types of institutions. I think at this kind of institution, you need to weigh more heavily research activities. That's not that I mean it [research] ought to be more than a third of the

action, just that, relatively speaking, it is going to have to get more attention because it is more rare...And I think you should be very broad in what you allow all those things [activities] to be. I think if universities don't support diversity, I don't know what institutions will.

Three integrators specifically mentioned the land grant university in discussing their view that exemplary faculty performance should include teaching, research and public service. One College E professor described an exemplary faculty member as:

> A person who, as part of a land grant university, does the necessary things to get the information required to help people address the problems that they have...[who] helps people identify their problems and learn more about them and actually helps people to arrive at their own solutions.

This same professor and others in the integrator group acknowledged their perspective of the role is different from that of some colleagues. He said:

> That vision or image isn't shared by everyone in this department...We have some people that I think can be referred to as intellectual snobs...I think the department is missing the boat because we, as a group, are not looking at our collective capabilities or our abilities to collectively address some of these very major problems, because many of the problems are so complex that I, as an individual, can't even think about the whole problem, let along trying to understand it.

Exemplary faculty members should continuously reflect on the effective-ness of their efforts, according to one College A professor:

> I would think that [an exemplary] faculty member should be organized, because the demands on his or her time are many and they really need to be able to prioritize and somehow distinguish between activity and effec-tiveness...[They are] willing to share their perspectives. But, at the same time...they are producing something, they are making a contribution or difference that's more than just activity.

Six of the integrators referred to exemplary faculty members as performing some but not all of the three role dimensions, or expressed doubts about whether

all faculty members should be expected to be simultaneously productive in

teaching, research and public service (or outreach, as one called it). One College

A professor didn't think there was a single type of exemplary faculty member and

felt exemplary performance should not be based on one's performance in any

given year. He said:

> ...I guess being an exemplary professor would be a person who is able to
> do all of those things but, realistically, I think even that exemplary
> individual one year would do more of one [dimension], then in another year
> do more of something different.

A College C faculty member saw an exemplary faculty member as

"somebody who contributes to the whole [of] what a unit produces", and said that

could be "somebody who does one or maybe two of those things, or maybe all of

them". Similarly, three integrators emphasized competence in scholarly research

and added another component, such as "being a genuinely nice person", as a

College D assistant professor said, or "really igniting in the students and interest

in what the professor is doing [in research] because it's important for them as

students", as a College B associate professor maintained. One College D

professor said exemplary faculty members are those who publish regularly and,

"They should do teaching or outreach --sometimes outreach might be teaching".

In terms of whether or not they saw themselves as exemplary performers,

four integrators felt they fit their own definitions. Four others did not consider

themselves exemplary, and two of those expressed surprise at being included in

the study. One was never asked the question during the course of the interview.

The responses of the 11 remaining integrators were equivocal but generally positive. One untenured faculty member considered herself "a solid faculty member" who does good work, and the other untenured faculty member in this group said, "I try to do an exemplary job. I try to set a high standard". One professor said he didn't like answering the question in relationship to himself, but added:

> ...there's no doubt in my mind that the research and activities we get involved in at MSU have had an impact on [certain clientele groups] in Michigan, the United States and, to a certain extent, around the world.

This faculty member used the plural "we" to give equal credit for accomplishments to his former graduate students.

Three other professors gave somewhat contradictory answers, indicating they were uncertain about whether they were exemplary but that they liked to think they were, or hoped they were. One associate professor in College A said, "I do not think I am unusual in this department", but a few minutes later said:

> I do not make a habit of trying to fit the traditional mold...I'm more interested in looking in the mirror and saying that I feel what I'm doing is useful and that I'm answering the questions that people need...I still think that we have to realize our clientele are the people who pay my salary, and that's the taxpayers, and I have to stay in contact with them. My clientele is not the people who read those refereed journals.

Self-Evaluation of Performance

In evaluating his own professional performance, this College A professor said he trusted some colleagues' reactions to his work but primarily tried to please himself:

...I guess my rule of thumb is, if more than half the people think you are doing the right thing, you are obviously not being very innovative or creative.

Integrators commonly have a sense of being atypical, coupled with a firm belief in the value of their professional contributions. They have strong internal motivations and convictions about acceptable academic performance, and hold themselves accountable to their own high standards. A College A professor spoke for many integrators when he said:

> Generally, if I can please myself, usually I please other people. It's like [with] teaching, I only feel as good as my last lecture. The job I do on my last lecture sets the tone for the entire day. It's a gut feeling when I leave class. When I talk to a group in extension, I know how I did...

In discussing how they went about assessing their own performance, several integrators talked about measuring themselves against fellow professionals. For example, a College A professor established his professional standards during graduate school:

> From the standpoint of drive, I guess when I was going through graduate school, I would look around and I'd say, "Who are known in [his field]? What is their reputation?" And I guess I set a goal to develop a reputation equivalent to the best. Not to be necessarily number one, but to be equivalent to...the best faculty that were out there at the time.

Similarly, a College B professor said he attempted to meet or exceed the achievements of respected colleagues across the country:

> ...I try to challenge myself every year to be able to put a stronger set of credentials together for that year. And I also keep in close contact with faculty members at other universities. I've built up a strong collegial relationship with a number of other faculty members through my involvement in a professional organization. And so I know what they are doing and I try to achieve their level or higher than other people that I am aware of at other universities.

An untenured assistant professor in College D had a checklist of questions

he asked of himself by way of self-evaluation:

> Are you active in your field? Do I go to meetings, regional and national?
> Do I communicate with my colleagues at those levels? Do I publish in
> refereed journals? Do I publish in nonrefereed regional trades [maga-
> zines]? Do I write research grants or do I get funded? I think that is really
> the key. For me, the answer to that is yes. I feel good about that. But it is
> tough...especially when you are young and starting out. You really have
> got to try to do all of these things at the same time...I don't think I often
> stop to think about something like, well, am I very happy?

At the other end of the career continuum, even senior integrator faculty

members continue to hold themselves accountable to a similar checklist, such as

the College E professor who said:

> I look at the annual report and see have I accomplished the things that I
> think a faculty member should accomplish in generating research, produc-
> ing doctoral students, masters students, publishing papers, contributing to
> society, to professional and public service activities and maintaining a
> good teaching performance, measured both by the students and [in] my
> own mind?

Similarly, an experienced College D professor enumerated the ways in

which she takes into consideration the feedback about her performance from a

variety of sources:

> ...There are all sorts of ways within the profession that you get feedback
> on the quality of your work. I publish a lot of papers. They're all in refer-
> eed journals so...I get reactions to the work that we are doing. We also get
> a tremendous feeling for the national and international appreciation for the
> work that we do through the invitations that we get to talk about our
> work...I have been giving something on the order of three dozen or more
> major talks, sort of keynote addresses, at conferences or universities each
> year for a number of years and, in that kind of environment, you get a lot of
> interaction with your ideas. You get suggestions from other people...so
> there's a very public interaction that allows you to get a reading on how
> well you're doing. In my teaching, I take student evaluations very serious-

ly. I think hard about my work...If anything, I think I set too high of standards for myself.

Eight integrators talked about seeking other people's opinions about how their work measured up against the prevailing performance standards. But even when they were assured by others that they were doing a good job, they continued to be their own toughest critics. For example, a College B associate professor said:

> ...I've read enough teacher evaluations or course evaluations to know, for my own classes, that things that I consider shortcomings are not always identified by the majority...of the students...I don't always feel like it's well-organized or well-conceived...I don't think most students felt that that was a shortcoming of the course, and maybe it wasn't, but from my own point of view it was. It could have been better organized.

A College C professor said that, at MSU, faculty members who are writing and publishing are considered to be doing well, which fits his own view of what faculty members at a public institution ought to be doing. He said:

> ...I think this enterprise ought to be public. One of the best ways of making it public...of getting truer feedback, is to write about it. I don't have a lot of trouble with that but, again, that's something I was doing before I ever went to graduate school.

Nevertheless, he does have trouble allowing himself to slacken the amount of written material he produces:

> ...part of me has got [a] good old Midwest work ethic. If you don't get something tangible done today, you haven't done anything. In this business, that means you haven't written anything today...I think if you don't write something every day, you are not getting much done. Do I write every day? No. Do I try and write every day? Do I hold myself accountable? Yes.

Several integrators talked about assessing their professional success by using a combination of measures both internal to the university, such as promotions, salary increases and merit pay, and external to the university, such as being elected to chair a national organization. But they never lose sight of what they think is most important. One College A professor who felt that being asked to speak at professional association meetings was an important measure of his effectiveness also said:

> Yet, at the same time, you kind of come back and you...wonder, now, are you just talking or are you doing something? I have written a lot of philosophical kind of things the last few years. Now I'm moving back to more technical things...It probably swings back and forth. You say, "Well, you've talked long enough. Now you better get something new to talk about.

A College E professor who was well-established in his career appeared to be still struggling to achieve a balance between others' judgments of his work and his own sense of having accomplished enough:

> I think there are two ways of looking at...how this goes through my mind...One of them is, I could sit here and start thinking about the things that I do and so I can kind of look at my contributions in terms of the research that I've done and who's using the results of this research in the application, or publications that I've written or the feedback that I've gotten from the talk I've given...Then I can look at myself and those contributions but not measuring them so much in terms of their impact but comparing them to what a peer...[is] doing and what am I doing. And I've come out on that one, depending on my particular mood, at the bottom or the top of the scale in my own eyes...I think everybody depends upon some kind of feedback for your self-esteem somewhere...I have to quit worrying about other people and worry about myself in terms of what's important to me...

One College D professor said his priorities have shifted in this latter phase of his career and now the only criterion he used to judge his performance was, "If I sleep at night". However, he said he works more hours now than ever before:

I'm usually here [in the office] by 7:10 a.m. and home by 5:45 p.m., then work 8 to 10:30 or 11 p.m. and all day Saturday and Sunday night. One of these days I'm sure I will burn out.

In reflecting upon their self-evaluations of professional performance, three integrators -- the two women in the group and one man -- expressed concern about their ability or inability to maintain a reasonable balance between their personal and professional lives. The untenured female assistant professor said:

> There are times when I think I'm doing too much in this [certain] area and I'll go to [department chairperson] in particular and say, "What do you think, can I afford to drop this out?" And he is very good about being able to balance, [to] help weigh personal and departmental concerns...One of my big goals in the next couple of years is to try and do that [achieve a balance]...Part of it is because I am getting married this summer...we'd like to try to have a family and I just know I can't go at the breakneck pace that I am going and keep my sanity and try and do that, too.

Responding almost as though she had overheard this woman's concern, a College D professor reflected her own uneasiness about the affect her career commitment has had on her children:

> I worry a little about the perception of my two daughters to me as a role model in that...I would not want either of my children to think that they had to make the same set of decisions I've made about my professional life. I've almost worked too hard and I think the reason that you do that is because you really are interested in what you're doing. My job brings me a great deal of pleasure, but that's hard for a 23- and 24-year-old to understand...I've tried to help them to know that I have no expectations in my mind for what they should do with their lives, but I do worry about that...I'm not a good role model...It's almost like, when you're a bit of a workaholic, you would like to have the young women that look up to you have a bit more balance, to feel like it's okay to go play tennis.

One male integrator appeared to be fairly satisfied with the overall balance in his life between career and family. He said:

I consider this [his faculty role] not me, not my life but what I do for a living and, when it periodically gets to a point where I spend either too much time at work or [am] devoting too much attention or energy at work, it's important for me to step back and realize that my family and personal life is more important. I'm not very good at making personal family sacrifices for my professional betterment.

Other faculty members talked about some of the tensions between their

personal and professional lives at various points during the field interviews and

this theme will be explored further in the following section.

Section 4: Systems of Constraints and Incentives

A university is a large, loosely coupled organization constituting a complex

culture of individuals, objects and symbols which faculty members, as relatively

autonomous individuals, must interpret and integrate into meaningful roles for

themselves. This study attempted to understand how participants' role

perceptions might have been affected by factors in the organizational

environment, such as significant individuals or circumstances, since the time they

entered the academic profession.

This section presents responses to questions about shifts or turning points

experienced during participants' faculty careers or, for those in the early years of

academic appointments, ways in which being a faculty member at Multidimen-

sional State University (MSU) might have changed the way they think about and

approach the faculty role. Also presented are responses to questions about what

participants worry about most in being faculty members at MSU and what, in their

ideal worlds, would be different about "this place", with the meaning of place left

open to individual interpretation. At the end of the field interviews, participants were given an opportunity to talk about anything that hadn't been covered in previous discussions. Their responses are also reported in this section.

The section is subdivided into reports on participants in the three primary faculty role types that emerged in this study: researchers, teacher-scholars and multidimensionals. The discussion within each role type is framed by the following topic structure:

1. Career Shifts and Turning Points
2. Obstructional Elements
3. Instrumental Elements and Additional Comments

Researchers

The nine participants categorized as researchers in this study talked primarily about how career turning points and concerns about the institution impacted their own scholarly research activities.

Career Shifts and Turning Points

The three untenured researchers -- one each from Colleges A, C and E -- were asked whether being a faculty member at MSU had changed the way they approached the faculty role. The College C assistant professor said that, although his activities appeared to be in sync with the institutional mission, his own sense of professional priorities had not changed since joining the institution. His apparent dislike for institutional rhetoric reflected, in part, his perception that the prevailing ethos of his department was contrary to that of the institution:

> This university talks so much about the land grant mission – all the time, all the time, all the time – and I think it is largely sort of myth-making. My own work happens to be extremely applied. I do regular consulting for [type of client] and I think that it's a reality check to talk to people who actually work in the practical side of my area of study because you realize what's important and what's not important...In that sense I guess I embody the land grant mission blah, blah, blah. I'm glad I'm not in other parts of the university where that part of the land grant mission seems to be all consuming...Maybe this is just a prejudice on my part but this department is actually one that has always fought the land grant label. We pride ourselves on doing completely unapplied work.

The College A assistant professor noted that, in contrast to her recent roles as graduate student and postdoctoral researcher, she now spends more time keeping up with the scholarly literature and writing grant proposals and manuscripts, and less time working in the laboratory. She talked, too, of being responsible for managing the people and work of the scientific enterprise associated with her faculty role.

The College E assistant professor, who had made a transition from graduate student to faculty member in the same department, felt she had "a pretty realistic expectation" of what the faculty role was all about before entering it. She said her research philosophy was undergoing a metamorphosis, but saw that as an inherent part of scholarly development:

> If you're a researcher, you become stagnant if you don't change...and, yes, I have seen different things as I've gone along over the years, just by [having] more exposure to other people and having different ideas and that sort of thing. But I think that's a natural progression.

Her two College E colleagues in this group also had experienced evolutions in their scholarly research. One College E professor said major shifts had occurred in his research program as he took advantage of new opportunities:

My personality is tuned to opportunities. I am amazed by people around me who seem to miss opportunities. I am very career oriented. A major force in my life is work. That's true of a small fraction of people – less than 25 percent. My work is the major thrust of my life. I spend a lot of time at it and enjoy it.

The other College E professor left a full-time position at one institution to take a temporary sabbatical replacement position at MSU where, unlike the previous setting, he said, "I was fortunate to have a couple of other colleagues in the department with whom I could interact..."

A College C professor was similarly influenced by collaborations with a colleague who joined his department a year after he had been hired:

We became good friends and we collaborated on beaucoup projects...and that was a turning point because he wanted to do things I did and I wanted to do things he did and...it was a mutual reinforcement of, you know, let's do these things and that was rewarding...There wasn't anybody in the department that was a senior person that I could see as a mentor...But when this other person came...it became a mutually reinforcing treadmill and so we worked on a lot of things together. We wrote and published a lot together and...it wasn't competition...we complimented each other's skills, I think, very well.

Two pivotal events occurred fairly early in the career of a College D professor. He was appointed as editor-in-chief of a major scholarly journal in his field and also appointed to a national science organization's research proposal review panel. He said:

Those things gave me a broad view of what's really exciting and new. They helped me develop insight. As an editor, I tried to promote those things that were visionary.

Another senior College D professor spent five sabbatical leaves working in research environments unlike his own. He said:

> Each sabbatical leave, I tried to go to a research environment that was not similar to what I had done here. I deliberately chose fields which were interesting but different, and that gives a fresh perspective...It is also extremely important in the teaching area because, working with people who are world renown scientists, you get the opportunity to transmit that excitement [and] interest to your students.

After one such leave, he developed a line of research that lead to what he called

a "breakthrough" and a "benchmark" study in his field that has profoundly shaped

his subsequent scientific work.

A College C associate professor held a series of temporary faculty

positions at various institutions, including one at MSU that became a tenure

stream position. When she was hired to fill the position, she said:

> ...I was able to start planning research that could involve students here, because I would still be here. And that's something that I adamantly refused to do the first few years I was here. I worked with graduate students, but I had no reason to expect that I would be here [throughout their studies]. I felt it was unfair to involve students in my research and then pick up and leave.

A more senior College C professor's success at bringing in research grants has

shifted his career more into management of research projects conducted by

graduate students. He said:

> And so I became less involved in actually doing the research, which is frustrating because that's what I'd like to do, but more involved in the budgeting and management and crisis resolution and so forth than [in] doing the research.

His chief concern now is whether or not he can balance the administrative and

faculty responsibilities, or will be forced to choose one role over the other.

Obstructional Elements

When queried about their greatest worries as faculty members and what they would change about the organizational environment, researchers talked primarily about the constant pressures of having to bring in funds to support their scholarly research, and about not having enough time to do a quality job or to think reflectively. Another prevailing perception was that the university, as an organization, had increased its expectations regarding faculty accountability while it had decreased its support for faculty members in performing their jobs.

Only one researcher, a College E professor, said he really didn't have anything to worry about because he had tenure:

> I'm a small business person without the responsibilities of being in small business [e.g. bankruptcy, lawsuits]. I'm insulated from that, especially at a state university. There's so much general fund money around.

