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Public and community service activities of faculty and academic
staff members at a land-grant institution: A study of Michigan
State University

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PUBLIC AND COMMUNITY SERVICE ACTIVITIES
OF FACULTY AND ACADEMIC STAFF MEMBERS
AT A LAND-GRANT INSTITUTION:
A STUDY OF MICHIGAN STATE UNIVERSITY

By

Carolyn Lee Arthur

A DISSERTATION

Submitted to
Michigan State University
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ABSTRACT

PUBLIC AND COMMUNITY SERVICE ACTIVITIES
OF FACULTY AND ACADEMIC STAFF MEMBERS
AT A LAND-GRANT INSTITUTION:
A STUDY OF MICHIGAN STATE UNIVERSITY

By

Carolyn Lee Arthur

The purpose of this study was to develop an understanding of the public service component of the institutional mission of Michigan State University, a land-grant institution. It employed descriptive, relational, analytical and definitional questions to accomplish that purpose.

A survey instrument was administered to 3,531 subjects in October, 1988. There were 1,980 useable returns, for a 56% return rate. The Statistical Package for the Social Sciences (SPSS-X) was used to analyze data. Simple statistics and correlation coefficients were computed and analyses of variance were used to determine relationships between means.

Major findings included the following:

1) Extent of involvement scores in both professional public and community service and service-related activities with students were lower than perception of importance scores.

2) Perception of importance scores in both sections were stable regardless of independent variable.

3)   Faculty and academic staff members' extent of involvement in professional public and community service activities revealed a pattern of stronger relationship with their own perception of its importance than with any university practices which could have had an effect on such involvement.

4)   College/unit affiliation was by far the strongest predictor of the four independent variables.

5)   Respondents whose longevity at MSU was 11-15 years scored consistently higher than any of the other longevity categories on almost every scale.

As a result of these findings, the following conclusions were drawn:

1)   There was a shared university-wide value present regarding the perceived importance of public and community service which transcended all four independent variables.

2)   Opportunities offered (or taken) to enact those values varied considerably, especially when considered college/unit by college/unit.

3)   Involvement in public and community service could be increased by capitalizing on the university-wide shared value of the importance of service.

4)   There must be other factors at work besides university practices which motivated involvement in

professional public and community service and service-related activities with students.

5) Respondents whose longevity at MSU was 11-15 years would be most likely to cooperate in efforts to strengthen the service component of the institutional mission.

DEDICATION

This dissertation is dedicated to the loving memory of my father, Donald Maurice Arthur, who instilled in me a love for reading and learning; to my mother, Dorothy Myers Arthur, whose loving care and sense of humor nursed me back to wholeness when I ruined my health in pursuit of this degree; and to the Lord Jesus Christ, the Master Teacher, who was the first to recognize that, ". . . the greatest among you shall be your servant" (Matthew 23:11).

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As with any project of this magnitude, the end result could not have been accomplished without the help of a number of people, who should be thanked.

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Dr. Casmer Heilman has also served in a dual role, as a member of the Campus Compact/Public and Community Service Committee and as a member of my doctoral committee. To him I am indebted for his patience and guidance during the development of the questionnaire that

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committee. He provided a number of valuable insights.

There were several other people vitally involved in
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Thomas P. Emling, then Director of Adult Services for
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Director in the Office of Planning and Budgets.

The actual logistics of administering a survey to
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along the way. And, finally, my mother deserves thanks
for continuing to tell me, "I know you can do it," at the
times I was least convinced of that fact.

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CHAPTER I

STATEMENT OF THE PROBLEM

Introduction

The concept of service has been recognized as an integral part of the mission of American higher educational institutions since colonial times. In the early years of American history, colleges were seen to "serve society through the lives of dedicated graduates" (Rudolph, 1962, p. 59). A college education was intended for those who would serve the church and state and was restricted to young people who "were eligible for the college experience by reason of birth or social station" (Martin, 1977b, p. 5).

It was not until the latter half of the nineteenth century, however, that the expectation of service to society was applied to the institutions themselves as well as to their graduates. Daniel Coit Gilman, president of Johns Hopkins, argued that the services which the university rendered to society were "'the acquisition, conservation, refinement and distribution of knowledge'" (Rudolph, 1962, p. 272). As the German model

pioneered at Johns Hopkins was adopted at more and more institutions, curricula began to change and universities began to emerge (Rudolph, 1962, p. 272).

The latter half of the nineteenth century also brought a "growing awareness that a new age required new training and new preparation" (Rudolph, 1962, p. 248). The lack of a curriculum that would serve the needs of the majority of the American people, at that time agrarian, became apparent (Kuhn, 1955, p. 8). In 1855, the Legislature of the State of Michigan became the first to establish an agricultural college (Eddy, 1957, p. 16). The Michigan Agricultural College consequently became one of the first to benefit from the passage of the Morrill Act of 1862.

Signed into law by President Abraham Lincoln, the Morrill Act set aside public lands for sale, stipulating that:

> the interest of which shall be inviolably appropriated by each State . . . to the endowment, support and maintenance of at least one college where the leading object shall be . . . to teach such branches of learning as are related to agriculture and the mechanic arts (The Morrill Act, 1862, in Crane, 1963, p. 192).