But this professor acknowledged that "junior faculty" find they spend a "mindboggling" amount of time on administrative details, such as filling out research proposal forms. Indeed, the junior researchers in this study were disgruntled with unwieldy aspects of the university bureaucracy and had a general sense that administrative expediency was driving the system rather than a desire to facilitate the work of faculty members. Said the College E assistant professor:

> I don't like the way purchasing is done...Everything is centralized and you can't really work with the people that are doing the work...With experimental work, it's an evolving thing, so you really need to sit down and talk to them [but] it's difficult to do. The bureaucracy, overall, I think is a real negative point of MSU, and I think that's largely due to its [the university's] size -- it's too big.

The assistant professor in College C said he would like to have secretarial support to screen his phone calls and to take care of other tasks on which he now wastes "an enormous amount of time". He feels administrators have more staff support than faculty members:

> It seems like every time you call to talk to an assistant assistant [sic] dean in the administration, you talk to a secretary first.

The assistant professor in College A viewed her research operation as "very entrepreneurial" and said her biggest worry was bringing in enough money to keep everyone in her lab employed. She said financial insecurity was common among her colleagues:

> ...everybody wishes that money wasn't such a hassle, but that's just a reality, so I don't even know how to begin to deal with that issue...I think money's a factor here that limits what gets done...

Another limiting factor cited by the College A and College C assistant professors was the university's lack of emphasis on teaching quality and on enrolling the best students. The College A faculty member said, "...the students don't necessarily come in with as much background as they should" and the College C faculty member noted, "I find the level of the student body extremely disappointing". One of his biggest worries was that, as financial resources become scarcer, "...we're perceived as instructional faculty [only] and our class sizes are getting bigger".

A senior professor in College E felt that, while all universities are now emphasizing the need for quality teaching, many institutions have done so by

giving teaching awards rather than attempting to improve teaching through faculty

development programs and better evaluation methods. He said:

> We hire people these days who have never taught before, and I think
> many of them don't know how to teach, or how they improve teaching, and
> the university doesn't do anything about it...Somebody must be trained to
> give feedback and tell people what they're doing wrong.

This professor's lament about the lack of pedagogical assistance was

paralleled in comments of a College C professor, who complained that too much

faculty time and effort was "tied up in survival" rather than spent in faculty

development activities. He was worried about what he called "the erosion of the

infrastructure at the faculty level", by which he meant the elimination of open

faculty positions and the lack of financial support for graduate students other than

grant money brought into the university by faculty members.

The biggest worries of a well-established College D professor had to do

with "time pressure", "the scramble for funds", and the inability to "be reflective

about things". He disliked the tendency in industry and, increasingly, in

universities to look for short term solutions to research problems:

> There's a difference between good research and sloppy research, and
> there's a tendency on the basis of the need to raise funds, get grants,
> graduate students, you know, all these pressures that are on you, to hurry
> up and get it done. Pressures even come from the graduate students
> many times, [who say], "Like, if I want a job, I need at least six publications
> in my name...when are we gonna publish the stuff I did last week?"

This professor said faculty time pressures are exacerbated by proliferating

reporting requirements at both the federal government and university levels, and

an excessive amount of what he called "busy work" or "secretarial details". He said:

> You spend a lot of time on things...and even the so-called e-mail revolution...or the computer revolution has not been all gravy. I have not yet gotten my secretary to send out e-mail for me. We change secretaries often enough and it's complicated enough that I have to sit and type it out myself, whereas I used to send memos by either dictating or handwriting and [secretaries] would take care of everything from then on...I spend an awful lot of time in front of my little MAC SE getting things arranged [that] I didn't do before, but the expectation level is up again.

Similarly, another College D professor complained, "There are things in the administrative structure that could be reorganized to be more supportive of faculty", such as what he called "inefficiencies" in the accounting system.

Finally, two women in the researcher group shared the perception that female faculty members, particularly those who are the only women in their departments, are asked to take on an inordinate amount of institutional committee service. While the College E assistant professor felt fortunate that her department had been "real protective of me with that", the College C associate professor felt she and the few other women in her department had been more "overloaded with things" than their male colleagues. She said:

> ...I have to start saying no because it's very easy for female faculty to be overloaded...I mean, I seem to have a harder time saying no than a lot of my male colleagues do...

Later, in reflecting about the ideal world, she said that there should be a system of accountability to ensure the equitable distribution of work among faculty members:

...I think that the responsibility that comes with having tenure means that you have to have a system of accountability. It's just not fair to the students to have people who have total job security and are not putting [in] time and effort, and I mean on all levels both from the teaching all the way up...I think that needs developing, some system of accountability for what you're doing and relative equity in the distribution of work -- however the work is defined, whether it's committee responsibilities or teaching responsibilities or serving on student committees...

Instrumental Elements and Additional Comments

Eight of the nine faculty members classified as researchers in this study made additional comments when given the opportunity. All of them chose to end on a more positive note than had been struck in their preceding discussions of the ideal world.

The three female faculty members in the group talked in various ways about the intersections of their personal and professional lives. The College A assistant professor said she was in a "wonderful department" in which "there's a lot of mutual respect despite the differences". She added, "I think most people in this department put a value on family," and she did not feel at a disadvantage for having a young child.

In contrast, a College C associate professor observed that being a single mother had ramifications in her professional life that were not experienced by male colleagues. She said:

...when I go to do field work, I'm the one who's in charge of figuring out where my children are going to be and essentially arranging all of that and, admittedly, I'm a single parent but, even when I wasn't a single parent, I was normally doing that and they [male colleagues] don't deal with that at all...All of my [disciplinary] colleagues are married and when they go in to do field work they may or may not take the rest of their families but it's their

wives who handle all of that and it's interesting just watching it. I mean, I need a wife at home doing all [of those] things...

Nevertheless, she felt that, as a woman, she had a different and valuable perspective to share with male colleagues and with students. She said:

> ...I've had a number of students over the years, female, say how significant it was to them that they had a female instructor...I know that both in my courses and when I team teach with one of my colleagues, I raise issues that would not have been raised if I weren't in class...The fact that I'm female I think is good for the students [and] also good for my colleagues.

The College E assistant professor also felt that women faculty members tended to "get dumped on committees" but that, in her department, "overall, I've been treated pretty well". However, she talked about making career choices based on personal as well as professional factors and not being completely happy at MSU:

> I'm a person that can't have my whole life depend on my job and what I do here. There needs to be some balance and I've found that living here in [this state], especially in [this city], the only thing I really had was my job here. Then you sort of start to resent it, and it's time to do something [about it].

In contrast, a male colleague in College E said work was a dominant part of his life and he would do it even if he didn't get paid. He said people think he is a workaholic, but he finds the term "demeaning" because it implies using work as an escape from the world, whereas his motivation is the joy of producing something of use in the world. Similarly, money was not the primary motivator for a College C assistant professor, who said of his career choice:

> I think it really is a profession where you know the parameters before you come in. What you don't know, you get hip to very quickly...I know that my

brothers and sisters will always earn a lot more money than I do, but I wouldn't trade my life with theirs anytime.

He added that, although he seemed to have a negative attitude toward the institution, he probably would be much more committed to it if he was still at MSU 20 years from now. Another College C faculty member said:

I'm not as alienated as I sound. I think it is a good place. I'm encouraged about some things that are happening in our department...Something that I have found nice about MSU...[is] that it is not unusual for people to cooperate on projects even across disciplines. And that is, I think, very valued and somewhat unique. I think that this is a climate that maybe fosters that.

One College D professor was appreciative of the new building he worked in. The other College D professor in the group said MSU was "a great place" and he enjoyed "the sense of cooperation" that existed in his department, unlike other departments that "have feuds going on".

Teacher-Scholars

The fifteen participants categorized as teacher-scholars in this study talked about career turning points primarily in terms of how significant individuals and circumstances had influenced their sense of being able to successfully perform the faculty role. The effects of career stage on perceptions of role performance were quite evident among teacher-scholars, perhaps because this was the most diverse of the three groups in terms of numbers of faculty members in each rank. Teacher-scholars also discussed ways in which aspects of the institutional environment affected their sense of what they valued as faculty members.

Career Shifts and Turning Points

Each of the three untenured faculty members in this group spoke about factors within the university that impacted their performance of the faculty role. Two assistant professors had been in temporary positions that became tenure stream positions within the past year. The College A assistant professor said he now felt a responsibility, as a tenure stream faculty member, to become involved "in the life of the university" rather than just focusing on his own work:

> Now, there's a whole new layer to consider with all these different college, university level, department level committees. So, I think that's been the biggest change, that you realize that you're a part of the place.

The offer of a tenure stream position at MSU prompted a College B assistant professor to assess other options in the academic marketplace. She was offered two other positions, one as the head of an academic program at a small Eastern college, and ended up staying at MSU because, she said:

> ...I liked the diversity of the university setting and I'm supposed to be conducting research and all of this, so I just felt that I needed the contacts that were here more...I was more concerned about [finding out] what's my research going to amount to...

When a College E assistant professor arrived on campus, the facility in which he now works was under construction. He was temporarily assigned to an office "in the building where most faculty members in the college are located, in another area of campus", and said he misses the camaraderie of hallway conversations and impromptu lunches with colleagues that developed in the first location:

I feel a bit isolated here. You have to make an effort to go and do those things...We don't have that [here]. You don't see people walking down the hall saying, "Hey, I'm going to lunch, want to join in?"...That's one of the drawbacks of being so far away [from other faculty members].

This participant felt his present campus location made him less accessibility to students. When he teaches undergraduate courses, he holds office hours in another building and has to spend time driving between locations.

Two teacher-scholars with more seniority commented about their original discomfort with aspects of the faculty role and how they had grown professionally. A College E associate professor said that, since receiving tenure, he feels more confident about the strength of his research program. Interestingly, he used the language of a student to talk about how tenure had changed his life:

[There is] certainly less stress in my life. There's still stress in my life. I still work as hard as I did before, sometimes even harder than I probably did as an assistant professor. [L.W.: So what makes the difference?] I think there's less stress from the standpoint of [thinking], "Oh, am I gonna flunk out?" Less fear of failure and now more stress like [thinking], "Gee, I have opportunities to do these things and I feel some obligation to do a very good job in research and to interact with the students and things like that so that keeps you very busy. That's the kind of stress that I think I need.

Similarly, a College D professor also had come to feel more comfortable with the mix of research and teaching in the role, after overcoming an initial lack of teaching experience. When he interviewed at MSU for his first faculty position, a doctoral student recommended a book to him on instructional design written by several MSU faculty members. He read it and several other books on teaching, and recalled, "I worked my butt off the first time I taught". Another fortuitous

circumstance early in his career was an invitation to participate in a college-wide

faculty development program that he called "a mind stretcher". He concluded:

> I guess it seems to me like the [academic] system has worked for me. I
> have happened to get the right influences to help me see something about
> what is excellence in an area. I tend to be the kind of person, I'd rather not
> do it if I can't do it well...

A senior College C professor was profoundly influenced early in his career by a

former MSU president. The professor recalled one incident in particular:

> I happened to be in this office over at [name] Hall. That's where the
> administration building was...and I was getting ready to leave. I had my
> hand on the door and [the president] said, "How did the talk go to the
> nurses?" I said, "How do you know I gave a talk to the nurses?" And he
> said, "Come here." So I walked back to his desk...He had a big wooden
> desk and he opened the bottom desk drawer and took out a big three-
> ringed notebook. And he turned to my name. I was standing right by him.
> I said, "What's that book?" He said, "This book is composed of the faculty
> members who make MSU what it is." And he said, "If you can get 30
> percent of the faculty committed to MSU, you can have a great university.
> You cannot have 100 percent achievers, because you can't manage 100
> percent achievers. They can get in each others' way...But if you can get
> 30, 35 percent, you are well on your way". Then he said, "About 50
> percent of the faculty will do whatever you tell them to do. They do not get
> in the way. And then you have another 20, 25 percent who could leave
> this afternoon and nobody would miss them".

This professor has a collection of about 50 letters from the former president that

essentially said, "Good work". In contrast, he claims to have had no response

from current top level administrators:

> I've yet to receive a letter from [current president]. He didn't even answer
> the mail I sent over there. So screw him...He doesn't understand. Neither
> does [the provost] for that matter. So it doesn't make that [much]
> difference, you know, I do it anyway. But, see, when you got a letter from
> [former president]...he motivated the faculty to do good and bigger, better
> things...That's how you build a university. You have to know the people
> who make the place. You know, it's the faculty who make those
> administrators look good.

Three teacher-scholars who appeared to be in their 40s had reached a

point in their careers at which they were weighing the pros and cons of taking on

more administrative responsibilities. A College E professor actually had taken an

administrative assignment some 18 months earlier. He chaired the search

committee for the position and, when none of the candidates had an appropriate

combination of academic and administrative skills, the dean asked him to be a

candidate. He was surprised:

> ...that came right out of the blue...You have to picture this because, as a
> faculty member, I always wore blue jeans...I had on a pair of blue jeans, a
> dirty old work shirt, my hair was a lot longer than it is now, and I'm sitting
> there and the dean is asking me if I want to be [title of position] and the
> first thing I said was, "Will I have to wear a tie?" He says, "Well, use your
> judgement". So I said, "Well, I've got to think about this. I don't know if I
> want to be an administrator". So I though about it, I thought about it, and I
> thought about it...It [being an administrator] had never occurred to me.
> Once I became a full professor, I just wanted to keep doing that, better and
> better and better and then...drop dead in front of the class one day, right?
> And so, this was a significant change. I knew it was going to have a
> negative effect on my research. I knew it was going to have a negative
> effect on my teaching. I knew it was going to have a negative effect on
> everything, and it did.

He said he doesn't know why he agreed to take the position, which he finds "very,

very time consuming". While he has continued to teach at least one course a

year and advises a doctoral student, he finds it difficult to simultaneously perform

the roles of faculty member and administrator. He wonders how long he will

continue to do so:

> ...I guess the question I have is how long does one do this before it is too
> late to go back? And I know I need to make a decision before I reach that
> point, because I think there is a point of no return where you are an
> administrator. And I've talked to other people in my position around
> campus and they all feel the same way...like they are in this period where

they are trying to hang on to their faculty position as best they can and trying to decide if, after a respectable period as an administrator, they should say, "Fine. I did my duty. Now I want to go back to being a professor". So they are afraid if they don't make that decision, it might be too hard later on.

While a sense of "duty" seemed to motivate the College E professor, a College A professor thought an administrative role would provide new professional challenges. This faculty member achieved the goals he set for himself by age 40 -- namely, becoming a full professor, gaining international recognition for his expertise, and becoming known and active in his college -- and said:

That's a major point at which you begin to question what you are going to do with the rest of your life here. In the university, there's not a whole lot else you can do in terms of the faculty [role] ...you can move into administration as it [the opportunity] presents itself here or somewhere else.

He said the major turning point of his career came a year earlier, when he was offered a department chair position at another university. A significant factor in the offer was the fact that his wife, who had a part-time position at MSU, was offered a full-time faculty position. After his wife said it was his decision, he opted to turn it down because "I didn't think it was beneficial to our family". But he added:

...[this] university isn't in a position, or doesn't want to do much, to help me and my wife in this situation, so I've made some decisions in terms of how I'll operate...I may leave at some point, and I made the commitment to my wife [that] if something doesn't happen here, that we will go out and look together.

A College D associate professor who was soon to become a full professor said she, too, was "struggling with what am I going to do with the rest of my

career". Having recently served on a campuswide task force that "focused my attention on all kinds of institutional issues that I probably hadn't thought about before", she was contemplating administrative and leadership positions she might want to pursue as a way of using knowledge gained through her committee service. She added:

> I mean, I was totally fascinated by the process, by the topic, and the biggest advantage probably was the people that I met on that committee. [L.W.: Some you wouldn't meet otherwise?] Wouldn't meet otherwise, nope, not being a lab rat, which most scientists are.

Two other College D female faculty members in this group talked about the physical and psychological toll exacted of them in highly competitive, male dominated scientific fields. A professor spoke guardedly about having "a very creative relationship" with a man she worked with as a postdoctoral fellow. After affirming that it was an intimate relationship, she added, "...if he had been really nice, I would never have left, but that relationship was impossible". He never encouraged her professionally, and she finally decided to look for another position. She was asked to apply for an MSU faculty position and, after agreeing to an interview, she found, "This was the best thing I had ever had". She talked about meeting women students who told her they needed women role models, and she liked the departmental chairperson's sense of humor and his support for women's professional advancement.

The College D associate professor recalled two incidents early in her first faculty appointment that marked a significant turning point. During a postdoctoral fellowship and her first year at MSU, she routinely got up at 7 or 8 a.m. and went

to work, stayed until 3 a.m., went home and repeated the cycle. In her second

year at MSU, doctors diagnosed her as having chronic fatigue syndrome and

recommended limiting the physical and mental stress in her life. She chose not

to tell anyone at work about her illness because, she said:

> ...I don't feel that people in academics are very sympathetic to their colleagues and everything that happens to you, whether it's your getting sick, or you have some sort of problem with your research or your teaching, it's all viewed as a failure. [L.W.: How does that message get communicated?] I think it's when you hear stories being related. It's sort of a negative reinforcement approach, I think. Any time things are going extremely well for you, you don't seem to hear anything. Nobody comes up to you and says, "Congratulations, great job". But when something isn't going well, you hear little digs or you hear people saying things...like you hear the little hall or water cooler gossip about someone not doing very well...

During this time, a faculty colleague compounded her stress by telling her that

she would not be tenured because she was too nice. In the guise of offering well-

meaning advice, he compared her performance to that of a male peer, whom he

said would be tenured because he was more aggressive. She recalled:

> I think that's about all he was willing to say about why I wouldn't make it, is because I was too nice. And I was astounded. I couldn't believe it. I almost quit my job here...I wasn't gonna quit my profession, but I almost quit my job and looked for another university because I think I could have easily found one. And it was that and the illness, I think, together that made me approach my job differently. I think I'm a lot tougher now...I recognize that there can be an unbelievable level of discrimination against women that people don't even consider as discrimination, which is [someone thinking], "I just don't think you're gonna make it because you don't look the part"...and I think that's what I experienced because this was a very old colleague and he's on his way out. He was bothered by my presence. He was bothered by my approach to doing science and he just couldn't wait to tell me that this just wasn't going to cut it...I trusted him. I trusted everyone, that they would look at my results and make decisions about me and not look at whatever he was looking at, my appearance,

perhaps my more social side, or whatever he was looking at that he saw as a negative...