One of the primary reasons for the creation of "land-grant" colleges, as they became known, was to establish a place in which "the search for new knowledge in neglected fields of fundamental importance to the

American people (and the application of this knowledge in practice) would have an honored place" (Eddy, 1957, p. x). The application of new knowledge became the basis for the "'land-grant idea' of higher education in the service of all people" (Eddy, 1957, p. xi).

Michigan Agricultural College was one of the first to create and disseminate new knowledge through agricultural extension, helping farmers to improve the practical performance of their work (Kuhn, 1955, pp. 203-204). As Michigan Agricultural College evolved over the years into Michigan State University, this original service function broadened to include the dissemination and application of new knowledge in a variety of disciplines to "the citizens of the State of Michigan, the nation, and the world" (MSU Mission Statement, 1982, p. 1).

While land-grant institutions became uniquely identified with service, other colleges and universities did not abandon the service ethic. In the early twentieth century,

> the service of the university was expanded
> to include service to the emerging new
> professions, . . . service to the advancement
> of new knowledge, and service to students
> willing to become initiates in the rite of
> passage into any profession . . . (Martin,
> 1977b, p. 5).

The services provided by colleges and universities to the larger society have continued to expand since the early

decades of this century, both in number and range and in the variety of people being served (Martin, 1977b, p. 5). While the recipients of service from universities have continued to change, the concept of service has remained an integral part of the mission of American higher education institutions in contemporary times, especially at land-grant universities.

In recent years, the expectation of service by students to society has been revived. A coalition of college and university presidents, known as Campus Compact, was formed in 1985, "to devise ways to encourage more community involvement by students" (Greene, 1988, p. A31). This organization expanded rapidly and several state affiliates were founded, the first in California in late 1988 (Greene, 1988, p. A31). A coalition of presidents from public universities, independent colleges and community colleges in Michigan officially announced the formation of the Michigan Compact at a press conference in March, 1989 (Gibson, 1989, p. 3). Michigan State University was one of the five founding member institutions of the Michigan Compact (Gibson, 1989, p. 14).

Purpose of the Study

The purpose of this study was to develop an understanding of the public service component of the

institutional mission of Michigan State University, a land-grant institution. This study of MSU faculty and academic staff members' public and community service activities employed descriptive, relational, analytical and definitional questions to achieve that purpose.

First, this study was designed to describe the extent of involvement of Michigan State University faculty and academic staff members in public and community service activities, both personally and with and/or for students. Faculty perceptions of the importance of such involvement as professional activities for themselves and as learning opportunities for their students were to be described as well.

Secondly, this study was designed to identify relationships between described behaviors and perceptions which may have an effect on the achievement of the service component of MSU's institutional mission.

Thirdly, the study was designed to analyze those relationships in order to: (a) develop recommendations which may be useable for enhancing achievement of institutional and faculty service goals and (b) aid in the generation of hypotheses which then could be tested in further research.

Finally, the study was designed to develop an operational definition of service for Michigan State University, by examining the responses to an open-ended

question regarding recent service activities.

The descriptive component of the purpose was to be achieved by seeking answers to the following research questions:

1. To what extent are MSU faculty and academic staff members involved in public and community service?

2. To what extent do MSU faculty and academic staff members consider public and community service important as professional activities?

3. To what extent are MSU faculty and academic staff members involved with students in service-related activities? In other words, if faculty and academic staff members consider public and community service involvement important for themselves, does that consideration translate into involvement with and support for students in service-related activities?

4. To what extent do faculty and academic staff members consider service-related activities to be important as learning opportunities for students?

5. Are there institutional practices which may have an effect upon faculty and academic staff members' participation in public and community service?

In order to achieve the relational component of the purpose, a number of comparisons were to be drawn, including the following:

6. What relationship exists between faculty and

academic staff members' extent of involvement in public and community service and their perception of the importance of such services as professional activities for themselves?

7. What relationship exists between faculty and academic staff members' extent of involvement with students in service-related activities and their perception of the importance of such activities as learning opportunities for students?

8. What relationship exists between extent of involvement of faculty and academic staff members in public and community service activities and the extent of their involvement with and/or for students in service-related activities?

9. What relationship exists between faculty and academic staff members' perception of the importance of professional public and community service activities and their perception of the importance of service-related activities with and/or for students?

10. What relationship exists between institutional practices and extent of faculty and academic staff members' involvement in professional public and community service activities and their perception of its importance as a professional activity?

The analytical component of the purpose was to be achieved by answering the following research questions:

11. Are there any additional relationships which emerge from analysis of findings of this study?

12. What patterns, if any, can be identified which may prove useful in developing recommendations to enhance achievement of service goals or in generating hypotheses for testing in further research?

Finally, the definitional component of the purpose was to be achieved by examining responses to the open-ended question which solicited specific examples of recent public and community service involvement.

Need for the Study

There were three primary reasons why the present study was undertaken:

1. Paucity of research regarding public service. While public service has generally been accepted as part of the tripartite mission of American higher education, there has been "little research on service and hence no developing body of knowledge on the service mission of higher education" (Crosson, 1983, p. 112).

The investigator was able to locate only two primary sources which dealt exclusively with public service in American higher education. The first was a 1983 ASHE-ERIC publication entitled, Public Service in Higher Education: Practices and Priorities. This volume "categorize[d] public service . . . by external

recipient: service to the community, service to state and local governments, [and] service to business and industry" (Crosson, 1983, p. 3). The other primary source was a volume of the New Directions in Higher Education series, published by Jossey-Bass in 1977, entitled Redefining Service, Research and Teaching. The chapters included in this book explored the concept of service through "ideas of value" (Martin, 1977b, p. 7).

In addition to the two sources listed above, the investigator was able to locate three case studies which were conducted in recent years on public service activities of university faculty members and their attitudes toward such activities. The first was a rather comprehensive study of faculty involvement in community service at the several campuses of the University of Minnesota (Kanun, 1975). The second was a study conducted on the University of California campuses which addressed the role of faculty in public service and motivations and rewards needed to promote such involvement (Dowling, 1986). The third study used faculty members from five state universities in Ohio as subjects (Johnson, 1984).

A small number of recent doctoral dissertations on public service were also located by the investigator, several of which were conducted at Michigan State University. In addition, while numerous journal articles

were found which discussed public service, most only gave
it passing mention as part of the tripartite mission of
American higher education.

If public service has indeed been accepted as an
integral part of the mission of American higher
education, then it deserves to be as well researched,
understood and valued in the literature as the other two
components, research and teaching. As one author noted,

> Faculty members in American colleges and
> universities sit on the three-legged stool
> of teaching, research, and service. But
> they rest uneasily there because the legs
> of their stool are uneven. Teaching and
> research tend to balance out. Service,
> however, is short--poorly conceptualized
> and erratically expressed (Martin, 1977a,
> p. vii).

Another reason public service should have more
recognition in the literature is because it would
document the contribution higher education institutions
and their faculty and staff members have made to the
larger society, beyond the more easily recognized methods
of teaching and research. Public service, the practical
application of knowledge in the public interest, is that
aspect of the mission of an institution "that will
address the current problems and concerns of the people,
the nation, and the world" (Dressel, 1987, p. 420).

Public service serves a need in higher education
which should be reported in the literature as well.
"Through public service, faculty validate past research

findings and identify the need for new research and for
modifications in the curricula" (MSU Mission Statement,
p. 3).

2. **Need to clarify the concept and definition of
public service**. There was considerable disagreement,
both in the general literature and in Michigan State
University documents, about what exactly constituted
public service.

The investigator found no less than a dozen
different definitions of public service in the relevant
literature, some of which contained common elements, but
several of which were radically different. For example,
the **Thesaurus of ERIC Descriptors** described public
service as

> extension or voluntary service with
> government, community or charitable
> organizations, including activity of
> educational institutions and personnel,
> made available to the public outside
> the context of regular instruction and
> research programs (Houston, 1987, p. 193).

On the other hand, Smith defined public service as

> ...a programmatic relationship between
> university and community through which
> knowledge is brought to bear upon the
> resolution of public problems" (Smith,
> 1982, p. 695-A).

Evidence of confusion regarding the definition of
public service existed in Michigan State University
documents as well. A recent memorandum comparing
definitions of public service in university documents

found that there was a "lack of consistency" from one university document to another (MSU Office of Planning and Budgets, 1988, p. 1). The current mission statement of the university did not define public service at all, but only mentioned it in passing as an avenue for validation of past research efforts and a method for identification of the need for new research (MSU Mission Statement, p. 3).

There was also a lack of consistency in university documents about whether consulting activities, for which a faculty member received personal payment, should count as public service in the evaluation process (MSU Office of Planning and Budgets, 1988, p. 3).

3. Lack of concrete, comprehensive information regarding public and community service activities of faculty and academic staff members at Michigan State University. While some colleges or units within the university may have had information regarding the public service activities of their faculty members, no office or individual at the University could be identified which or who had concrete, comprehensive information on the subject. For this reason, the investigator believed that a systematic collection and analysis of such information would make a worthwhile contribution to the knowledge base of the university.

It was expected that the instrumentation,

methodology and results of this study would make a relevant contribution to the literature, as well as prompt further study at land-grant institutions of similar size and complexity as Michigan State University.

Methodology

The impetus for this study came from some of the responsibilities assigned to the investigator as a graduate assistant in the Office of the President at Michigan State University during the 1987-88 academic year. Following discussions with appropriate university personnel regarding possible content and format for the research instrument, a first draft was created by the investigator. After a number of subsequent refinements and drafts, the content and final format of the instrument were decided by the investigator.

The questionnaire was divided into five sections, as follows: (I) background (demographic) information; (II) professional public and community service activities; (III) service-related activities as learning opportunities for students; (IV) institutional practices which affect participation in public and community service activities; and (V) specific examples of public and community service activities (see Appendix A).

Section I was designed to provide demographic information about the respondents which was needed to

analyze results in subsequent sections. Included were longevity of appointment at MSU, part-time or full-time status, type of appointment, academic rank and college/unit affiliation.

Section II addressed extent of faculty involvement in public and community service activities and their perception of the importance of such service as professional activities.

Section III addressed the extent of faculty involvement with students in service-related activities and their perception of the importance of such activities as learning opportunities for students.

Section IV dealt with faculty members' perception of institutional practices which may affect their involvement in public and community service activities.

Section V allowed for open-ended responses. This section was included for several reasons: (1) to validate the respondents' perception of what constitutes public and community service; and (2) to provide specific examples of faculty and academic staff members' public and community service involvement.

Because of the accessibility of the research population to the investigator and a desire for the broadest possible representation in the results of this research, the entire population was used instead of a sample.