After awhile, she told some colleagues about the incident and they discounted what he said, but the story spread through the department. Then, she received several professional awards and was offered a tenured position at another institution. As part of what she viewed as the department's strategy to keep her, the senior colleague came to visit. He "tried to bury the hatchet with me" she said:

> He was trying to make up for what he had done. So, I don't ever think about that any more but, when I was thinking about it, I could never come up with an explanation in my own mind as to why he did that. It still puzzles me.

> A College D minority faculty member left an MSU position for one in

another state and found himself working with a department chairperson with whom he did not agree "on much of anything". He said:

> ...he rather enjoyed coming around and saying that I wasn't going to get promoted, and it was his yearly thing.

This faculty member had tenure but stopped submitting his materials for promotion to professor because, he said:

> I wasn't really actively pursuing promotion, but I thought I deserved it. I just didn't want to play that game [with the chairperson].

He said that he wasn't bothered by not attaining the highest faculty rank because he had written textbooks that were selling well and he was "getting requests to go all over the country", so he felt financially and professionally secure. Eventually,

he returned to a faculty position at MSU because of an opportunity to do outreach in his area of interest.

A minority faculty member in College C has not felt accepted by colleagues, many of whom seem to prefer that she act like them. But she has come to value being a role model for graduate students of another way of being a faculty member. She said:

> I've also learned, with increasing appreciation, the importance of training graduate students and being available to them as [an example of] a real person who balances a lot of things in her life and is not your typical faculty person but yet has managed to have a successful life -- not typical in the sense [of being a] white male interested in boring crap, willing to put up with anything in order to be chairman of the pooh bah committee, concerned only with my discipline...

Two teacher-scholars talked about shifts in their careers that had emerged from the synergy of their teaching and research, but they had opposite views of the source of ideas. The College A professor experienced definite shifts in his research after two younger faculty members were hired. They had expertise in an area he was considered taking a sabbatical leave to work in, so he chose to work with them for several years instead. He talked about the impact this new line of research has had on his role as a teacher and scholar:

> I became extremely interested in the area because there's tremendous potential there...We added some courses to include that type of [research] material, which previously was never taught, and we made that change in the mid-70s and have been teaching it since and it has expanded. This is still the program that everybody in the country looks to...

In contrast, a College B professor said:

> ...almost everything I write comes out of my teaching...Some of my early articles spun out of kind of arguments and things that arose in class where

we had a discussion about something we read or some point. And then [from] conversations with students, I'd start developing an idea or try to say something in a certain way and after awhile maybe I'd get something that seemed to make sense to me and be a good point and, as far as I could tell, it was in none of the readings so I decided to write it up and send in some place. And so a lot of articles that I've done come out of subjects that I was teaching.

Obstructional Elements

As would be expected, many teacher-scholars worried about their own ability to meet needs of students as well as institutional support for and commitment to providing quality education for undergraduate and graduate students. Like their researcher colleagues, teacher-scholars had a predominately negative view of the university generally, and administrators specifically, in terms of the ratio of demands placed on them and services received by them. The anti-administration sentiment seemed to intensify with faculty seniority.

The three junior faculty members in the group were concerned about keeping their positions during periods of budget cuts and meeting performance requirements for tenure. A College E assistant professor worried about a number of things. Initially, he worried about his performance in teaching and research, and added, "The service thing sort of goes along and you do whatever needs to be done". He was particularly concerned about student performance:

> ...Generally, the background of the students...by the time they get to this level, they're so weak compared to what I expected that we have to do extra work to bring them up to speed, where you basically don't do certain things because you know they're going to have such a hard time. That's not a university problem. I think this all goes back to the high school and the elementary school. Beyond that, it goes [back] to the family structure in this country. I think over the last 20 years or so, it has fallen

apart...again, this is an average picture...There are some very good students...but the level of commitment that they have to their own education seems to be quite noncommittal actually. I'm not sure why they're going to school sometimes...That's the thing that worries me. I'm not sure how much of that is our fault in teaching styles, and how much of it is their own upbringing [and] lack of preparation...

His concerns about research related to being able to secure sufficient funding to support his experimental work:

...if I don't find a grant to maintain the research, it won't be done internally. The resources aren't here on campus. So there's an extra pressure there that's like running a business. You're on your own. You have to make it succeed...So you really have to work extra hard trying to get the grants to come in on a regular basis so you can pay your students. It's very hard to get GA [graduate assistant] support for students in the department...the research support from the university overall is rather weak.

In his view, the university not only fails to provide funding for his research, but also makes it difficult to get whatever support is available. He said:

This place is sometimes quite disappointing...I've never been in a place this large, so everything that I have to do as both a teacher and a researcher seems to take extra time...extra leg work...Part of it is the support structure that we have from the university. I'm not confident in some of the people who are in charge, [whether] they are competent in their work...What sometimes happens is that, to try to find just a simple answer to a question, you just can't go to one person and ask them. You go from place to place, person to person...The operations are not really running smoothly.

This faculty member was bothered by his sense that, if he does not do a good job, he won't be tenured but incompetent university employees are protected by unions.

A College B assistant professor was most worried about what people were saying about the quality of her students' work, as well as about having adequate facilities and equipment for them. Since her temporary faculty assignment had

become a tenure stream position, she also was worried about establishing her

research program and about how her peers would evaluate her work. She said:

> ...if I say that my research is going to be certain types of projects with the computer, or whatever, I could also get paid for that and a lot of faculty do have a problem with that — that it's just community work and it's local or whatever. I don't know where I'm going to take that [research]. I've got a sabbatical that I'm hoping to take in the spring, so I really want to have a clear idea of what I'm doing...

In this assistant professor's ideal world, all faculty members would communicate

better and be more respectful of each other. For a College A assistant

professor, the ideal world would consist of smaller class sizes and more

opportunities to work individually with students. It would also ban the "on-

campus/off-campus" mentality that exists among extension staff, and would

engage more field staff in teaching campus courses. Being in the first year of a

tenure stream position, this faculty member was worried about his position being

eliminated or reduced to nine months because of tight budgets. He also worried

about "just having enough time to do the things you need to do".

These same concerns were also evident in the comments of well-

established faculty members. A College D professor and a College E professor

both worry about successfully guiding their graduate students, and about bringing

in enough grant money to support graduate students and technicians.

A College A professor said that, while he has been well-supported and has

excellent facilities and equipment, he worries about the erosion of federal

research funding and the highly competitive environment that his graduate

students will enter as new faculty members. He also felt that the dean of his

college hadn't given faculty members enough input into decisionmaking. Another

College A professor alluded to the "change in philosophy of some units" and

implied that it was administratively driven. In his ideal world, he said:

> People wouldn't be in control who are really dictatorial and don't allow
> creative thought and don't care about teaching or students, who force their
> opinions on the whole group of other people and are unresponsive to
> students and to society at large...

A College D professor said:

> I worry about what the faculty is asked to do. To respond like a halfway
> decent citizen, there are so many demands on their time [it's] really
> frightening...I mean, I'm just pulled in so many directions.

She felt that women faculty members, in particular, were overworked and that,

ideally, the university would "progress much more rapidly [in] making this a better

place for women and minorities". She added:

> We would know what we really have to do and we wouldn't have 200
> workshops and [then] only appoint one percent increase [in] women and
> minorities per year in the faculty...Yes, we are increasing, but not fast
> enough.

A College D associate professor would do away with what she sees as the

double standards for female and male faculty members. For example, she said:

> ...I think men can get away with dressing very casually...you know, the
> quintessential scientist who's only concerned about science...I don't think
> women in science are there yet. We're still viewed somewhat as objects of
> our outward appearance and people place too much emphasis on that.

She talked about a recent incident in which her photo ran in a campus newspaper

with a story about a professional award she had received. A male colleague

approached her and, rather than comment about the award, told her it was a bad

photo and that she should have a different one taken.

A minority faculty member in College C complained that her colleagues tried to "homogenize" her. She said:

> They want me to move to [university town], join their card club and start participating in their little tailgating parties and be one of them. So, if I could change this place, I wouldn't ask that they change their behaviors, but I would ask that they become more tolerant of my behaviors...

Her biggest worry as a faculty member was that she would become accustomed to the intolerance for diversity she felt was prevalent in the university:

> [I worry that] I will become complacent about the racism, sexism, homophobia and antisemitism. That I will be able to hear somebody say, "Jew 'em down" and not have my blood pressure spike and have my neck almost swivel off its anchoring because I'm whipping around to see who could have said something like that. So, it's a challenging kind of an adjustment because, on one extreme, it certainly isn't adaptive to have heads swiveling and blood pressures spiking every time you hear something like this. These are high frequency occurrences. But, at the other extreme, I don't want to be this sort of person who listens to things like this and doesn't react.

A minority professor in College D said the number of minority students at the university was too low and the number of campus administrators was too high. The university administration came in for considerable criticism by the more established teacher-scholars, who generally felt unappreciated, unrecognized and unsupported by administrators who seemed to care more about expediency than about quality teaching and the educational needs of students. For example, a College B professor felt "the powers that be don't appreciate the kind of teaching I do". He said they recognize scientists' need for well-equipped laboratories but they don't recognize the liberal arts faculty's need for classes with low ratios of students to teachers. This professor was also

concerned about the recent decision to have freshmen take televised humanities

courses:

> With good students at Harvard, it's okay. But MSU students need help.
> They are nice kids, but they need more help than Harvard students --
> spiritually, not just intellectually.

A College D associate professor was concerned about "how far removed

the administration is from what faculty really do", but added that she did not know

if the situation was different at other universities. This faculty member and

several others felt that administrators could enhance faculty morale simply by

writing an occasional note acknowledging individual faculty accomplishments.

She said:

> ...recognition for people who are really doing a good job...doesn't have to
> be money, or distinguished faculty awards. It can be a letter from your
> dean or from somebody in the office of the Provost who recognizes people
> who aren't getting all these other awards but who have distinguished
> themselves on the campus in terms of providing either a service to
> students and/or faculty colleagues. One letter of one paragraph that gets
> sent to people I think would make a big difference in people's minds.

A College C professor said top level administrators need to send clearer signals

about what is excellent faculty performance and need to use the reward system

to buttress such performance. Not surprisingly, he thinks the university's

priorities are wrong:

> This university exists for students. And because we have students, we
> need faculty members. If we didn't have any students, we'd get rid of the
> faculty. That's what is wrong with this place. We've got the thing upside
> down, ass backwards. This university exists for students.

This sentiment was echoed in the words of a College E associate professor:

There are 2400 faculty members at this university and there's over 10,000 employees, so that's about three employees for every faculty member...Sometimes the tail wags the dog...and I have complained in the past and had some conflict with staff because I think sometimes they lose sight of the fact that the purpose of this place is to educate the students and that the faculty are the ones who do that.

In the ideal world, a number of teacher-scholars wanted to return to some halcyon period when scholarship prevailed and bureaucracy had not been invented. For example, a College E professor said:

I would try to go back to the scholarly environment...I just have this image in my head of a faculty member walking across a campus with a group of students discussing Newtonian vs. quantum mechanics...a university where people came to an auditorium to discuss issues openly in a scholarly environment...I'd like to see the place become a place where people have time to share ideas, whether it be [in] philosophy or engineering or business or life science or whatever.

This faculty member lamented the loss of time that he said he had as a new faculty member to argue issues or go to the library to read the latest journals. He thinks the situation has changed for everyone today, including young faculty members, because of increased pressures to write proposals and fill out other required paperwork. He concluded:

Things have reached a point now where [faculty] don't have time to be thoughtful...There is so much of this accountability and...do more with less. And how many courses are you teaching, and how many grants do you have, and how many papers did you publish, and how many committees are you on? And what really concerns me is, if anyone said, "Oh, I spend eight hours a week thinking", they'd probably get fired.

Instrumental Elements and Additional Comments

Of the fifteen teacher-scholars, five either were not directly asked for additional comments at the end of the interview, or chose not to respond. Of the

remaining ten, only one College E assistant professor continued his discussion of the negative things he would change in the ideal world by repeating a point he hade made throughout the interview about needing to somehow change the lack of internal motivation that he finds is common among today's college students.

The two other assistant professors ended on fairly positive note. The College A faculty member said it was "a good place" because "you have freedom and you get paid to think". The College B assistant professor said being at MSU had been a good experience and she felt challenged to continue growing. But she questioned whether she would remain at the institution:

> ...my biggest thought right now is, "Where am I going to be in five years? Am I going to be at MSU?" I don't see myself as staying in one place because I've never done that. This is the longest that I've been anywhere...

Two teacher-scholars in mid-career hedged their earlier negativity by making closing comments that left an overall sense that the positives outweighed the negatives in their experience. Both obviously enjoyed their relationships with students. The College E associate professor said:

> It's a good life. There's opportunities to meet people from different places, different countries, and most of the faculty and staff are pretty regular, nice people that are fun to interact with. You get to meet students who are always interesting and keep you feeling young and keep you feeling interested, so those are the things I like.

The College D associate professor appreciated having several women colleagues and enjoyed the opportunity as a female scientist to overcome stereotypes. She said:

...When I walk into a classroom to teach a class...I'm sure that they [students] have an impression that's different than when a male -- especially an older male faculty member -- walks in the room. [They] probably think I'm not going to exert a lot of authority and power. And by the time that class finishes, they have absolutely no thoughts of that kind remaining. And they tell me this...If I can change people's minds, if I can dash stereotypes, that's the best thing I can do by being here -- perhaps even better than just doing the science.

A College A professor who was nearing retirement said his career had been "a very pleasant experience", primarily because of his almost parental feeling toward former graduate students:

...I have been blessed with 50 outstanding graduate students over the years...They've gone on and have done extremely well. Out of those 50 grad students, there are five deans out there and a number of department heads, vice presidents with companies and others doing exceptionally well in research programs and so on. I hear from all of them at Christmas time, even the foreign students, and I've had about 10 foreign students.

A College D professor said her experience as a faculty member has not been ideal but it has been good and, she said, "I think I feel more secure as a person today". A College D associate professor said she liked the place and the opportunities she has had to contribute to it through committee service. Unlike other faculty members, she made positive remarks about the MSU Provost, but disliked administrative politics:

I think the...politics at the upper administrative levels bugs me, but that is going to occur everyplace, too. And if I'm in positions on committees and I [am] put in this position...of choosing to toe their line, which is not honest, and not choosing it, I will not choose it -- taking whatever heat comes along, and it always does. But that is sort of a way of making a statement that things don't always have to be extremely political and you don't have to have things that are dishonest going on in order to make things run...So, maybe I look at that as the way I can be a thorn in people's side...I can do that here, but that comes also from having been here for a very long time.

Two other teacher-scholars who had been at MSU for quite a few years

said they have had offers to take other positions but have decided to remain. A

College D professor said:

> I'm happy here. I've had chances to go other places [but] I have space, good facilities, my salary is reasonably good...I could bitch and bitch but [you] need to keep things in perspective. Even though there are problems with budgets, in the whole scheme of things, this is like a fairytale to me...I've gotten the chance to do these things and pursue what turned me on. The thing I like is, if you ask me what I'll be doing ten years from now, it will be a mystery. I'm looking forward to [international] travel...I've got a couple of books in me...I can't think of a better place to be than right where I'm at with all the possibilities that exist for me. I like being in academia. My graduate students do apprenticeships with me and that's a neat thing, to mentor people and impact them as much as they impact me. People in the world don't always get that opportunity. I'm happy to get up in the morning and look forward to my job.

A senior College C professor also had chosen to remain at MSU because, he

said:

> ...I like it. I have a network that I can exploit to the extent that I want. I can do lots of things that I think need to be done and nobody gets in your way...I strive to do the very best I know how...[My] concern is for the students, which are my primary responsibility, [and] for my colleagues. See, I want this university to live up to its potential...This is a quote by Abraham Lincoln, "He has the right to criticize who has the heart to help". I'm critical of this university beyond belief, but I'm willing to help.

Integrators

As mentioned in Section 3, the 17 participants categorized as integrators

believe their fundamental purpose as faculty members is to use knowledge to

directly benefit society, or a certain segment of society. They are motivated

primarily by the need to make a difference or be of use and, therefore, they seek

to engage in activities variously described as extension, public service (or service), and outreach.

The majority evolved into an integrated role framework from other perspectives. And, as mentioned in the previous section, 3 of the 17 did not engage in all three role dimensions at the time of the field interviews, choosing instead to emphasize various dimensions at different points in their careers. Of the 14 who did enact all three role dimensions at the time they were interviewed: 7 entered their first faculty positions with personal values that dictated a three-pronged approach to role enactment; 4 took positions in which they were expected to enact the three role dimensions; and 3 shifted into three-dimensional roles to enhance their professional advancement in the academic environment as they perceived it.

Many integrators talked about career turning points and institutional concerns in terms of how they have learned or are learning to establish credibility with colleagues whose values and perspectives of the faculty role differ from their own.

Career Shifts and Turning Points

The College A, D and E professors who did not engage in all three roles at the time of the study chose to emphasize parts of the role at different stages of their careers when it became difficult to fit all three components together at one time.

For about seven years, the College A professor engaged in teaching, research and extension activities that were "highly complimentary", but he "evolved away from my real strong interest in teaching for the sake of teaching" when he was assigned to teach a course in which "the subject was so different that there wasn't a close overlap with extension and research". He said:

> ...it was frustrating because the teaching would kind of, you had to spend a lot of time on things that you wouldn't otherwise use in extension work and applied research. It wasn't complementary so that's why I changed and deemphasized the teaching.