The MSU Office of Academic Personnel Records was contacted and subsequently supplied the investigator with labels for the entire population of 3,531 as of September 10, 1988. Of that number, 2,461 were faculty and 1,070 were academic staff.

An advance letter was sent to each subject one month before the planned mailing of the questionnaire itself. This letter informed recipients of the purpose of the survey and solicited their participation (see Appendix B). The questionnaire, with cover letter, return envelope and return postal card was subsequently sent to each member of the population in early October, 1988 (see Appendices C and D). A follow-up letter was sent two weeks later to all subjects who had not yet returned the postal card, which indicated that they had completed and returned the questionnaire (see Appendix E).

The questionnaire was printed so that it could be machine scored. The Statistical Package for the Social Sciences (SPSS-X) was used to analyze the results. Descriptive statistics were generated for each of the first four sections. Computation of correlation coefficients and analyses of variance were employed to determine the relationships among and between results in Sections II, III, and IV.

Assumptions and Limitations of the Study

This study was limited to those persons who held an academic appointment at Michigan State University during Fall Quarter, 1988, the time at which the research instrument was administered. A print-out from the MSU Office of Academic Personnel Records revealed 69% of this group to be tenured faculty, in the tenure stream, or holding a continuing academic staff appointment (MSU Office of Academic Personnel Records, 1988). Consequently, it was assumed that this population was relatively stable.

Previous studies have shown that the variables of age and gender of respondents were not significant factors (Kanun, 1975, p. 9; Johnson, 1984, p. 42; Dowling, 1986, p. 12). Thus it was assumed that such information was unimportant for the purposes of this study as well.

It should be recognized that those who chose to respond to a questionnaire regarding public and community service may already have been predisposed as strongly in favor of the concept or, conversely, strongly opposed to it. The results from this research may consequently have been skewed somewhat rather than truly representative of the activities and perceptions of the population (Borg and Gall, 1983, p. 434). Interpretation of results from this research should be considered in light of this fact.

While the population under study was confined to Michigan State University, its findings may be generalizable to other land-grant institutions of similar size and complexity, as found in the membership of the National Association of State Universities and Land Grant Colleges (NASULGC).

Definition of Terms

Although marked differences in the definitions of service were found in the relevant literature, the following definitions were used for purposes of this study:

> 1) **College or university service:** committee or other governance activities internal to the department, college, school or campus related to program development and institutional policy;
> 2) **Professional service:** committee, editorial, or other work for national or regional professional associations and/or academic disciplines;
> 3) **Public service:** activities other than basic research and teaching involving direct relationships with groups external to the academic community (Crosson, 1983, p. 5).

For the purposes of this study, these definitions by Crosson have been taken together and only the public service label has been used to denote all three categories.

In addition, the following relevant definitions are offered:

Community service--The voluntary performance of

civic duties (or as the Carnegie Commission called them,

"citizen tasks,") by faculty and academic staff as

individual members of the community, which may or may not

involve use of their professional expertise.

Research--"The investigation which is usually

theoretically oriented and which has for its purpose the

production of new knowledge" (AECT, 1977, p. 192).

Teaching--"The process of helping learners acquire

knowledge, skills and appreciations by means of

systematic instruction" (Knowles, 1977, p. 536a).

Faculty--All "regular faculty" and "temporary

faculty," both full-time and part-time, as defined in the

MSU Faculty Handbook:

> The 'regular faculty' of Michigan State
> University shall consist of all persons
> appointed under the rules of tenure and
> holding the rank of professor, associate
> professor, assistant professor, or instructor,
> and persons appointed as librarians. In
> addition, the principal administrative
> officer of each major education and research
> unit of the University shall be a member of
> the 'regular faculty.'
>
> The 'temporary faculty' of Michigan State
> University shall consist of all persons
> holding the rank of professor, associate
> professor, assistant professor or instructor,
> but not appointed under the rules of tenure
> (MSU Faculty Handbook, February, 1988, edition,
> p. 10).

Academic Staff--All continuing or temporary academic

employees of Michigan State University who are not

regular or temporary faculty, i.e. specialists, research associates, lecturers, and assistant instructors (MSU Faculty Handbook, October, 1986, edition, p. 25). All persons with adjunct and clinical appointments are also included in this category (MSU Faculty Handbook, October, 1986, edition, p. 27).

Consulting--The process by which a faculty member takes his/her expertise and shares it with an individual or group outside the university, for which that faculty member receives personal payment.

Recommendation--An idea, choice or course of action presented as appropriate, desirable or worthy of acceptance.

Hypothesis--"A guiding idea, tentative explanation or statement of probabilities, serving to initiate and guide observation and the search for relevant data and other considerations and to predict certain results or consequences" (Good, 1959, pp. 276-277).

Organization of the Study

This dissertation has four additional chapters, organized in the following manner:

Chapter II contains a review of the relevant literature, including a brief history of the land-grant movement and its influence on the public service component of American higher education. An examination

of public service definitions and descriptions in the literature follows, including a review of consulting as a public service function. Major works on public service are then reviewed, and the role public service plays in faculty workload is included as well. The chapter concludes with a review of how public service activities are evaluated and rewarded in contemporary American colleges and universities.

Chapter III outlines the design and methodology used in the study. It contains a description of the survey instrument, the population, and procedures used in data collection and analysis.