He had always liked teaching and extension because they both involved "helping people through information" but, given what he perceived as the predominant emphasis on research in both his department and college, he opted to focus on what he refers to as "integrative extension and research".

The College E professor began his career teaching and researching in a particular subject area and then began researching a different area that "gained national attention and it became a rather big project". At that time, the extension specialist assigned to the area in which the College E professor had begun doing research had decided to shift his focus, and the College E professor asked to move into the extension role so he could "have all the activities kind of focused in one area". He also had another reason for switching to an extension and research assignment:

> ...I was getting tired of teaching. I had been teaching as a faculty member for ten years plus four years as a graduate student. And it wasn't so much that I didn't like teaching, that part was okay. But there was one course that I had taught 21 times, if you can imagine, in just 13 years and I was, at the time, 37 years old, so I basically said, "For 25 more years...I'm going to

be teaching the damn course" and I just didn't like the prospect of it...I was getting bored with it and...I found myself actually beginning this course at a higher level each term because I was so bored with the stuff.

Like the College A professor, he realized what he was learning in research wasn't enriching his teaching so, he said, "I changed my teaching for extension". Now he can schedule his time by days rather than by hours, as he did when he was teaching:

> For example, last week I attended our [regional project meeting] and I knew ahead of time I was going to that and I had those days blocked out, no problem. And then, when I get there, I see there are people who have teaching appointments. They had to get somebody to teach their classes while they were gone. Now is that fair to the students? You have to ask that question. Then, when you come back, you've got to make sure that whoever substituted for you did the job they were supposed to do and...there's a lot of tension associated with that for me...it wasn't easy for me to turn a class over to someone else even for one or two lectures because of the responsibility I felt about the course.

The College D professor started his career as a teacher and researcher in an area of science. Throughout his career, he took the lead in designing departmental academic curricula, and he served on numerous academic governance committees. About ten years ago, he was asked to serve on a campus task force looking at education issues in science and math. The task force provided an opportunity for him to become engaged with issues he had identified some 20 years earlier, but was not in a position to address. As an outgrowth of serving on the task force, he submitted a proposal for teacher workshops that was funded by a major federal agency. The workshops eventually developed into the full-time program he now heads. He said:

I closed my research lab and had my last graduate student about three years ago. It was a natural thing. There is so much to do here, I couldn't possibly do both.

Observing that science research grantsmanship has become a full-time job, he

said has chosen instead to focus on service work:

My credo is to help K-12 teachers do what they have to do and do it well. We provide workshops and courses to enrich their backgrounds and course content. Teachers put money in and buy university services. The university does that for industry. I capitalize on that benefit for teachers. My position here now is administration — trying to get faculty to do this and that.

In addition, he teaches an undergraduate course and serves on a campus

committee for undergraduate education.

It is interesting to compare the faculty role perceptions of these three

established professors with the two untenured faculty members who more

recently entered multidimensional positions. At the time of the interview, the

College B assistant professor had just submitted her application for tenure and

expected it to be approved. She noted a shift in her focus:

...I'd have to say that the imperative to make some scholarly contribution to the field is, well, I always knew it was there, but I think maybe it has become more important to me personally as a faculty person in the last few years...I used to be much more service oriented and thought that was really enough. And so maybe that's changed a little bit. I see myself trying to accomplish something more in the research and writing area than I used to. And that is a necessity...I think I always thought that teaching was very important, and being a good role model for students and a good mentor. That's always been real important to me and that really hasn't changed.

Her natural proclivity for teaching and service is similar to that of the College A

professor mentioned earlier, who evolved away from teaching into an integrated

extension and research role. The College B assistant professor's position

required performance in all three role dimensions, including outreach to an off-

campus constituency she had difficulty working with at first but has since found

rewarding because, "...they are so involved in the real world...much more so than

straight applied [professionals in her field] are in my opinion".

During her first years at MSU, several jobs came up that at one time were

of interest to her. After weighing the pros and cons of each institution, she

decided MSU offered some important advantages, such as:

> ...a nice blend of freedom to do the things I want to do, enough student
> contact, enough opportunity to do research [without] the snottiness that I
> see in a lot of other places.

The College D assistant professor moved from a postdoctoral research

fellowship to a tenure stream faculty position responsible for teaching, research

and extension. He was struggling with how to shape a broader role for himself:

> ...individual faculty people have to know many, many different things.
> They have to be good generalists. You know, people are trained to
> specialize...you do your research project in a certain area [and] you
> become an expert researcher in this particular niche. But then, when you
> are hired, all of a sudden you've got to do everything and I think it can
> create problems.

His primary problem, in making sense of the faculty role, was sorting through

mixed messages from university administrators about faculty performance

expectations. He said:

> You know, the picture of the university as the ivory tower where you could
> go and do your own thing and people are not going to really be noticing
> that much -- you know, you can do something esoteric -- is no longer true.
> But...I think we need some better leadership in the area of trying to help
> the individual faculty member understand what that change means. And
> you hear so many different things from people for priorities. For example,
> we had a meeting with Dean [name] to try to understand what the dean

thought about our department and help him understand what we thought about his leadership...And he said, "I'd like to see you do less with special interest groups in the state". Well, that's in direct conflict with our extension mission. We have people who work directly with [constituent] groups and get their resources for research from them...And the second thing that happened was that, later on, Dean [name] put out an announcement that he wanted to see more outreach activities on the part of his faculty. So...that's as mixed a signal as one can get.

This College D assistant professor agrees with the university's renewed emphasis on undergraduate teaching because, he said, "I hear way too many stories about undergraduates who are really not happy with the quality of their courses". But if the emphasis includes an expectation that faculty members will teach more, he said they will have to do less of something else:

If you are going to teach more, then you can't do outreach [because] you can't be gone [from campus]...If you are going to teach more, then you can't do research because that is so time absorbing. So it brings up that whole idea of how is the reward system going to work for teachers? Are we going back to this old model where we will have certain people who just teach?

His concerns were reminiscent of the College E professor's comment about the difficulty of scheduling other activities around on-campus teaching.

Two senior faculty members had entered positions in which they were expected to perform all three role dimensions. A College A professor had experienced teaching and research at the graduate school level but, when he took a faculty position with a three-way appointment, he said:

...I was not sure I really understood what extension meant in that context. I knew it was for writing publications and I had no problem with that. I knew it was speaking at meetings and I had no problem with that. But...we had a tendency in this department, initially, to define extension as anything that did not fit [in the categories of] teaching or research. And so it was whatever someone else did not want to do. If they were pure teaching or a

pure research faculty or a combination of those two, [they] delegated to extension. So, all of these chores, these kinds of things which I thought at the time were really kind of a burden, I think turned around to be a real asset...I don't mean to sound egotistical or boastful, but I think I could talk with any person in this state about anything related to this department and the whole [field] and do it in a way that would bring credit to the university, all because of that very broad training. I just feel that was a tremendously valuable requirement that allows one to be a fairly productive and effective faculty member today...I worry a little about the future because I don't see that at all happening today...they [faculty] can bury themselves in their rather narrow specialty and they may represent the discipline, but they probably don't represent the university in a very favorable light to people of the state.

This faculty member has worked with a particular clientele group in the state for

15 years and has evolved from providing technical information to offering a

broader perspective of trends and future directions. He said:

> ...I was their resource person and I wrote publications on...very technical aspects of management. But, over the years, I still do that but I've also now gotten to be much more of a philosopher...I think we've developed kind of an, "Oh, let's see what [his name] thinks about that" philosophy. "Why don't we ask him to give an evaluation of how he would view what is going to happen in the next ten years in the [name] industry". So it's gotten to be much more philosophic and I kind of like that in some ways...maybe it recognizes being an elder in the church as opposed to just a member...Really that's normal for every faculty person who is working in a particular profession to become kind of less technical and more...of a stateperson type role.

He also enjoys being an "agitator" who gets people to look at things from a

different perspective, in keeping with a saying he quoted and lives by: "When

everyone thinks alike, no one thinks much".

Similarly, a College B associate professor was told when he was hired that

the department wanted "better outreach" with high school teachers in the state,

so he has taken charge of developing that area and said:

...basically, I just want to set up some lines of communication with the teachers. Plus, I want them to look to MSU as a place where they can learn something about the profession or about what has changed in the last few years, to see us as a resource on anything having to do with [his field] teaching or whatever...There had been a real break in relations between high school teachers and our department.

In addition to his commitment to casting a favorable impression of the university across the state, this faculty member felt a heightened sense of professional responsibility since receiving tenure. He said:

...for a lot of people, your whole life revolves around whether you're going to get tenure and you live in limbo until that decision is made. But that wasn't as traumatic as the sort of post-traumatic stress once that decision is made...there's a huge letdown and then you're bombarded with an additional layer of responsibilities...you reach a higher echelon almost of decisionmaking. You have to decide, "Really, now, what do I want to do for the next ten years?" ...You're committed to the department and program in a different way [after being tenured].

Three full professors in Colleges A, B, and C broadened the roles to include all three dimensions after experiencing career roadblocks.

The College A professor initially took a position with teaching and extension responsibility and, while he was promoted through the faculty ranks, his career advancement was slower than he desired because it was not based on his own research:

You get visibility the fastest in this area of science -- almost any area of science -- by research...I had no research responsibility...In looking back, it was not a job built on a lot of experience or credibility...not the kind of credibility that exists in the university, because you teach what you know and what you have done. I was primarily teaching opinions and learning and doing rather slowly. My involvement was there, and I had good relationships with people I was working with, but the power structure in the department were skeptical of me and what I was saying in many ways.

The turning point came when he published a textbook and got involved in an area

of research that has become "the icing on the cake of my entire career". But,

while these scholarly efforts gave him visibility and credibility with his colleagues,

his insecurity continued:

> I had already been promoted to full professor, but I still had not felt that I
> really had arrived in my own mind. And I still don't. That's part of the
> professional disease...I want to prove myself every day, and I'm sure I'll
> never change.

A College B professor's insecurity was triggered by a fear that his program

might be deemed expendable as the university faced financial difficulties in 1980.

He pursued and was offered a position at a prestigious private university which

had certain advantages over MSU:

> ...I realized after a couple of years [at MSU] that I was somewhat
> disappointed with the quality of student that I was getting...and I was not
> engaging in the rigorous, challenging environment that I had at [his private
> graduate school]...there was the respect for the research aspect of [his
> field] at that school...that there is not here and, from talking with colleagues
> at other universities, [there is] dramatically less support for the idea of
> research in [his field] at public universities as opposed to private ones. It's
> not valued hardly at all. You know, if you walk into MSU as an assistant
> professor in biology, for example, they say, "Here is your office, here is a
> secretary...here is your lab, here is $500,000 worth of equipment, [and]
> these are your three graduate students that are going to help you do your
> research". And obviously some of that is supported by grant money that
> other people have gotten. But, given the disparity between what you get
> walking into the liberal arts departments compared to what you get as an
> incoming faculty member in certain departments at this university, it is not
> surprising that we are very strong in some areas and not very strong in
> others...I really believe there is almost a [conscious] decision to let people
> sink or swim based on how much of their salary they are willing to spend
> on their research.

The other job never materialized, and he has survived at MSU by supporting

research activities through his consulting business. He noted that, as a new

faculty member, he did not like solving other people's problems but economic

necessity changed his perspective:

> I still enjoy solving my own [creative] problems. However, I really enjoy
> getting paid lots of money to solve other people's problems...It is not cheap
> to do any sort of research in any area...but I think if you are in [liberal arts],
> if you have to bear all of the research responsibility financially, that really
> limits what you are able to do as a faculty member and, this is the crime of
> it. If you are promoted at this university, don't believe anybody who tells
> you it is based on your teaching...[or] your service. It is based on your
> research, period. End of statement. And the university has never made a
> commitment to supporting faculty across the board.

Indeed, a College C professor found out research was the key to

professional advancement after moving into a tenure stream faculty position in

the department in which he had been a graduate teaching assistant. He began

by "overteaching" because he saw his role as being an undergraduate teacher.

Since none of his colleagues told him he should be publishing more, he assumed

that his excellent teaching record would "override any deficiencies in research".

He recalled:

> I wrote very little the first five or six years and that was reflected in not
> getting promoted when it was up or out time. The typical amount of time in
> place for an assistant professor is six years and, at the end of five years
> when I came up for that review, I was given tenure but not
> promoted...[Then] I just started focusing much more on research and
> writing and...I really felt pressure from the system to develop a vita.

He now has a well-integrated program involving consulting that he categorizes as

public service, or outreach, which informs both his research and teaching.

Seven integrators entered their faculty positions with strong commitments

to working across the role dimensions. A College A professor's comments were

typical:

> See, my value system is such that, if I do something, I want to do it right...I
> started out with the idea that I would do the best job I could teaching, I'd do
> the best job I could in the research area from a standpoint of creating new
> scientific knowledge and having an impact at the [off-campus constituency]
> level. So my values have not changed. There has not been any major
> thing that came down the path that pushed me away from that basic
> philosophy, and I continue to look towards opportunities...

Still, this faculty member said, "two monkeys that it was nice to get off my back"

were being tenured and promoted through the ranks. He felt those milestones

represented a "perception by your colleagues that you, in fact, meet their

standards -- you are accepted". In the last several years, he has chosen to limit

his work, as much as possible, to the 8 a.m. to 5 p.m. time slot in order to spend

time with his children.

Another College A professor never felt he was meeting expectations until

he achieved the status of full professor. He had gone through several career

turning points as he transitioned from public school teaching to a faculty position

at a smaller university and then to a tenure stream position at MSU where, for the

first eight years, he felt "like a guest and like...I still had to prove myself". He

explained that his position is unique in the department because:

> "I'm in what we call the human dimension -- it is applied -- and part of the
> problem [is] this is a department of people who consider themselves to be
> hard scientists.

This faculty member was aware that his predecessor never was promoted to full

professor, even though "he had a tremendous following out in the state", because

he was not fully accepted by colleagues. He said:

> I knew that...I had to integrate my contribution into the
> department...Because I was aware of it, [that] I had to find ways to

integrate and to maintain communication with [hard scientists], my own perceptions flourished because that integration fits my personality. I like working with synthesis and integration. And that's also why I like a land grant university, because it is an applied effort and that's the very essence of what I do, a little bit of everything.

A College A associate professor said he feels successful, even though he has not achieved the rank of full professor after twelve years on the MSU faculty, because he has job security and a solid professional reputation that has people coming to him with their problems. He said:

> ...I have lots of contacts. I do not write proposals. People come to use with their ideas and ask if we'll work on them. And we select the ones which fit into our program...So we are really in an enviable position right now. We pick and choose.

Two integrator professors talked about having a central thread of intellectual interest from which a variety of intriguing patterns have developed as their career tapestries have been woven. A College C professor said his work has been significantly influenced by graduate students and people in the community with whom he has worked, and added:

> ...but my interest in this method of experimental social change is what runs through all of that -- the idea of trying to build a better mouse trap and see if it catches more mice, I guess.

A College D professor gave a detailed explanation of the interrelationships of the work she has done in her discipline, and then said in summary:

> I'm trying to help you understand how broad my interests were to begin with [but] there's been a thread of connection to everything that I've done. We currently have a new project...We will be working at this for another four years and it feels very good in that the work we've done over the past twenty years is what's positioned us to do this project. And it also feels very good in that there are all kinds of intellectual challenges left to be figured out in the project that we're currently involved in.

Two other integrator professors segued into nonfaculty administrative roles

for periods during their careers as a way of having an impact in new arenas. A

College A professor's work with public policy issues landed him an invitation from

a chancellor of a state university system to help design a new university. He

said:

> ...I can recall getting the call from him one evening and [he] wanted to
> know if I would be willing to take off a week, come to [state] and...design a
> university from scratch. Well, my god, that is so heady. You know, I could
> recall sitting, as a graduate student at [institution], saying, "Look, if I could
> ever design a university, it would be different than what we're experiencing
> here"...So, when the challenge came I said, "Okay, I'll do it" [and] went
> over and found the renegades that [the chancellor] had assembled. It was
> a good set of renegades...kind to each other but totally lacking in respect
> to anybody's position. It was dog-eat-dog intellectually. God, that was
> exciting.

After helping to design the university structure, he was asked to become one of

the top level administrators and found that challenge too compelling to refuse.

He said:

> It was a good experience and I did that around the clock for four years...[It
> was] very demanding, very demanding...And, of course, it made it tough
> for the family...the children saw very little of their father. I wasn't much of a
> husband and, to this day, I don't know how I would have had a better
> balance and still have been able to achieve the things [I did]
> professionally.

Another turning point came four years later when he was pursued for a

department chairperson position at MSU and realized he had to choose one of

two directions, "either to get back into my disciplinary area in a substantive way,

or to go full bore into college administration". He opted for a four-pronged role as

a department chairperson who also did teaching, research and extension

because, he said:

> ...I'd missed teaching but, as much as anything, I just missed having a
> chance to be more substantively involved [in his discipline]...I was always
> intrigued by the possibility of making a difference in people's lives...I'm
> concerned about making people's lives better and [when I] got here, I just
> had the chance to do some things...I was one of only two department
> chairs that kept an extension appointment at the time...I wanted to be in
> the field, working in the field with people and so I had that, and I did my
> research and...[L.W.: So you did all three things?] All four
> things...administering the department in addition to teaching, research and
> a strong outreach program.

A College E professor was on the faculty at one university for two years before

taking a leave of absence to work in state government with a chief executive

whose ideas had impressed him. A one-year leave turned into two years and

then, during the third year, he agreed to teach a graduate course each term while

continuing his governmental work. He said:

> The government arena offered an interesting challenge and I intended it to
> be temporary. It was not a shift in career in my mind. It was an interesting
> challenge working for someone I admired.

In circumstances similar to those of the College A professor, the College E faculty

member was asked to apply for a department chairperson position at MSU and

accepted the position because the opportunity to build a program appealed to

him.