Chapter IV includes a presentation and analysis of the findings of the study, in both text and tabular form. The chapter begins with a description of the distribution of respondents, includes results from each of the twelve research questions and concludes with an analysis of the results from the open-ended, definitional question.

Chapter V presents a summary of the major findings and conclusions which can be drawn from the results of the study. Implications of the findings and recommendations for further study complete the chapter.

CHAPTER II

REVIEW OF LITERATURE

Introduction

Service has long been considered an important part of the mission of twentieth century American higher education, although a "distant third after teaching and research" (Crosson, 1983, p. 1). Because discussion about college and university public service "is inextricably linked to fundamental questions about the nature and purpose of higher education," there is a considerable amount of references to service in the literature (Crosson, 1983, p. 1, 111). A problem arises, however, because

> there is both too much and too little
> literature on public service in higher
> education--too much because the treatment
> of the service mission is contained
> throughout the literature on higher education
> . . . and too little because very few books
> and articles treat the subject of public
> service in any depth (Crosson, 1983, p. 111-112).

The investigator found Crosson's analysis of the situation to be only too true. While there were quite a few references in the literature to service as a uniquely American contribution to higher education, "there is

little research and theory on service and hence no developing body of knowledge on the service mission of higher education" (Crosson, 1983, p. 112). All of the research on public service located by the investigator had been done during the last twenty years.

In addition, there was little unanimity found in the literature regarding what constitutes public service, nor was there much written about its relative importance as a professional activity for faculty members. Little was found by the investigator regarding how public service activities should be evaluated and how they should be rewarded in the tenure and promotion structure of contemporary universities.

This chapter is divided into several sections which reflect the diversity of references to public service found in the literature. Those sections are as follows:

1) A brief history of public service, particularly in land-grant institutions;

2) How public service is defined, both in the general literature and in Michigan State University documents;

3) An overview of major works in the literature which are devoted solely to public service, including a review of recent research;

4) The role of public service in faculty workload expectations, including a discussion of outside

consulting and, finally,

5) How public service is evaluated and rewarded in tenure and promotion proceedings.

A Brief History of Public Service

The concept of service has been a part of American higher education since the founding of the early colonial colleges. At that time, the colleges were seen to "serve society through the lives of dedicated graduates" (Rudolph, 1962, p. 59). In colonial times a college education was reserved for those who were going to pursue "a very select and limited group of professions that were closely allied with church and state" (Martin, 1977b, p. 5). This meant that the colonial colleges provided a service to "the young people who were deemed eligible for training . . . and/or were eligible for the college experience by reason of birth or station" (Martin, 1977b, p. 5).

During the latter half of the nineteenth century, the expectation of service to society was also applied to the institutions and their faculty members, not just to their graduates (Rudolph, 1962, p. 272). Daniel Coit Gilman, president of Johns Hopkins, asserted that the services which the university rendered to society were "the acquisition, conservation, refinement and distribution of knowledge" (Rudolph, 1962, p. 272). As

colleges followed the lead of Johns Hopkins and began to adopt "the German concept of scholarly research for its own sake," creating universities, they also adopted the concept of research in its own right as a service to society (Brubaker, 1968, p. 394).

Service did not win acceptance as an integral part of American higher education without some difficulty, however. Woodrow Wilson, president of Princeton, delivered a message in 1896 which he entitled, "Princeton in the Nation's Service" (Wilson, 1896, in Hofstater and Smith, 1964, p. 684). In this address, Wilson argued that "it is not learning but the spirit of service that will give a college place in the public annals of the nation" (Wilson, 1896, in Crosson, 1983, p. 25). He "spoke of 'public service' as an academic aim" (Veysey, 1965, p. 242). However, he "did so while maintaining the integrity . . . of the academic institution" and expressed the feeling that the demands of the external society were "grasping" (Veysey, 1965, p. 243). Thus it would seem that while he favored the idea of service to the nation, Wilson "insisted that higher learning was becoming far too practical in its focus" (Boyer and Hechinger, 1981, p. 13).

Most colleges in the United States eventually did come to accept the uniquely American concept of service as a part of the mission of higher education.

> To the English concept of the general
> culture of the educated gentleman and
> the German concept of scholarly research
> for its sake, the American university
> added another dimension; namely, that
> higher education to justify its own
> existence should seek to serve actively
> the basic needs of American life (Brubaker,
> 1968, p. 5).

In no other place did this idea of serving basic needs bear more fruit than in the land-grant colleges created by the Morrill Act of 1862. Signed into law by President Abraham Lincoln, this legislation set aside public lands for sale in order to support and maintain at least one college in each state

> where the leading object shall be . . .
> to teach such branches of learning as
> are related to agriculture and the
> mechanic arts . . . in order to promote
> the liberal and practical education of
> the industrial classes in the several
> pursuits and professions of life (The
> Morrill Act, 1862, in Crane, 1963, p. 192).

The creation of land-grant colleges eventually provided a new dimension of service to American society in two distinct ways. First, land-grant colleges opened the doors of higher education to "children of the common people" who had been excluded from colleges in the past, thus serving a larger segment of American society than ever before (Morrill, 1960, p. 7). Secondly, land-grant colleges provided for direct service to the people of each state through extension, primarily agricultural experiment stations in the first 25 to 30 years after the

passage of the Morrill Act (Kerr, 1931, p. 19).