Obstructional Elements

Most integrators had a multitude of aspects they would change about the

university, including increasing the commitment to and support for diversity,

decreasing class sizes, rebalancing the faculty reward system to focus more on quality teaching and outreach, reducing the institutional bureaucracy, and improving facilities. Their primary worries as faculty members were about inadequate funding for their programs, the erosion of university support staff and services to assist them, and a lack leadership ability of administrators at all levels. Many integrators were concerned about their perceptions of a changing university paradigm and implications for the faculty role.

Only one integrator, a College E professor, said he had no worries, but he conceded to having "concerns" about the quality of students and about maintaining adequate research funding. In his ideal world, more two-way communication would take place between faculty and top level administrators, rather than what he saw as the prevailing one-way information and idea flow from faculty to administrators, and budget policies would selectively eliminate programs, rather than the current strategy of implementing cuts across the board.

The two untenured faculty members in this group both worried about "getting overwhelmed by work", as the College B assistant professor said, and knowing when to say no to activities. The College D faculty member explained his difficulty with refusing requests:

> The problem is, I'm in a job where I'm supposed to say, "Yes, I will help you" or "Yes, I can do that"...I think as an untenured young faculty member, you are pretty vulnerable. You've really got to try to get as much done as possible to make as many people as possible happy so that you can get to the point where tenure offers you security...If I were to say am I ever anxious about anything, it would be meeting deadlines and covering commitments. And I find myself getting behind on those things...I guess, in a nutshell, I'm really, really busy --really, really, really busy.

In their ideal worlds, these assistant professors both said that new faculty

members would clearly understand what was expected of them in the role. And,

according to the College B assistant professor:

> ...everybody would share in departmental tasks and committee work, and
> teaching would be rewarded as well as research is...In an ideal world,
> there would be ways of weighing those things comparably.

The College D junior faculty member voiced a complaint, which also

resounded in comments of senior faculty members, about there being "haves and

have nots right now" on campus. He compared the inadequacies of his facilities

to the modern accommodations of scientific colleagues located on the other side

of campus. Several faculty members in other colleges made references to being

financially or otherwise disadvantaged compared to colleagues in biological and

physical science departments. A College B professor said:

> We have an institutional history of not valuing – in fact despising – the
> arts...If you get a sense that I am somewhat bitter about what's going on
> here, it is absolutely true...My students pay the same amount of money per
> credit as somebody in any other department in this university and it is
> really unconscionable that they do not have [a] quality facility to work
> in...This department is terribly underfunded. It is not possible to properly
> educate students in the environment that we presently have...But this is
> not a problem that is unique to our department. It is present in many
> departments.

Indeed, a colleague in College B worried about how "economics" might affect "the

role of a humanities-oriented department in an institution like this" that has been

strong in traditional land grant science and engineering disciplines. This faculty

member felt the land grant philosophy was embodied in his department's

outreach activities, yet they were underfunded compared to other campus

departments. He also was bothered by the inefficiencies of a "Byzantine

bureaucracy" that forces people to misuse the system. For example, he said:

> ...most of us in the department...have realized that you go right over the
> heads of the people that control the local purse strings and you go to the
> Provost...I find that a real strange setup at this university. The people go
> right to the top and get it [funding]...There are slush funds all over the
> place.

Two College C professors worried mostly about faculty relationships within

their own departments, given financial problems that threaten to become more

acute. As one said:

> In the department, I think that this has been a particularly difficult year for
> faculty interaction. At the bottom of it is some of the stress that is put on
> from the college -- that we are continually asked to do more with less has
> created some discord in the department between the chair and the
> members of the department. And then I think the mood among the faculty
> in the department has not been as good this year as in the past. The most
> obvious sign is the way faculty interact in meetings, with much more
> hostility than I remember and maybe a lack of respect for one another at
> times.

The other College C faculty member said:

> There have been times when I've worried about the survival of this
> graduate program...because this kind of activity is not seen by a lot of
> people in this field as essential. It's viewed as a fringe. Even though
> we've been here half as long as the department has been here, we're still
> viewed as power windows or something by some of our colleagues --
> "Well, it's nice but we don't need it".

This sense of being inadequately supported was present among inte-

grators in all five colleges in this study. Two College A professors were grateful

for computers and printers because of the shortage of secretarial support. One said:

> We have far less resource support for individual faculty members today
> than we had before. I have the equivalent of about a tenth of a secretary

now...If I don't worry about my own organization and take total responsibility for it, it doesn't really happen.

A common concern among College A integrators had to do with the capacity of individual faculty members to make a difference, or an impact. One faculty member said that, in the ideal world, he would put less emphasis on trying to get outside grants and more emphasis on having an impact on clientele groups. He felt administrators should adopt this value system as well:

> The clientele of administrators, in my opinion, are the faculty and a good question an administrator should ask [is], "What impact have I had on my faculty? How are they improved? How have I helped them to improve and do their job better?" I'm not so certain that our administrators spend their time thinking of how [they] can improve the faculty.

This faculty member spoke gratefully of support he received as a new MSU faculty member that is no longer available:

> ...when I came to MSU there was a group that provided support to faculty for more effective teaching...[It was] one of the most valuable things this university offered me when I first got here and I'm thankful I arrived when I did because, about two years later, that was dismantled...I can honestly say that the seminars...and the brochures they had and the time that group took was very instrumental in assisting me into developing the teaching techniques and the values and the philosophies I have today...I just personally feel that that type of support for new faculty...is not here...faculty development is more or less left up to the faculty. If you're going to improve, you're going to wind up doing it yourself.

Another College A professor felt that extension work was not supported or valued as much as it should be in his department and college:

> You know, research, extension and teaching are supposed to be equal. That's what the administrators say, and maybe that balance is changing. I hope it is...but I think that one of the frustrations is [that] good, effective extension or integrative extension/research are not rewarded as well as the peer research, and I was just reviewing some of our salaries in our department. The peer researchers are making much, much more money

> than any of the extension people...So on-campus extension specialists like myself are disadvantaged salary-wise to some degree, but the field agents are even more so...Part of that is administrators in the College of [name] departments that have the three-way responsibilities understand extension the least...We have never had a department chairman in our history that's primarily, or even to a minor degree, extension [oriented]...they don't understand [that] an effective extension method is you don't go around blowing your own horn. You just quietly work with people and, when it works, you say to the other person, "Boy, you had a good idea. You were so successful in doing that". That's good, effective extension, but the department chairman lacks the sophistication to know what we did...We also need better vehicles for getting that information to the administrators. Our extension reporting system is just horrible in that regard.

He said that, in the ideal world, the university would be committed to the land grant philosophy. But he felt the provost only gave "lip service" to it, and he perceived that top level administrators planned to deemphasize his kind of work.

He said:

> We need to continue to make a difference to our clientele that we've developed for many years. They look to us and we know how to help them and they have important problems. We should not abandon them.

A College D professor believed an effective outreach system needed to encompassed the entire university. He felt that some faculty members in math and science departments should have extension appointments, "as part of the obligation to respond to public needs", as also because ideas for basic research frequently emerged from applied problem-solving efforts.

A College A professor worried about the capacity of younger faculty members to do the kind of multidimensional work that he was expected to perform and on which he has built a career:

> ...I wonder, when I'm not here, who is going to perform the roles and have this perspective that I think the department needs...I see faculty today so

focused on getting tenure and getting into the system that they are very reluctant to take this broader perspective of what it means to be a faculty member. They want to become the best researcher in topic A and evidence that by five or six refereed publications in three years. There isn't the interest in working with students. There isn't the interest in understanding the broader issues. There isn't the interest in being involved in the university committee structure and really getting to be a member of the institution...There are some that would say, "Well, I don't have the time to do that because that takes away from my doing good research" ...And I think a university has got to be more than a collection of specialists ...Somehow this system needs to make us think not just of ourselves, but of others. And yet I realize, at the same time, the tenure process we use today is really rather strict and demanding...But I fear that we are losing this holistic sense of responsibility and I still view MSU as being a very land grant, service, state-focused university...I think that has been our strength.

Two College A professors expressed a firm belief in doing research that is

useful and worried about their own capacity to make a difference. One said:

You know, you do research and you generate information and, because this is land grant, because we are applied science, I want that information to be useful and worthwhile. And you so seldom can see that it has done any more than train a graduate student and provided the university with some overhead. So that concerns me, that my research program be something that is making a difference ...I'm not against basic research, if that were my job...but that's not what we should be doing here. I don't think that's our responsibility...you always can do some basic research as part of every project, but it is not a priority.

Now at a career stage in which he is no longer "buried in my own survival", he

has begun looking at broader institutional issues. For example, he said:

...I am becoming very concerned about the paradigm of the university. Do we have our act together, when you consider we are supposed to be a conglomerate of the most reflective people in society and have great responsibility for problem-solving? I don't think we're doing a good job of adapting to society's needs and changes. So I'm finding that I spend more time talking about those kinds of things and less time [on] the microenvironment.

His ideal world would allow more time to be thoughtful, creative and reflective

about his scholarly work. A College A associate professor talked having a

reciprocal obligation to a society that has taken care of his basic needs:

> I want to feel, when I get up in the morning, that I'm proud of what I'm
> doing, that I'm useful to somebody...Society has made an incredible
> investment in me and I want to fulfill that expectation. And right now this is
> the best place to do that. They've been good to me. I don't have to worry
> about feeding my family...[or] paying for my house...[or] health care. All
> the fundamental worries of man, they've been taken away from me. And
> for that I should be responsible to do the best I can in an area. And I do,
> you know.

He recognized that he "chose a very nontraditional game of applied research"

which has kept him from being promoted to the rank of full professor by

colleagues who don't always understand or value his contribution. Still, he is a

pragmatist who believes what he does should be useful, and he is confident in

the appropriateness of his approach:

> My guess is that, as the university becomes more entrepreneurial, what I
> do will become more common. But at this time, it is still considered a bit
> risque to the university to be so closely a look alike to private industry...To
> some people, that is an abhorrent idea. They think we're getting in bed
> with the wrong thing...You get a little indignant with your colleagues once
> in awhile and say, "Gee, they don't realize how important what I'm doing
> [is], but probably I don't spend much time telling them either...

His pragmatism prevented him from thinking about the ideal world because, in

such a world, he would not be needed to solve problems. And he was the only

one who said that the availability of unlimited funding would not be ideal:

> It would not be an ideal system if they gave us all the money we thought
> we needed...It's not necessarily a blessing because you'll develop instantly
> expensive solutions when you have an infinite amount of money...You
> can't solve problems by throwing money at [them].

In contrast to this College A pragmatist, who seemed to accept the things he could not change, two professors spoke at length about their frustrations over the things they could not change in the institutional environment. A College B professor spoke about how the initial idealism of many faculty members diminished as they faced the realities of a system that inadequately supports them:

> I think everybody, when they get their terminal degree, feels that they are ready to take on the world. And if they choose to become a faculty member, they do that because they feel it is going to provide an environment that will allow them to be all they can be. And if there was any word of advice that I would give, [it] is that it is very rare that happens....there are, unfortunately, more instances than not in which all that you do will not be enough to provide you with the quality environment and support system that you need in any field...to really contribute all to society that you can. And you better be prepared to accept that...I've met more bitter people at university settings than I think I've met or known in any other setting because I think people come in with very high expectations and they are confident and they are, by and large, very bright and talented people. And one of the reasons that they accept a smaller paycheck is because they assume that the university environment will be more amenable to the growth that they want to engage in...But very often it doesn't work out that way...I haven't given up yet, but I know a lot of people who have.

A College E professor talked about how factors in his personal life intervened to help him admit that he could not change his new chairperson's administrative style and other departmental factors. He said:

> I worry about the department...but I've come to the realization that I can't control all of this and, just because it's not going the way that I want it to go doesn't mean it's wrong anyway...But I have this need to control things and I'm discovering all of that, so I've worked an awful lot on internal, personal kinds of things in the last year or two years...There have been some things that have happened in my personal life that...that's another whole area, but it doesn't have anything to do with my job...[L.W.: It doesn't?] Well, yes it does have, of course it does...surely there is a direct relationship because

the things that I'm looking at in my personal life have to do with your priorities, your values, how you are going to spend your time, who you are going to do what for, and the whole thing about your sense of where you get your self-esteem and what makes you feel good about yourself and the difference of measuring your self-esteem in your own eyes versus measuring it in what you perceive someone else believes you are, all those kinds of things...And I guess, in my particular case, some of the things that happened in my personal life have allowed me to probably be more comfortable and more content with where I find myself at this point.

Like other integrators, he feels somewhat out of step with departmental colleagues, whom he senses do not share his commitment to serving society or his need to feel part of a community of scholars. He said:

The thing I would like to see different in this department would be, somehow or other, creating an environment where people were sharing more about their own values...as related to their profession and how they see themselves serving society. I don't know that with a lot of people in this department because we don't have any mechanisms or vehicles to communicate that. We don't really even have a well-functioning coffee room anymore and that's bad...When I first started, at 9:30 everybody went to the coffee room...It was a definite coffee break ...everybody in the department sat around for 15 or 20 minutes and drank a cup of coffee and talked about bowling or the world or something. And [now] there are people in this department that I don't see for weeks at a time, months at a time...So this isn't truly a department. It's just a place where people have their offices and we have a few secretarial services...Somehow or other, we have lost our ability to communicate with one another.

This faculty member did pay tribute to the communication abilities of two university administrators, however. He talked about being impressed when the dean came to his office and talked for two hours about his work, as part of the dean's strategy to visit every faculty member in the college. And he was pleased with the extension director's efforts to periodically send letters to staff updating them on new developments. He said:

...what this [communication] does is it clears the air in a lot of cases, and it stops rumors and it reduces speculation and it kind of gets us all talking about the same things. That's really a responsibility as far as leadership...it has to come from the leader. I guess we really suffer from a lack of leadership, in a general sense, throughout the system.

Instrumental Elements and Additional Comments

Fifteen of the 17 integrators in this study made additional comments when given the chance. Four struck a negative note by pointing out, one last time, institutional shortcomings such as inadequate financial support, expecting faculty to do more with less, failing to understand the extension role, and misguided leadership. A College B professor said:

The idea that we are a land grant university has got to be something that we give more than lip service to and there has got to be a commitment to quality across the board. I think there are many, many intelligent, frightened people here who are just champing at the bit to work together and to make this university a great place...I don't think our present administration has lead us. They have dictated to us. And I think until a leader really takes the pulse of the university and has a board of trustees that will commit to excellence, we are just going to plod along...sort of being bounced along from one concern to another without a focus.

Five integrators spoke very positively about their choice of the faculty role, calling it "a stimulating profession" with certain "freedoms" such as deciding what to work on, involvement with "bright students", and "flexibility" to engage in activities such as consulting and overseas travel. A College E professor who has spent his entire faculty career at MSU said that, "I've basically had at least two careers, and in some respects maybe three" because of the different work he has been able to do.

A College A professor said the most important part of the role was being able to serve people:

> Our fundamental purpose in a land grant school is to serve people...I can train young people and I can help people any day, so I work on that. Sure there are times when you think, "If only I had developed that [project] in industry, I'd have been a millionaire...[but] sometimes I think it's ridiculous the amount of money they pay me here to have fun...

Two College A integrators were generally positive about both their job and the university, saying "there aren't many things I would change in terms of the job...MSU has been good to me" and "I can't think of any place I'd rather be or anything I'd rather be doing". And three integrator faculty members made favorable remarks about the institution, describing it as "rich in good people" with a "collegial atmosphere" and an easy place in which to "work across departmental lines". A College D professor ended with the comment, "It's a nice place to work and play".

Summary

Interview data were analyzed for responses to the four primary research questions regarding: how participants chose the faculty role and learned aspects of the role in graduate school; how participants interpreted and acted on the role as new faculty members; how individuals presently think about and enact the faculty role; and institutional factors considered instrumental or obstructional to role performance.

Most participants' decisions to become faculty members were grounded in perceptions of the faculty role as they had come to understand it through

graduate school experiences. One of the most important catalysts for their choice of academic careers was the example set for them by faculty members who were highly effective in the role. Participants acquired the values, attitudes, norms, knowledge, and skills required of faculty members by observing and working with these exemplary academics, a number of whom modeled ways in which a multidimensional role could have an impact.

For the most part, participants entered the professoriate with an idealized view of the role based on graduate school experiences. Some, primarily male faculty members in the sciences, had been well-mentored and brought strong faculty role identities into their first positions. Others entered positions with role responsibilities and/or academic environments that were unfamiliar to them and had more difficulty feeling established in the role.

With experience, participants began to feel more comfortable with and appreciative of the freedom and flexibility they had to shape their own roles. Data analysis showed that, while all participants had engaged in the three role dimensions (e.g., teaching, research, and public service), they had developed a role preference based on their own personality traits, competencies, and professional values. In this study, these individual preferences were categorized into three primary multidimensional role types: researcher, teacher-scholar, and integrator. Each of the three role types embodied a generalized set of values and beliefs that affected individuals' enactment of the three role dimensions.

Most participants in this study valued the multiple role dimensions and, for the most part, did not regard enactment of them as impossible or burdensome. They disliked the compartmentalization of the faculty role into three discrete dimensions, preferring to see them as linked in a synergistic whole. While the majority in this study had strong internal motivations to be multidimensionally productive, they named external factors in the institution as barriers to their productivity, such as declining support for faculty, increasing demands for accountability, and inadequate facilities.

Themes and general understandings that emerged through the data analysis are discussed in the final chapter in relationship to the conceptual framework and relevant literature, and with institutional policy implications and recommendations for future research.

CHAPTER V

DISCUSSION AND CONCLUSIONS

In this final chapter, the findings of the study are discussed in relation to

the conceptual framework of symbolic interactionism and the relevant literature.

The discussion is followed by implications for institutional policy, recommenda-

tions for future research and concluding remarks.

Discussion of Findings in Relation to the Conceptual Framework

Viewed through the conceptual lens of symbolic interactionism, a

university is a social organization within which individuals enact their roles in

ways uniquely shaped by each person's own experiences and interpretations of

others' actions. Each university organization provides a unique, ever-changing

context within which individual faculty members define their roles through the

ongoing processes of interacting with and interpreting organizational symbols and

situations. Thus, universities qua universities do not determine individual actions;

rather, universities are dynamic group environments that are impacted by the

actions of specific individuals who enter and leave the organization.

The focus of symbolic interactionism, then, is on the acting units of society -- both individuals and groups -- and reality is what these acting units make of it. A role is seen as a fluid set of expectations that takes shape when it becomes a source of an individual's personal identity. As such, the faculty role is clearly what an individual makes of her/his interpretations of organizational and personal expectations regarding the mix of dimensions to be engaged in at a particular point in time.

In keeping with the symbolic interactionist view, this study described and explained the faculty role from the perspective of 41 individuals who were considered to be highly productive in enacting all three role dimensions. During field interviews, a number of participants used metaphors involving physical activity and sports to describe aspects of faculty role enactment. For example, the phrase "sink or swim" came up several times in discussions of the prevailing attitude participants encountered as graduate students or new faculty members among established faculty members, who failed to offer much assistance and seemed to expect them to survive on the strength of their own determination and persistence. One participant referred to a particular applied research opportunity he had during graduate school as "an emersion", and he considered the experience "like being thrown in the deep end". Another said that, as a new faculty member, she "just plunged in and worked hard". Perhaps these aquatic analogies are not surprising, given that the assumption of a faculty position is commonly referred to as "entering the tenure stream".

Since the preponderance of metaphors involved variations on "playing the game", the following discussion of the research results will be guided by four broad themes on a game metaphor that correspond to the four primary research questions, stated after each theme:

Trying Out: The transformational nature of graduate school role experiences and role models;

1. How did participants come to select the role of faculty member, and to define and interpret the role during the professional socialization processes of graduate school?

Taking the Field: The challenge of hitting the ground running into a game with unclear rules and unknown players;

2. How did participants interpret and act upon the role as new faculty members?

Becoming a Key Player: The emergence of role preference and team spirit;

3. How do participants think about and enact the faculty role in a manner resulting in multidimensionally productive performance?

Calling the Signals: The need for common understandings among faculty and administrators of role expectations and performance standards;

4. What aspects of the institutional environment do participants view as instrumental and/or obstructional to role performance?

Trying Out: The Transformational Nature
of Graduate School Role Experiences
and Role Models

Roles become sources of personal identity through what is referred to as the process of socialization, or learning roles. In the view of symbolic interactionism, role learning takes place through both observation and rehearsal. Individuals choose to attentively observe role models for whom they have "associational preferences", that is those who appear functional and attractive to the individual in certain ways (Heiss 1981, 102). In order to effectively learn the role, however, individuals must also rehearse the role, either through actual performance of role behavior or through visualizing themselves performing the behavior.

Most participants in this study chose to become faculty members during or at the end of graduate school socialization experiences in which they engaged in both role rehearsal, by performing various dimensions of the role -- usually research and teaching -- and role observation, by attending to the behavior of role models and mentors. A black female faculty member said no one in her family had ever gone to graduate school and she learned about the faculty role by selecting a good role model. She observed, "I'm very good at learning by watching people do things...you pick a good model and you can pretty much figure it out".

The one faculty member who decided during high school to enter a profession in which she could address world food problems was atypical of this

participant group, most of whom reported more progressive career decision-making processes. One participant recalled, "I kind of grew up thinking anyone who would get a Ph.D. must have it all together. I never really thought that attainable until I basically worked my way up the step, and then that step, and that step..."

Some participants were profoundly affected on both professional and personal levels by individual mentors. One talked about his major professor's "incredible energy base" and the opportunities he had to watch this mentor "move into a situation and make a difference". One female participant got married at the end of her doctoral program and saw her dissertation adviser as a good role model in terms of "the care she put into her teaching...and also in terms of living your life, juggling roles". Another participant had "an excellent major professor" who spent considerable time offering advice of both a professional and personal nature. This participant said, "He had great confidence in my potential and put me in a position to proceed down the path into an academic environment".

Other participants engaged in a process which Bandura called "creative modeling" (Heiss, 1981, 103), in which they combined traits observed in various role models into principles which they adopted in their own behavior. For example, a participant said he worked closely with three "really magnificent individuals who greatly shaped the way I viewed the world"; one professor was "a marvelous mentor", another modeled positive interactions with students, and the

third was interested in public service and was "a good role model for how you do it".

It was evident that most participants in this study probably would not have become faculty members were it not for their "effective contact" (Heiss, 1981, 102) with individual faculty members who enabled them -- either by serving as examples or providing direct encouragement and support -- to imagine themselves in the role. In a few cases, the effective contact was more of an example of inadequate performance that inspired prospective faculty members to want to enact the role more effectively. For example, one participant said high school teachers in the field he eventually entered were "mediocre teachers who showed me there was room for improvement". Another participant was a teaching assistant to a particular professor who embarrassed him because the faculty member's classroom performance "was so lousy" and nonrigorous.

A highly attractive aspect of the faculty role for these participants was the opportunity it presented to enact multiple role dimensions. A number of them had become bored with previously held one-dimensional positions in teaching, government research or public policy arenas. During graduate school, one participant acted as what he called "a mini faculty member" by teaching, giving workshops, participating in departmental research projects and serving on the thesis committee of a master's student. He decided to move from a high school position to a faculty position after getting "a flavor for the whole frenetic lifestyle that is possible" within a university. Another participant said that, if she hadn't

done teaching and research as a graduate assistant, she wouldn't have imagined herself in the faculty role.

By practicing parts of the faculty role and observing the performance of veteran faculty members from the sidelines as graduate students, these participants developed an affinity for the freedom and flexibility available in academia. They saw it was possible to shape a role based on their own scholarly interests, rather than what they considered to be politically motivated agendas of government agencies or short-term financial needs of industries. A number of them were given considerable autonomy by their graduate school advisers in pursuing research or teaching assignments, and found they liked the feeling of being their own boss. One said his major professor expected him to be "a real self-starter", which felt "a little terrifying but great". This participant said of his major professor, "I think he had a decent sense of how far and how fast to encourage a person to fly on their own wings, and he certainly never got in the road".

For the participants in this study, the positives in academia outweighed the negatives. They opted for an academic career on the basis of an "ideal conception" (Turner 1962, 23) of the faculty role that embodied a system of values and beliefs about what one ought to do in the role learned from individuals operating within the social framework of graduate school. Only a couple of faculty members commented about the positive influence of fellow graduate students. Most formulated their academic values and philosophies through the

influence of established faculty members. One spoke of his mentor's "half-and-half philosophy of research" which he said "probably reflects a good deal of my philosophy now from the standpoint of the research program that I carry on"; the mentor modeled the philosophy in that "he tried to walk the line down the middle" by producing both a publishable journal article and a commercial application from the same research. Another participant was an undergraduate when he found a role model who was both a well-known researcher and a good teacher who made class sessions fun; he was excited by this professor's modeling of what he saw as "this kind of double victory in accomplishing something and also teaching someone else to accomplish things". Another participant's view of research was shaped by what he called his postdoctoral mentor's motto: "Let's work as smart as we can. If you work smart, there's more time to play".

In the next section, the discussion centers on how the participants entered the professoriate carrying ideal conceptions of the faculty role they had come to know during graduate school into what, for most, were new academic organizations with department cultures and players different from those they experienced during the transformational period of graduate school.

Taking the Field: The Challenge of Hitting the Ground Running Into a Game With Unclear Rules and Unknown Players

The majority (about 83 percent) of the participants in this study took their first tenure stream faculty positions at Multidimensional State University. Some were actively recruited for their positions by departments or had their pick of

several job offers, while others had fewer options and felt fortunate to get an interview and subsequent offer.

As fledgling faculty members, they faced what for many felt like a double bind: being presumed to be professionally competent by their departmental colleagues and being uncertain about whether the performance standards, values and beliefs they learned in graduate school were the same ones operating in the new academic arena.

Prior to receiving tenure, these faculty members vigilantly searched their academic environments for signals about expected role performance. Having learned in varying degrees during graduate school to be autonomous, they were able to form their own interpretations of the signals. And because most were used to having role models and mentors in graduate school, they looked for trusted colleagues in their new environments who could help interpret the operative academic game plan and provide feedback about whether they were fulfilling their responsibilities. A number of participants did not find colleagues willing to offer advise and they did not feel safe in asking for it. They sensed a kind of Darwinian principle operating in which it was assumed that good faculty members would independently interpret performance signals and make the permanent team by getting tenure. One participant said, "Part of the academic game is shaking out the people who can't figure out how to play the game". Another said, "How you operate around here is a secret and you have to join the club to figure it out".

These participants were able to enter and act upon the faculty role as the result of what symbolic interactionists refer to as the two role verification processes of internal and external validation. Internal validation involves the "continued interplay" (Turner 1962, 30) between one's ideal conception of the role and one's actual experience with the role; external validation involves "a sense of what goes together and what does not" gleaned from key individuals "whose judgments are felt to have some claim to correctness or legitimacy" (Turner 1962, 30). Role enactment, then, involves ongoing role modification as the individual engages in internal and external validation processes.

Interviews with faculty members in this study clearly supported the symbolic interactionist view that a faculty role is shaped by a combination of internal and external validation. However, differences were evident among participants in the relative strength of the role identities they brought into their first faculty positions from graduate school, and the extent to which they relied on external validation from others in their new academic environments.

Some participants had been well-mentored and brought strong faculty role identities into their first positions. For example, one participant had been "kind of brought along by mentors" and had a "big league science" postdoctoral experience that gave him the confidence to negotiate with the six universities that offered him faculty positions. He chose a position at MSU in an entirely new research specialization than the one he had been working in because he saw an opportunity to "be one of the new leaders in it". During the negotiation process,

he made it clear that he intended to spend evenings at home rather than working in the laboratory.

Another participant learned from his doctoral mentor, who was among the top scientists in the field, that is was important to have a joint appointment in both an applied and a basic field of science and to develop "your own niche". He negotiated a joint appointment at MSU, where he soon received direct signals from established colleagues and administrators about the priorities and values of his new academic organization. For example, he recalled the director of a major campus research unit gathering the first year science faculty together, in the manner of a coach, and stating their success would depend on three things: where they published, how much they published, and how much money they brought in. This faculty member continues to value the advice because, he said, "It keeps you on track".

Male participants who were well-socialized in scientific research and entered faculty positions in which research productivity was expected seemed to have the smoothest transitions into the professoriate. Female participants in scientific research fields and participants who entered positions with role responsibilities that were new to them had more difficulty feeling established in the role. For example, one participant said he "hit the ground running" in research because of his previous experience in a federal research program. But he also was assigned to extension activities, which he knew nothing about, and considered them "housekeeping details" and "little chores". Gradually, he

realized these activities (e.g. making radio presentations) were "all part of the land grant factor" and he found them rewarding.

Another established faculty member said it took more than ten years for him to realize that, even though he was promoted to full professor, he lacked "visibility and credibility" among his colleagues because he was not conducting research. Unlike their senior colleagues, many untenured faculty members in this study had one or more departmental mentors assigned to help them interpret departmental signals regarding promotion and tenure standards. Still, an untenured participant who moved from a postdoctoral research fellowship into a tenure stream faculty position responsible for teaching, research and extension was struggling with having to be "a good generalist" when he had been trained as a research specialist. This faculty member found it difficult to sort through the mixed signals about faculty performance expectations he received from the Provost's Office, the dean and the department chairperson. For example, his chairperson selected two basic researchers to mentor him through the tenure process, which the participant perceived as "giving me a signal about what he thinks is important. That's the way I interpret it...he is saying, 'Let your research form your program and let everything else follow from that'".

Several female faculty members in scientific fields had to counteract strong messages in both personal and professional environments that said women didn't belong in such careers. One woman was told by college roommates that, if she got a Ph.D., no man would ever marry her. Another woman, who initially wanted

to enter the field of physics, was asked by a physics professor how she would feel about the time she wasted getting a Ph.D. when she ended up as a housewife. Another woman was told by a male colleague early in her career that she would not get tenure but a male colleague would because he was more aggressive and "in some ways plays dirty pool". All of these women kept moving forward professionally through the influence of positive male mentors and their own strong desire to use their minds and to teach others to use theirs. They felt it was important to be positive role models and mentors for other women in science, as well as examples to men that women were capable of making valuable scientific contributions.

Several minority participants relied mostly on their own interpretations of the environmental signals about values and norms. A black male participant said, "I learned early in the game it was important to know the politics of the environment and know who the key players were and what was expected of you...because someday they were going to decide whether or not you were going to get tenure". Before receiving tenure, a black female participant sat in on promotion meetings for other faculty members to "pick up what their biases are -- not necessarily what ought to be, but what the local culture thinks are appropriate". She also chose service activities that interested her, such as particular committees, rather than waiting to be assigned to those she didn't want to do.

Central to the process of taking the field was the need for individuals to come to terms with whether they felt like a part of the team they had joined and wanted to be identified with it. Several faculty members left initial faculty positions after a few years because of conflicts between their values and those of the institutions regarding civil liberties issues.

Eventually, the new faculty members began to feel more comfortable with and appreciative of the freedom and flexibility that initially had drawn them, in an ideal sense, to the academic profession. As they gained experience, each developed a role preference that was based on their own personality traits and competencies and reinforced by "significant others" who controlled the rewards they valued (Heiss 1981, 113). This theme is explored in the next section.

Becoming a Key Player: The Emergence of Role Preference and Team Spirit

In the conceptual framework of symbolic interactionism, an individual's role behavior takes a certain form according to the general role definition the person started with -- previously referred to in this study as the ideal conception of the role --and subsequent interactions with others. According to this view, the individual knows several versions of a particular role. He or she assigns each version a "preference rating" and ranks them along a "hierarchy of prominence" (Heiss 1981, 111-112). The role preference rating is based on "the sum of the reward anticipated from others...and the expected self-reward" (Heiss 1981, 112).

Role preferences generally come from several sources: versions of the role that individuals have observed more frequently, those favored by "significant others" who control rewards that are important to individuals, and those that are compatible with individuals' personality traits and have been enacted by them with positive results (Heiss 1981, 112-113). Self-reinforcement is particularly important in forming role preferences according to Heiss (1981, 113), who maintains, "If a particular role pattern holds the promise of providing major self-reinforcement, it may come to be preferred over one that has more social acceptability". Results of this study confirmed that, while the views of significant others were important, self-reinforcement was the dominant factor in the development of particular role preferences among faculty members.

Participants in this study were nominated by significant others, either a dean or department chairperson, who considered their role performance to be multidimensional – that is, highly productive across the role dimensions of teaching, research and public service. However, participants' commitment to and involvement in the role dimensions were not known prior to the field interviews. Subsequent data analysis determined that, while all 41 participants in this study had engaged in all three role dimensions, each participant had a preference for a particular version of the faculty role. The individual role preferences were categorized in this study according to three primary role types: researcher, teacher-scholar, and integrator. Each role type embodied a generalized set of

values and beliefs that impacted the way in which individuals in that category enacted the faculty role.

Participants adhered to their preferences for certain role behaviors even when significant others had different views of acceptable performance. For example, one researcher acknowledged that a lot of well-respected colleagues go into a room by themselves and "crank out an article a week". In contrast, he prefers to conduct collaborative research and to coauthor articles because, he said, "I don't subscribe to the notion that coauthored pieces are less valuable. I think they can be more valuable for an individual's development if they are truly coauthored".

A teacher-scholar said that early in his career he was "reprimanded quite strongly" for something called "graduate student interference" because, after students talked to him, "they didn't seem to respect their major professors as much as they should have". Yet, he followed his conscience and refused to place collegial relationships ahead of what he saw as graduate students' professional development needs.

The participants classified as integrators struggled the most with finding a place for themselves among significant others whose hierarchy of prominence for role preferences was different from their own. Prior to achieving tenure, some integrators were insecure about whether their professional contributions would be valued by colleagues. Even after receiving tenure, some felt they had not achieved the same professional status as their research-oriented colleagues. For

example, one participant who chose to work in extension wrote articles for popularized publications rather than scholarly journals and said he paid a professional price, in terms of slower promotions and a lower salary than his departmental peers. A number of integrators were plagued by the notion that their positions or programs were considered marginal and expendable in times of budgetary constraints. One well-established professor said, "We're still viewed as power windows or something by some of our colleagues". This participant said his definition of service as "being of some use to society" did not match his colleagues' view of service as being a member of professional or university committees. However, he was confident that his view was compatible with the MSU faculty handbook definition of service.

Like this participant, most integrators were driven by the conviction that what they do fits and, indeed, embodies the role of a faculty member at a land grant university. They had strong internal motivations and beliefs about what is acceptable academic performance, and tended to be their own toughest critics.

Data analysis showed that a number of participants across the three role types did not regard enactment of the multiple dimensions of the faculty role as an impossible or burdensome task. Instead, they were attracted by the variety of performance opportunities available in the faculty role, and the freedom and flexibility to shape a role for themselves. About 88 percent of the participants saw the three role dimensions as linked and synergistic, even though most did not give equal time to the dimensions. Since they don't consider the dimensions as

discrete, the necessity of categorizing their faculty role activities and assigning

percentages of time to each for reporting purposes was frustrating and meaning-

less to these faculty members. Quotes from participants in each of the three role

types elucidate this finding. A participant in the researcher group said:

> I do not like the categorization of a faculty member's work into teaching,
> research and service because they're artificial categories that overlap so
> strongly that they shouldn't really be said as separate entities...The re-
> search I do is teaching...I've put out 46 or so Ph.D.s over the years. These
> are the people who are the leaders of the future...and so our education of
> them is extremely important and that's research, that's teaching...And then
> the outreach part of it, the service part of it, falls into several categories, as
> I see it. One is we have an outreach to our profession. The ties to the
> profession are nearly as strong as the ties to the university...That's one
> kind of outreach...It shouldn't be the only thing we do, but it's one of the
> things. The second kind of outreach I see is somewhat self-serving...It's
> for the future and that's to try to outreach to people who are going to be
> our clients in the future, the people in K-12...So we have a lot of
> volunteerism going on in regard to interacting with secondary school
> teachers and other teachers...It's an outreach to try to get them [teachers
> and students] a little excited in the field of science...And then the third kind
> of outreach is with regard to the people who are already professionals in
> our industry, collaboration with industry [through] both teaching and
> extension courses.