Opening the doors of land-grant colleges to members of the mechanical trades and agricultural communities essentially led to the democratization of higher education in America, serving the educational needs of a far greater segment of the population than had ever been served before.

> The new type of college fulfilled the
> needs and aspirations of the common
> people. It offered equal opportunity
> for all. It limited the level of
> achievement, as well as opportunity,
> by no standard of wealth, privilege,
> or patronage (Kerr, 1931, p. 11).

Land-grant institutions also served the nation by "helping to stimulate the growth" of public high school systems, so that students might be prepared for college level classes (Eddy, 1957, p. 116). By the early decades of the twentieth century, it was possible for the colleges to discontinue "preparatory departments" which had been necessary in their earlier years (Johnson, 1981, p. 336).

It was for the services provided to their constituent states, however, that the land-grant colleges were most noted. They were praised for "serving ingenuously and usefully the community from which the sources of their strength arise" (Morrill, 1960, p. 13). President Robert Van Hise of the University of Wisconsin was quoted as saying in 1904, "I shall never rest content

until the beneficent influences of the University . . .

shall be made available in every home of the state"

(Eddy, 1957, p. 114). He was considered the father of

the "Wisconsin Idea," arguing that

> the boundaries of the university will be
> coterminous with those of the state, and
> the primary purpose of the university
> would be to service the needs of the state
> and its citizens (Crosson, 1983, p. 24-25).

Agriculture and its continued improvement were the

driving forces behind the services provided to each

state's citizens. Improvement of agricultural methods

was provided most directly to farmers through

agricultural experimentation and dissemination of

research results in the early period of land-grant

college growth. In fact, the first federal support for

research, the Hatch Act of 1887, "furnished funds for

agricultural extension stations and experimental work"

(Davis, 1974, p. 23).

A unique idea at the time was that "the work of

scholars--and particularly their research--may be and at

times should be deliberately planned toward utilitarian

ends" (Anderson, 1976, p. 3). Coupled with this

utilitarian research was the complementary concept of

taking the "fruits of research . . . to the people"

(Anderson, 1976, p. 4). In land-grant institutions "the

emphasis has been on the usefulness and relevance of all

learning to a better life . . ." (Morrill, 1960, p. 12).

As the land-grant colleges experienced an
unprecedented period of growth in the early decades of
the twentieth century, their services to constituents
continued to grow as well. The Smith-Lever Act of 1914
provided aid to land-grant colleges so that they could
take "home economics and agricultural instruction to
those not attending or in residence at colleges" (Davis,
1974, p. 23). This concept broadened into a "function
[that] is typically called continuing education"
(Anderson, 1976, p. 5). Land-grant colleges became known
for "their pioneering of adult education services"
(Geiger, 1963, p. 64).

Another service provided by land-grant colleges was
particularly evident in the western states. There,
land-grant colleges were known to provide service to
their constituents by "elevating their general cultural
level" (Geiger, 1963, p. 68).

The training of military leadership was another
service provided to the nation by land-grant colleges, a
service often overlooked. The original Morrill Act of
1862 included a specific provision that, along with other
"scientific and classical studies" instruction in
"military tactics" should be a part of the curriculum
(The Morrill Act, 1862, in Hofstadter and Smith, 1961, p.
568). Kerr asserted that, during World War I, "the
outstanding test of the land-grant institutions was their

ability to furnish trained men for military leadership"
(Kerr, 1931, p. 22). "Supplemented by the National
Defense Act of 1916," land-grant colleges were
responsible for "inject[ing] a strong civilian and
university influence into the officer corps" through ROTC
training programs (Geiger, 1963, p. 72).

As land-grant institutions continued to grow, the
colleges expanded their service function beyond the
borders of their own states to provide services to the
nation as a whole, and internationally as well. W.J.
Kerr, President of Oregon State Agricultural College,
stated in a 1931 speech that the aggregate national
economic impact of new and improved agricultural
"production resulting from agricultural research,
teaching and extension" was estimated at more than one
billion dollars per year (Kerr, 1931, p. 20).

The impact of land-grant institutions was even felt
internationally. In fact, Eddy noted that, "the land-
grant idea of higher education in the service of all the
people has become one of this country's most popular and
least controversial exports" (Eddy, 1957, p. xi). Much
of the land-grant institutions' influence overseas,
however, came through "students who came to America . . .
and returned to serve in their own lands" (Kuhn, 1955, p.
468). At the same time, land-grant institutions ". . .
undertook to export educational methods which had proved

successful in America" (Kuhn, 1955, p. 468). Michigan

State University was cited as a leader in giving

"emphasis to world affairs education" (Allen, 1963, p.

42).

American higher education in general, not just the

land-grant institutions, expanded their concept of

service in the first half of this century.

> . . . the service of the university was
> expanded to include service to the
> emerging new professions, service to
> science and technology, service to the
> advancement of new knowledge, service
> to the guilds of the academic disciplines
> and service to students willing to become
> initiates in the rite of passage into any
> profession . . . (Martin, 1977a, p. 5).

Since World War II the services provided by higher

education institutions in America have continued to

expand, both in number and range as well as in the

variety of people who have become recipients of such

services (Martin, 1977a, p. 5). With major population

shifts in the last 50 years from rural to urban to

suburban areas, "the most spectacular need for increased

services has been to cities" (Allen, 1963, p. 26). Long

and Groskind argued that

> just as the agricultural college paid its
> way by research and education relevant to
> the problems and pursuits of a nation of
> farmers, the modern public university can
> pay its way by being useful to a nation of
> city dwellers (Long and Groskind, 1972, p. 7).