One of the teacher-scholars said:

> ...I don't think you can compartmentalize the various aspects of this job.
> There's something that I think is a myth in academics and I hear it all too
> often from the administration, and that is, research vs. teaching, that
> they're not the same. I have, right now, eight Ph.D.s, three undergradu-
> ates, and a postdoctoral [fellow] in my group. Those people require so
> much of my time and it isn't time that we're spending writing papers
> together. I'm teaching them. I'm going to the blackboard just like I go in
> the classroom. I consider the 30 or 40 contact hours a week that I have
> with my research group mostly teaching...And [the] service side...the
> things that we talk about in committee meetings are of utmost importance
> to those other two [teaching and research], so I don't see how they could
> be separate either...So, if people decide that they should only be one type
> of person and two of those should take a back seat to the other one, I think
> they're missing the point.

And one of the participants in the integrator group said:

> I think an effective three-way appointment is one that is not segmented. The research that I do complements my extension activity. I hope my extension activities can [identify] what research needs are out there. There is no doubt in my mind that my teaching style and whatever I do while I'm teaching is the result of having given 14,000 different presentations at meetings around the state over the years...[And] being able to back up what you say by doing it has tremendous credibility.

As evidenced by these quotes, the diversity of views among the participants about what constitutes public service -- or extension, outreach, or service -- makes it somewhat difficult to draw conclusions about how this dimension was integrated with research and teaching. What was clear from the data analysis was that, contrary to conventional wisdom, these faculty members spend much more than 40 hours a week engaged in their professional pursuits and they do not labor alone. All 41 participants collaborate with others, to a greater or lesser degree, and most do so with other faculty members. One participant said he only collaborates with graduate students.

The majority of participants in all three role types emphasized that the ability to work cooperatively with others and to be a team player and good colleague were important attributes of exemplary faculty members. The composite view of exemplary faculty members was that they: are competent scholars who like to share ideas; assume their fair share of responsibilities at departmental, college and university levels; willingly help junior colleagues and students to achieve; and are honest and straightforward in their dealings with others.

While most participants declined to categorize themselves as exemplary

faculty members, their descriptions of exemplary performance embodied ideals

they strived to achieve. A number of participants said that a university should

have multiple models of exemplary faculty performance and should not expect all

faculty members to simultaneously perform across the three dimensions.

The majority of participants identified time pressures, increased demands

for accountability, decreased faculty support, expanding bureaucratic bloat,

inadequate funding and/or facilities, and a lack of administrative leadership as the

biggest impediments to role performance. These themes are explored in the

following section.

Calling the Signals: The Need for Common Understandings Among Administrators and Faculty of Role Expectations and Performance Standards

Group action, as viewed through the conceptual lens of symbolic

interactionism, consists of the collective action of individuals "who fit their

respective lines of action to one another through a process of interpretation"

(Blumer, 1986, 84). Most people in a given group define situations in the same

way, as the result of common understandings and definitions that emerge from

their previous interactions (Blumer, 1986, 86). According to Blumer (1986, 20):

> Both the functioning and the fate of institutions are set by this process of
> interpretation as it takes place among the diverse set of participants.

One purpose of this study was to describe and explain how the interpreta-

tive processes used by a diverse set of faculty participants might have been

affected by factors in the organizational environment of Multidimensional State University (MSU), the self-described "research-intensive land grant university" on which the study was based. At the time of the study, MSU had been engaged for some five years in a long-range strategic planning process to prepare for the coming century. Task forces had created a series of planning platforms from which to establish university policies and programs in the areas of undergraduate education; research and graduate education; diversity and pluralism; and lifelong learning. The planning process was conducted under the leadership of the MSU Provost, with the full support of the President. At the time of the study, both top administrators had been in their positions for about seven years.

Several common themes emerged from interview discussions of constraints to participants' role performance: time pressures, increased demands for accountability, decreased university support for faculty, expanding bureaucratic bloat, inadequate funding and/or facilities, and lack of administrative leadership. These themes can be subsumed under "doing more with less", a recurrent refrain in the faculty interviews and one that was predictable, given that MSU had announced faculty members would not receive raises in the subsequent academic year. However, the sentiment behind it had less to do with inadequate salaries and more to do with the perceived erosion of university support staff and services to assist faculty, such as secretaries, graduate assistants, travel funds, faculty development programs, and facilities and equipment.

The frequently cited inadequacies of funding and facilities were perceived by some faculty as evidence of the existence of "haves and have nots" within the university. A number of faculty members in arts and humanities disciplines felt their academic programs and professional needs were underfunded and under-valued compared to those in scientific disciplines. And even some faculty members in scientific disciplines felt disadvantaged when comparing their outmoded facilities to the new buildings across campus in which peers were housed. A number of participants in scientific fields talked about having to be entrepreneurs who were expected to continuously engage in a "scramble for funds" to support their research operations, while the university offered minimal grant preparation assistance or support of other kinds.

The theme of decreased university support for faculty was coupled with the theme of expanding bureaucratic bloat, or what one participant called a "Byzantine bureaucracy". Many participants said they spent an inordinate amount of time documenting their professional activities on administrative forms and felt such demands for faculty accountability were beginning to erode productivity. Some felt that administrative and staff positions were increasing while faculty positions, which were at the core of the university mission, were being reduced. As one participant said, " the tail is wagging the dog". Another complained that, while unproductive faculty members were not given tenure, unproductive nonacademic employees were protected by unions. Several participants commented about the time spent doing things that secretarial support

staff used to do, such as filing, preparing correspondence, and answering phones. On the other hand, one observed, "It seems like every time you call to talk to an assistant assistant [sic] dean in the administration, you talk to a secretary first".

Time pressures were mentioned by faculty members in all ranks and disciplines. Junior faculty were primarily concerned about being overwhelmed by work as they raced — at what one called a "breakneck pace" -- to fulfill the multiple demands of their positions and tenure requirements. However, tenure did not grant faculty members immunity to time pressures. A participant referred to the letdown after receiving tenure as "post-traumatic stress", and said it was only a lull before being "bombarded with an additional layer of responsibilities" to the profession and to the institution. One participant in the later stage of his career lamented his inability "to be reflective about things" and was concerned that universities were becoming more like industry and government in their emphasis on short-term solutions in research. Another well-established faculty member described the demands on her time as "really frightening".

A number of female participants felt a double standard existed in the university for male and female faculty members' performance. Several said women were asked to take more responsibility for committee service than male colleagues, and one said women were judged more than men on their appearance. Both women and minority participants were concerned about

perceived intolerance within the university for diversity and the shortage of female

and minority faculty to serve as role models and mentors for students.

Given the pervasiveness of participant complaints about being expected to

do more with less and the variety of ways in which the complaint was manifested,

it is not surprising that another constraint theme was the lack of leadership, or

misguided leadership, of administrators – most frequently pinpointed at the

highest levels of the university. Academic administrators can be compared to

coaches in that they are looked to by faculty members -- the key academic

players – for guidance and direction about the overall game plan and for support

in developing their professional competencies. Faculty members want clear

signals about promotion and tenure standards and a sense that everyone is

functioning on a level playing field, rather than one favoring certain disciplines or

players. Above all, they want to feel that administrators recognize and respect

their talents and abilities.

In this study, a number of participants expressed views similar to the

faculty member who said she was concerned about "how far removed the

administration is from what faculty really do". The negative attitudes toward

administrators seemed to intensify with seniority, as faculty members came to

feel more a part of the university. Some established faculty members felt

unappreciated, unrecognized, and unsupported by top administrators, whom they

perceived as caring more about financial expediency than about academic

quality. A number of participants complained about the one-way flow of

information and ideas from academic faculty and departments to central administration, with little of substance coming back. Several participants had written to the Provost and President about particular professional achievements and were unhappy that their letters were never acknowledged. Another participant said that recognition of faculty achievements did not have to be monetary to be meaningful. She said, "One letter of one paragraph that gets sent [by administrators to faculty members] I think would make a big difference in people's minds".

This study showed that the ideal role conception is not far below the surface of most faculty members' consciousness. Although the initial idealism faculty members brought into their positions faded somewhat in the face of perceived constraints to role performance, it quickly came to the fore in participants' discussions of exemplary faculty performance, and also was reflected in comments about the institutional mission and the land grant philosophy underlying it. Many participants, particularly integrators, were concerned that the university was failing to live up to its land grant obligation to serve the public. Some perceived that the Provost interpreted the description of MSU as a "research-oriented land grant university" to mean that research was preeminent. It was apparent during field interviews that considerable tension existed among faculty members concerning what one participant called "the changing university paradigm" and the unclear implications for the faculty role.

Discussion of the Findings in Relation to the Literature

As discussed in Chapter II, research conducted over the past twenty years has contributed to a more complete understanding of the work lives of the diverse collection of individuals that is the professoriate. Yet, the research has produced data mostly on males working in research universities (Blackburn, 1985). This study contributes to the understanding of faculty role enactment by describing and explaining how both male and female faculty members from a diversity of disciplines, ranks, and career stages construct their roles so as to achieve high levels of productivity across the role dimensions within the context of a research-oriented land grant university.

This sort of multidimensional role enactment--referred to as the "triple threat" pattern--is thought to be attained by only a small number of faculty members found mostly at elite institutions (Light, 1974; Blackburn, 1974; Tuckman, 1976; Finkelstein, 1984). In this study, a total of 114 faculty members were identified by 13 college deans at Multidimensional State University as exemplifying multidimensional role performance. This is a fairly small number, representing about 5 percent of the total MSU faculty population. However, the study clearly documents that multidimensional performers exist at all career stages, in all colleges of the university, and among female faculty members as well as males.

In this study, the role perceptions of 41 exemplary faculty were examined indepth through face-to-face interviews. Similar research was done on so-called

vital faculty by Clark and Corcoran (1985) and Baldwin (1990). Clark and Corcoran's "highly active ideal type" faculty members had high self-esteem, were strongly oriented to research and believed they worked harder than most colleagues. In this study, only about 22 percent were categorized as research oriented. A number of MSU participants felt their commitment to helping students, serving the state, collaborating, or working in teams was greater than colleagues', but they did not talk about working longer or harder. In terms of self-esteem, most participants in this study felt they were productive performers, but some worried about whether colleagues valued their professional contributions.

The differences in results can be partially explained by the fact that MSU participants were atypical performers in a context that rewarded research most highly, whereas participants in the Clark and Corcoran study were those who "continuously publish, teach and perform administrative and/or professional services at highly productive levels" (1985, 118) and, therefore, closely fit the performance values of a research university.

Baldwin's study of professors in small liberal arts colleges found vital faculty members were distinguished by their greater tendency to collaborate with colleagues in teaching, research and joint authorship; to take professional risks by engaging in nontraditional activities such as creating interdisciplinary programs; and to add variety to their work lives by expanding or changing their roles in various ways. Although Baldwin's participants were all full professors employed at a different kind of higher education institution, their responses

parallel this study, in which all participants collaborated and most, particularly

those categorized as integrators, took professional risks by pursuing

nontraditional roles, and continuously looked for new professional challenges.

This similarity can be explained in part by the fact that MSU participants' more

balanced approach to the role dimensions makes them more like faculty

members at nonresearch universities.

How did multidimensional faculty members learn to perform across the

three role dimensions? Individuals generally are thought to acquire the values,

attitudes, norms, knowledge and skills required of faculty members by working

with advisers, mentors and role models during the graduate school socialization

process. These participants were no exception. Most decided to become faculty

members during or at the end of graduate school, and some 85 percent identified

role models and mentors as influential in teaching them both positive and

negative aspects of faculty role performance. These participants strongly

adhered to all of the core values of the academic profession (Austin, 1990):

discovery and dissemination of knowledge; autonomy and academic freedom;

collegiality; commitment to intellectual honesty; and service to society.

Role expectations and values formed during graduate school usually are

strong predictors of faculty performance throughout the career. While all

graduate students learn the scholarly research role, they rarely receive formal

training in all role dimensions, according to the literature. The MSU participants

were no exception to the general pattern, since none were formally trained in

teaching, even those who served as teaching assistants. What distinguishes faculty members in this study was the strong graduate school acculturation to the teaching and public service role dimensions some obtained from being exposed to faculty mentors and role models who worked across the dimensions. By combining a commitment to scholarly achievement with a desire to relate scholarship to students and to real world problems, these established faculty members modeled ways in which a connected role could have an impact. In some cases, there appeared to be a kind of mentoring multiplier effect at work in that, because mentors enjoyed working with others, they had well-established professional networks that helped participants get established in the profession. The participants, in turn, became other-oriented faculty members with professional networks of their own and were able to continue the mentoring cycle with their graduate students.

For MSU participants, the decision to become faculty members was based on an affinity for the flexibility and freedom to shape the faculty role according to their own scholarly agendas, as well as enjoyment of the multiple role dimensions. About 88 percent viewed teaching, research and public service as linked activities that, appropriately arranged, have a synergistic effect. Although time constraints were frequently cited barriers, participants regarded multidimensional role performance as an interesting challenge, rather than a burden or obstacle. In fact, those who previously tried one-dimensional professional roles found them too limited.

The faculty exemplar description used in this study was intended to give equal emphasis to public service, teaching and research dimensions of the role. In actuality, few participants gave equal emphasis to all three dimensions. However, while research is considered the dominant norm even among faculty at land grant universities (Clark and Corcoran, 1985), only 9 of the 41 participants in this study were categorized as having primarily a research orientation. This study clearly demonstrated that those individuals categorized as integrators do feel the faculty role dimensions support each other and form "a seamless blend" (Clark, 1987). This finding gives credence to Checkoway's (1991, 224) observation that multidimensional performance is moving beyond an ideal to become more of a standard, as "quality research, teaching and service are emerging as complementary activities".

In the faculty exemplar description, the public service role dimension was said to involve "the successful extension and application of knowledge to address the needs of people at local, state, national or international levels through activities that build on the faculty member's professional expertise". However, the MSU participants defined and enacted public service in diverse ways, including service on professional and university committees. Therefore, it was not surprising that all of them claimed a commitment to some form of service. This study supports the contention that the service dimension is not well-defined, evaluated and rewarded and that few faculty members engage in service as their primary activity (Tuckman, 1976). Nevertheless, contrary to the notion that faculty

members are not attracted to the field on the basis of the service dimension (Bess, 1982), 17 participants (more than 40 percent) were categorized as integrators on the strength of their internal commitments to using knowledge in service to society. Integrator faculty members were found among all ranks and within all colleges examined in this study.

Productivity among MSU faculty members was not negatively affected by length of career, a finding which coincides with the literature. In fact, the majority of participants felt their productivity had increased as they established reputations and professional networks that led to plentiful opportunities to collaborate, consult, speak, etc. Differences were found between junior and senior participants in the extent to which family life affected professional mobility and time devoted to work. In general, early career faculty members expressed more concern about fitting family activities into their schedules and factoring their spouses' career development needs into their professional decisions than did senior faculty at a similar career stage, although some of them regretted past decisions that placed their professional considerations ahead of family needs. This finding indicates that faculty stress levels caused by competing responsibilities at home and at work may continue to rise as faculty retire and junior faculty are hired.

Female and minority faculty members, particularly those in disciplines traditionally dominated by white males, perceived barriers to their full acceptance as professional peers by senior male colleagues, even though their dedication to

and enactment of the faculty role was not significantly different from the male

faculty members, most of whom were white. On the other hand, all of them also

had been mentored by male faculty members, a fact which could explain, at least

in part, how they managed to survive and thrive in environments that were not

always supportive.

As found in previous research (Glueck and Jauch, 1975; McKeachie,

1979; Lawrence, 1985), the desire for self-direction was particularly strong in

these highly productive MSU faculty members and they were most satisfied when

the work environment fostered their autonomy and freedom to pursue their own

goals.

This study also demonstrated that, as in previous studies, factors in the

work environment that were considered obstacles to productivity could be

categorized as material resources, and processes of communication, leadership

and decisionmaking (Bland and Schmitz, 1990). However, institutional factors

were not motivating them to actively pursue positions at other institutions,

although two male faculty members said they would accept other opportunities if

their wives also could find more suitable positions.

Some 83 percent of the participants took their first tenure stream positions

at MSU and, overall, the majority appeared reasonably content to remain there.

This finding supports the literature stating that faculty productivity is a byproduct

of a close fit between the individual and the institution, since it is likely that those

who did not fit at MSU had probably moved on to other professional opportunities.

A number of participants, especially those categorized as integrators, cited the

university's land grant philosophy and mission of serving societal needs as

compatible with their own view of faculty role enactment.

While an individual's ideal view of exemplary faculty performance may

appear to match the ideal but often imprecise view of the institution embodied in

its mission statement (Davies, 1986), effective group action depends on the

collective action of individuals "who fit their respective lines of action to one

another through a process of interpretation" (Blumer, 1986). This study

demonstrated that each individual interprets organizational signals through

interactions with significant others in the organization and through her/his own

previous experiences. Therefore, in a very real sense, this higher education

institution is defined by the roles its individual members choose to perform

(Melendez and deGuzman, 1983). It was clear in this study that administrators at

various levels of the university were giving mixed signals regarding faculty role

performance expectations and evaluation criteria, resulting in confusion among

participants, each of whom engaged in an ongoing effort to make sense of these

signals in order to make role performance decisions. As might be expected,

untenured faculty members experienced the most stress regarding unclear

institutional messages. But even well-established faculty members were tuned in

to, and often turned off by, the lack of clarity in administrators' statements, which

they translated as a lack of leadership.