The creation of "the American municipal university helped provide for educational opportunity and curricular diversity" (Crosson, 1983, p. 26). These municipal universities provided help by "meet[ing] the sweeping public demand . . . for more direct service to a fast industrializing and urbanizing society" (Brubaker and Rudy, 1976, p. 170).

The centennial of the Morrill Act in 1962 caused many land-grant institutions to examine their service function, to face "the same central question they did at the outset: how could they best be of service to democracy?" (Nevins, 1962, p. 110). By this time the dream of Ezra Cornell, that "he wished to found a university in which any student could pursue any study to the height of his ability," had practically come true (Nevins, 1962, p. 111). Public universities, many of them land-grant, "had to serve democracy by molding unprecedented numbers" (Nevins, 1962, p. 111).

The centennial of the Hatch Act in 1987 also coincided with the 125th anniversary of the signing of the Morrill Act. The combination of the two created an occasion for many land-grant institutions to re-examine their service mission (Mooney, 1987, p. A1). One of the questions which surfaced at that time was whether or not land-grant institutions had "served the constituencies they were intended to serve? Whom exactly, should they

serve?" (Mooney, 1987, p. A30). While some would argue
that "one of the strengths of the land-grant universities
is that [they] have been willing to change . . .," others
contend that "they stand to lose their current land-grant
identity" by giving "prestigious research that brings in
large grants a higher priority than public service and
teaching" (Mooney, 1987, p. A30). Thus it would seem
that there is some confusion about the current status of
the importance of public service in contemporary land-
grant institutions.

Definitions of Public Service

As Crosson found in doing the research for her 1983
book, Public Service in Higher Education: Practices and
Priorities, "the concept and definition of public service
entail enormous difficulties . . ." (Crosson, 1983, p.
111). She asserted that "perspectives on what is
appropriate public service differ according to different
conceptions of higher education as a whole" and she
recommended further research to clarify the conflicting
jumble of definitions found in the literature (Crosson,
1983, p. 111).

This confusion regarding the definition of service
has been recognized for some time in the literature.
Nevitt Sanford, in his landmark publication, The American
College, recognized as early as 1962 that, "service in

intellectual affairs, is often hard, if not impossible to define" (Sanford, 1962, p. 953). There was not even agreement in the literature on the term to be used for describing this mission of higher education. The review of literature by the investigator found a variety of terminology, including: service, public service, university service, community service and professional service.

Long noted that the public service mission in American higher education was "now probably the most nebulous and ambiguous of institutional missions in definition, application and organization" (Long, 1977, p. 82). Martin, the editor of the volume in which Long's article appeared, asserted that

> Faculty members in American colleges and
> universities sit on the three-legged stool
> of teaching, research, and service. But
> they rest uneasily there because the legs
> of their stool are uneven. Teaching and
> research tend to balance out. Service,
> however, is short--poorly conceptualized
> and erratically expressed (Martin, 1977a,
> p. vii).

The investigator found that, while some of the definitions of service offered in the literature were very precise and extensive, others tended to be rather nebulous. For example, Crosson in her major work on public service published in 1983, argued that these three broad categories of activities have come to be labeled service:

>**College or university service:** committee
>or other governance activities internal
>to the department, college, school, or
>campus related to program development and
>institutional policy;
>**Professional service:** committee, editorial,
>or other work for national or regional
>professional associations and/or academic
>disciplines;
>**Public service:** activities other than
>basic research and teaching involving direct
>relationships with groups external to the
>academic community (Crosson, 1983, p. 5).

Most definitions were not this precise, however. The

Dictionary of Education, defined public services as

"activities designed to reach the general population in

the public interest" or "extension activities of

educational institutions not classified as formal

teaching and training" (Good, 1959, p. 497).

Most definitions of service given in the literature

agreed on one thing: the recipients of that service were

external to the college or university itself. Faiman

defined service as

>the making available of instruction and
>problem-solving support and assistance to
>individuals, public agencies, governmental
>units and industry outside of on-campus
>instruction and research activities (Faiman,
>1972, p. 8).

The Dictionary of Education subscribed to the external

nature of service by defining public service programs as

>any one of various types of extension
>activities . . . directed to adults and
>others not the immediate students . . .
>by such means as radio and television
>broadcasting, visual aids, public lectures,
>popular courses, general and specialized
>information services, . . . conferences,

> clinics, leadership training, in-service
> training, testing, community organization,
> . . ., etc. (Good, 1959, p. 419).

The Thesaurus of ERIC Descriptors also gave evidence of

the external nature of service. It defined public

service as

> extension or voluntary service with
> government, community or charitable
> organizations, including activity of
> educational institutions and personnel,
> made available to the public outside
> the context of regular instruction and
> research programs (Houston, 1987, p. 193).

McCallister agreed that the recipients of service

are external to the college or university, but added the

idea that service was provided not only by the

institutions themselves but by their faculty and students

as well. He defined service as

> . . .the utilization of the professional
> expertise and labor pool of the institution
> (including its students) for the benefit
> of the communities which contain those
> institutions (McCallister, 1976, p. 477).