Implications for Institutional Policy

On the basis of this study's findings, some policy recommendations can be made that are specific to Multidimensional State University, and may have some applicability to similar types of higher education institutions.

The challenge to university administrators at all levels of the institution is to enhance individual initiative while facilitating the collective action of faculty members. Through the messages they choose to send or not send, administrators can either foster institutional commitment, team spirit and willingness to work for change, or they can fuel faculty members' desire to join other academic teams, or compel them to become apathetic fixtures on the institutional sidelines.

MSU administrators need to regularly send direct, clearly interpretable signals that contribute to a common understanding of the important role faculty members have in fulfilling the institutional mission. The need for meaningful two-way communication processes between administrators and faculty members appears to be particularly acute now, following a protracted series of planning initiatives that was designed to prepare the university for the next century but has left it without a unified, coherent sense of how it is to function today.

A logical next step would be for the Provost and academic governance groups to exercise leadership in clarifying faculty performance expectations by creating a well-defined set of standards for faculty promotion and tenure that would be implemented across the university. Presently, the reward and incentive system is not only highly decentralized, but also imbalanced in favor of scholarly

research and publication. If the full range of the university's mission is to be enacted by faculty members, better ways must be found to document, evaluate and reward teaching and public service activities.

The consensus among this study's participants was that the service dimension is a catchall category that includes everything that doesn't fall neatly into the categories of research or teaching. Adding to the lack of clarity about what is considered service is the profusion of terminology used in reference to this role dimension — including public service, professional service, consulting, extension and outreach. An immediate need exists to define these faculty activity categories in ways that have commonly understood meanings across the university, and to develop tangible measures and rewards for faculty performance in these categories. In doing so, the university will shift service activities from their peripheral status to one on a par with teaching and research.

In reconfiguring the faculty reward and incentive system, the university should consider ways of redesigning institutional reporting formats that presently require faculty members to account for their activities by dividing them into the traditional categories of teaching, research and service. Evaluation methods that facilitate holistic thinking about the faculty role, such as portfolios, should be encouraged. Participants in this study who were categorized as integrators had a clear sense of the ways in which the public service dimension could be integrated with teaching and research in a manner consistent with the institutional mission.

The university should draw upon their insights and expertise in campuswide efforts to clarify faculty performance standards, measures and rewards.

Beyond clarifying and sending consistent signals about faculty performance expectations, administrators should make every effort to identify and recognize excellent faculty performance as it occurs. At a minimum, the President and Provost should make certain that all correspondence from faculty members is acknowledged in a timely and personalized manner. Even within a university the size of MSU -- and precisely because of its large size -- top level administrators cannot expect most of the work of creating esprit de corps among faculty members to come from college and department level administrators. All faculty members, particularly those who have been in the institution for a decade or more, want to be recognized by administrators at the highest levels as being among the university's valuable assets.

Administrators at all levels of the institution should be willing to not only request and receive information, but also to regularly communicate messages back about how such information is being used. A few examples of effective communication by administrators that emerged in this study include: a former president who sent congratulatory letters acknowledging faculty accomplishments; a dean who visited all college faculty members in their offices to learn what each was doing; and an extension director whose periodic letters updating faculty and staff about new developments managed to, in the words of one participant, "...kind of get us all talking about the same things". As study

participants pointed out, regular two-way communication can have significant payoffs in positive faculty morale and can be accomplished without substantial expenditures of funds.

The university should develop formalized mechanisms, such as workshops or field experiences, to demonstrate ways in which faculty members and graduate students from all disciplines can integrate their scholarly research with teaching and service, and should provide one-on-one assistance to those who want to shape a more integrated role for themselves. Faculty members identified in this study could be tapped as mentors or advisers to encourage multidimensionally integrated performance among their disciplinary colleagues.

All departments on campus should be required to assign mentoring committees to untenured faculty members and, as part of developing a reward and incentive system supporting multidimensional faculty performance, efforts should be made to select seasoned faculty members for these mentoring committees who, collectively or individually, embody excellence in teaching, research and service. In this way, new faculty members can learn early in their careers how to work across the role dimensions in a manner that is most efficient and effective.

If Multidimensional State University expects to recruit multidimensional faculty members in the future, it must also be willing to provide graduate students with opportunities to engage in teaching, research and service. Departments should be encouraged to view a doctoral committee as more than a group of

faculty members who guide the scholarly research of the graduate student but, instead, as a professional development committee that could be selected in a manner similar to the mentoring committee for untenured faculty members, in order to give the graduate student a more well-rounded perspective of and experience with the faculty role. Following up on a suggestion made by a participant in this study, a graduate seminar could be offered on a university-wide basis, to provide a general education to new and prospective faculty members about various institutional philosophies and missions, principles of academic freedom and responsibility, academic governance, the role of boards of trustees, and common rights and responsibilities of faculty members in teaching, research and service dimensions of the role.

Given the widespread lack of formalized training in teaching for graduate students, the university should offer faculty development programs in areas of instructional design, development and evaluation for both new faculty members and graduate students who intend to become faculty members. A number of participants in this study were indebted to MSU faculty and staff members in a now disbanded unit of the university who had assisted them, as new faculty members, with techniques of effective teaching. Given the intensifying interest among taxpayers, legislators, parents and other concerned citizens about the quality of teaching in the nation's secondary and postsecondary institutions, it is no longer acceptable for universities to leave the development of effective

teachers to chance, with the unfounded rationale that good researchers are good teachers and, therefore, students need only be prepared as good researchers.

Finally, while it is understandable that public universities should be held accountable for faculty role performance, demands for accountability must not be allowed to unfairly infringe upon faculty members' academic freedom and flexibility. Results of this study indicate that highly-productive, multidimensional faculty performers place great value on academic freedom, flexibility and autonomy. In exchange, they are willing to work long hours at salary levels lower than those of other professionals. Therefore, universities should increase their efforts to engender greater understanding of the faculty role and appreciation of the accomplishments of specific faculty members among opinion leaders, decision makers and the general public, as well as among nonfaculty employees within the university. As a case in point, a generalized impression seems to exist that, because all faculty members are not physically present at the university from 8 a.m. to 5 p.m., they do not work as much as most other people. This is an unfounded belief, given the fact that faculty members frequently teach courses at night, attend meetings out of town, or do their best writing in the solitude of their homes. In this study, several participants talked about not telling secretaries or others that they were at home during part of the week so they wouldn't be interrupted. Others lamented the lack of time for reflective thinking and intellectual renewal in their overcommitted schedules. If faculty members are unable to shape roles for themselves based on their own intellectual agendas,

academic careers will lose their appeal for many. Given the number of hours most faculty members spend working, they need latitude in creating schedules that allow them to achieve a reasonable balance between personal and professional needs.

Recommendations for Future Research

This study illuminated ways in which faculty members at one university work productively across the three role dimensions. It described and explained how they think about and enact their roles and identified institutional factors that they feel enhance or impede their work.

One institutional factor that emerged as significant was the leadership role of top level administrators in creating and sustaining an environment in which these highly productive faculty members feel recognized, rewarded and reasonably content to remain. For the most part, faculty members in this study were confused about the Provost's vision for the "research-oriented land grant university" and were uncertain about whether the President had the same vision. They felt that administrators, in general, were too far removed from the day-to-day reality of faculty members. However, for the most part, faculty members in this study did not speak negatively about their deans or department chairs. That could be explained by the fact that the letter inviting them to participate in the study said they had been identified by college administrators as faculty members who do an excellent job of teaching, research and public service, which may have precluded participant criticism of these administrators or prevented inclusion in

the study of those faculty members whose relationships with these administrators were not positive. It was clear that untenured faculty members looked to their department chairs for cues about whether their performance was meeting expectations. What was not as clear was the role played by deans and department chairpersons in fostering or hindering faculty members' feelings of a good fit with the institution, particularly after tenure had been achieved. Since deans and department chairs are involved in recruiting, socializing and retaining productive faculty members, more research is needed to understand the roles they play regarding multidimensional faculty performance.

Many participants in this study came to understand and feel an affinity for the faculty role while they were graduate students, as the result of effective contact with established faculty members. According to symbolic interactionists, these individuals chose as role models and mentors faculty members for whom they had "associational preferences" (Heiss, 1981). Other than the fact that these role models were thought to be attractive to the individuals in some ways, little evidence was uncovered in this study about the process by which participants' associational preferences were formed. For most participants in this study, graduate school was a somewhat remote experience and remembrances of interactions with faculty role models and mentors were undoubtedly affected by the passage of time. Given the pivotal role played by graduate school faculty members in socializing future members of the professoriate, more research is needed to illuminate the processes by which associational preferences are

formed between faculty members and graduate students. The process should be

studied both from the perspective of the graduate student and from the

perspective of the faculty member involved in such a pairing. Such research

could provide insights that could enhance the attractiveness of the faculty role for

future graduate students.

Conclusions

Significant change is underway in how this university and other U.S. higher

education institutions think about the nature of the faculty role. In keeping with its

land grant mission of teaching, research and public service, Multidimensional

State University is looking to its faculty members to not only create knowledge,

but also to effectively impart knowledge to students, and extend knowledge to

other segments of society that need it.

But public pronouncements of the mission statement are not sufficient to

motivate multidimensional behavior in faculty members whose primary graduate

school socialization experiences and professional rewards have been steeped in

the ethos of research. As Ernest Boyer stated in Scholarship Reconsidered

(1990), what is needed is a fundamental rethinking of the ways in which the three

faculty role dimensions are interrelated and connected by faculty members'

scholarly interests. University administrators have significant roles to play in

articulating faculty performance standards that are more in keeping with societal

needs and expectations, and encouraging faculty members to strive for such

standards. However, in the final analysis, it is the faculty members, individually

and collectively, who embody the university mission through their role enactment.

As Boyer (1990, 79) said:

> But, when all is said and done, faculty themselves must assume primary responsibility for giving scholarship a richer, more vital meaning. Professors are, or should be, keepers of the academic gates. They define the curriculum, set standards for graduation, and determine criteria by which faculty performance will be measured--and rewarded. Today, difficult choices about institutional mission and professional priorities must be made. Only as faculty help shape their purposes and engage actively in policy formulation will a broader view of scholarship be authentically embraced.

This study demonstrated that multidimensional role performance is possible among faculty members of both genders, in all ranks, and across disciplines. Participants in this study enjoy and are committed to enacting a multidimensional faculty role. They care about others and want to make a difference by using their knowledge to address societal needs. They are collegial and connected to others, both personally and professionally, through collaborative and mentoring activities. And they are committed to the institution, even though they don't always perceive their values to be the same as those of other colleagues and administrators. Perhaps, in the future, they will set the standards by which all faculty performance is measured.

APPENDICES

APPENDIX A

DEAN INTERVIEW INVITATION

Dean Interview Invitation

Date

Dear   :

I would like your assistance in identifying faculty members in your college who are doing an exceptional job of integrating the multiple dimensions of the faculty role -- teaching, research and public service/outreach. We are seeking to identify a group of faculty members at MSU who "personify" the land grant ideals in their professorial role.

While most faculty are not engaged in all three dimensions and are not expected to be, we believe it is likely that some are doing excellent work in all three – or have done so during their careers. The Faculty Exemplar project seeks to understand the ways in which these faculty members construct their roles to enable high levels of achievement across the span of professional responsibilities. The project is one facet of a larger institutional study examining such issues as the faculty reward and incentive system, recruitment, retention and related aspects of professional development.

The following description of a faculty exemplar, drawn primarily from the MSU Distinguished Faculty Award criteria, is offered as a point of discussion:

A faculty exemplar is an individual who has a sustained record of exceptional achievement in the multiple roles of the academic profession -- research, teaching and public service.

Exceptional research is demonstrated in the discovery of new knowledge and/or the creative aggregation, interpretation and application of existing knowledge.

Exceptional teaching incorporates efforts to challenge undergraduate and/or graduate students and contribute to their overall development through creative teaching approaches, curriculum development, and academic advising or mentoring.

Exceptional public service involves the successful extension and application of knowledge to address the needs of people at local, state, national or international levels through activities that build on the faculty member's professional expertise,

international level through activities that build on the faculty member's professional expertise, such as consultation, technical assistance, policy analysis, program evaluation, and public information.

An exemplar's productivity is characterized by quality of output, not solely by quantity, and by professional growth throughout the academic career. A faculty exemplar is widely respected by colleagues and constituents both on and off campus. Her/his efforts make a difference in the lives of those with whom she/he is engaged.

Laurie Wink, a doctoral candidate in higher education administration, would like to interview you regarding your perspective on the faculty exemplar description and on faculty members in your department to whom it applies -- including some at the early as well as later stages of their careers. She will call your office in a few days to set up an appointment. Meanwhile, if you have any questions about the project, please contact me at _____.

Sincerely,

Kathyrn M. Moore, Chairperson and Professor
Department of Educational Administration

APPENDIX B

DEAN INTERVIEW PROTOCOL

Dean Interview Protocol

FACULTY EXEMPLAR PROJECT

<u>Purpose</u>:

The Faculty Exemplar project seeks to understand the ways in which faculty members construct their roles to enable high levels of achievement across the span of professional responsibilities.

<u>Faculty Exemplar Description</u>:

A faculty exemplar is an individual who has a sustained record of exceptional achievement in the multiple roles of the academic profession -- research, teaching and public service.

<u>Exceptional research</u> is demonstrated in the discovery of new knowledge and/or the creative aggregation, interpretation and application of existing knowledge.

<u>Exceptional teaching</u> incorporates efforts to challenge undergraduate and/or graduate students and contribute to their overall development through creative teaching approaches, curriculum development, and academic advising or mentoring.

<u>Exceptional public service</u> involves the successful extension and application of knowledge to address the needs of people at the local, state, national or international level through activities that build on the faculty member's professional expertise, such as consultation, technical assistance, policy analysis, program evaluation, and public information.

An exemplar's productivity is characterized by quality of output, not solely by quantity, and by professional growth throughout the academic career. A faculty exemplar is widely respected by colleagues and constituents both on and off campus. Her/his efforts make a difference in the lives of those with whom she/he is engaged.

<u>Key Questions</u>:

1. Do you have any comments about the appropriateness of the above description of an exemplary faculty member on this campus?

2. Does your college have a similar definition of faculty excellence?

3. How do you become knowledgeable about exemplary performance of faculty in your college?

4. Among the faculty members in your college, to whom does the above description apply? Why do you think so?

5. Does your list include faculty members who are at the early as well as later stages of their careers? Female faculty members?
Department of Educational Administration

APPENDIX D

FACULTY INTERVIEW INVITATION/CONSENT FORM

Faculty Interview Invitation/Consent Form

Date

Dear   :

You have been identified by college administrators as a faculty member who does an exceptional job in teaching, research and public service. We would like to understand your perspective of the faculty role as part of the Faculty Exemplar project. The project is one facet of a larger institutional study examining the faculty reward and incentive system and related aspects of faculty professional development.

Laurie Wink, a doctoral candidate in higher education administration, would like to interview you about your decision to become a faculty member, your graduate school preparation, the evolution of your career and aspects of the work environment. Interview data will be used in her doctoral dissertation.

All responses will be kept confidential. Reports of this study will not use real names of interview subjects or the institution, departments or colleges. Subjects will not be referred to by descriptors that could serve to identify them. Participation is voluntary. You may refuse to answer any questions or discontinue participation in the project at any time.

Laurie will call you in a few days to arrange a time for the interview. She will ask you to send her a copy of your vita in advance of the interview, along with your signature on this letter (see below) indicating informed consent. If you have any questions about the project, please contact me at _____.

Sincerely,

Kathryn M. Moore
Professor and Chairperson

Signature_____Date _____

APPENDIX E

FACULTY INTERVIEW PROTOCOL

FACULTY INTERVIEW PROTOCOL

<u>Introduction</u>

Thank you for agreeing to participate in the Faculty Exemplar study. First, I'd like to repeat that the purpose of the study is to develop a better understanding of how faculty members make decisions about their professional responsibilities and act out their roles.

I'd also like to repeat my assurance of the confidentiality of your responses; your name will not be used in any written or verbal reports of this study, nor will the institution, college or department in which you work be mentioned by name.

The interview consists of open-ended questions that ask you to reflect on your decision to become a faculty member, your graduate school experience, your first faculty position, your work interests and preferences, and ways in which the work environment affects your performance.

Do you have any objections to being tape recorded?

Do you have any questions I can answer about the project?

If you're ready, I'll begin by asking...

1. How did you decide to become a faculty member?
   a. When did you make this decision?
   b. Did anyone influence your decision?
   c. What did you know then about the faculty role?
   d. Why did the role seem to suit you?

2. What did you learn about the role of faculty member during graduate school?
   a. Did anyone have a particular influence on you?
   b. Did your initial understanding of the role change?

3. How did you obtain your first faculty position?
   a. How did you find out about it?
   b. Was anyone instrumental in your entry into the position?
   c. What were the <u>pros</u> and <u>cons</u> of the position?

4. As a new faculty member, how did you come to understand your role?
   a. How did you know what was expected of you?
   b. How did you know whether you were meeting expectations?

5. How has your career evolved?
    a. Have you experienced turning points or periods of refocusing in your faculty career?
    b. Has being a faculty member here changed the way you approach the faculty role?
    c. What do you worry about the most with regard to being a faculty member here?

6. How do you decide which activities to engage in?
    a. How do you allocate time among these activities?
    b. Do you think of these activities as discrete or related?

7. Do you collaborate with colleagues or other professionals?
    a. How do you define and interpret such relationships?
    b. What are the drawbacks and benefits of this work?

8. How do you evaluate your professional performance?
    a. Do others' expectations influence your work?
    b. Has your productivity changed during your career?

9. How would you describe an exemplary faculty member?
    a. Do you perceive yourself as exemplary?

10. In the ideal world, what would be different about this place (institution, department, etc.)?

11. Is there anything else you would like to add about being a faculty member here -- something annoying, pleasant or whatever?

Thank you very much for participating in the study. If I need to clarify anything we've discussed today, may I give you a call?

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