The Carnegie Commission shifted the focus of service

somewhat by addressing it as an activity of faculty

members both in a professional capacity and as private

citizens. They stated that

> as individual members of the community,
> faculty members serve in a variety of
> citizen capacities. . . While these
> faculty members often bring to their
> citizen-tasks their special expertise,
> these services cannot be distinguished
> from those of any citizen performing
> his civic duty (Carnegie Commission,
> 1972, p. 73).

Long provided a definition of public service that
encompassed much of the foregoing and added several
dimensions as well. He categorized public service
activities into the following:

> *Dissemination of knowledge beyond the
>   campus.
> *Delivery of instructional programs
>   beyond the campus.
> *Applied research for immediate public
>   problems.
> *Sharing of resources, including facilities
>   and instructional and other learning
>   resources and personnel.
> *Public participation in cultural, aesthetic,
>   and other university activities.
> *The development of public policy issues
>   and alternatives.
> *Community development and community problem
>   solving (Long, 1977, p. 82, emphasis his).

Another definition that, like Long's, tended to be more
descriptive, was adopted by the University of
Massachusetts in 1971. It included three major areas:

> *advice, information, and technical
> assistance to business, government,
> neighborhood groups, and individuals
> on problems which the University has
> competence to assist in solving;
>
> *research toward the solution of public
> policy problems, whether by individual
> or groups of faculty members or by the
> formal institutes and centers of the
> University;
>
> *conferences, institutes, seminars, workshops,
> short courses, and other non-degree-oriented
> upgrading and training for government
> officials, social service personnel, various
> professional people, business executives,
> and so on (quoted in Crosson, 1983, p. 7).

The authors of several of the recent research
studies and doctoral dissertations dealing with public
service have developed or adopted their own definitions.
One, a study conducted in the University of California
System in 1986, contained a definition of public service
that was developed "in order to establish common language
and understanding among the academic community" (Dowling,
1986, p. 4). The definition was as follows:

> Public service is the extension of research,
> teaching, and professional expertise of
> faculty members for the benefit of the
> community and the larger society. Directed
> at non-university audiences, it is normally--
> but not necessarily--uncompensated (Dowling,
> 1986, p. 4).

The definition of public service has been a problem
evident in doctoral dissertations dealing with the
subject in recent years. Smith's 1982 study of the
public service function in selected state colleges and
universities defined academic public service

> as a programmatic relationship between
> university and community through which
> knowledge is brought to bear upon the
> resolution of public problems (Smith,
> 1982, p. 695-A).

Several dissertations published during the last 20
years at Michigan State University revealed differing
definitions of public service as well. Davis, in her
1974 dissertation on public service defined the term as
"the application of knowledge" (Davis, 1974, p. 6).
Shuib, in a 1983 study confined to the College of

Education at Michigan State University, chose to use a
definition of public service that was contained in an MSU
Mission Statement prior to the current version. It read,

> University public service is a purposive,
> institutionally organized activity to
> deliver the University's special competence
> to organizations, groups, and individuals
> outside the University in order to assist
> and facilitate problem solving. University
> public service is fundamentally educative
> and advances the creation and application
> of knowledge through planned programs and
> activities (quoted in Shuib, 1983, p. 18).

Russell G. Mawby, Chairman and Chief Executive
Officer of the W.K. Kellogg Foundation, delivered an
address on public service at the 100th annual meeting of
the National Association of State Universities and Land-
Grant Colleges in 1987. In this address, Mawby contended
that public service was

> best conceived as dynamic and creative
> teaching and research carried out in
> the full dimensions of the human life-
> span and the broad range of human
> associations both on and off campus
> (Mawby, 1987, p. 15).

Mawby also asserted that there were five activities of
universities that would fall under the rubric of public
service although "up to now, few people have thought of
them under that rubric" (Mawby, 1987, p. 9). Those
activities were: (1) preservation of knowledge, (2)
provision of aesthetic experience, (3) direct consumer
services provided to communities, such as hospitals,
clinics, hotels, and restaurants, (4) custodianship of

young people of collegiate age, and (5) entertainer for the masses, particularly the masses who watch intercollegiate athletics (Mawby, 1987, pp. 9-13).

The lack of consistency in definition of public service was evident within the documents of Michigan State University as well. The current version of the MSU Mission Statement, adopted in 1982, acknowledged public service only indirectly and did not define it as such. The Mission Statement mentioned the university's efforts to "discover practical uses for theoretical knowledge and to speed the diffusion of information to residents of the state, the nation and the world" (MSU Mission Statement, p. 1). However, in terms of contemporary public service, it was mentioned only as a method through which "faculty validate past research findings and identify the need for new research and for modifications of curricula" (MSU Mission Statement, 1982, p. 3).

The Michigan State University Faculty Handbook, under the section regarding Faculty Rights and Responsibilities, stated that

> public service involves application of
> the faculty member's professional
> training and competence to issues and
> problems of significance to constituencies
> and it is related to academic program
> objectives of the unit(s) in which the
> faculty member is appointed (MSU Office
> of Planning and Budgets Memorandum, 1988,
> p. 1).

The MSU Statement on Academic Programs maintained that

in providing public service, the University
utilizes available personnel and other
resources, and cooperates with many public
and private organizations in addressing
significant problems for the benefit of
society (MSU Office of Planning and Budgets
Memorandum, 1988, p. 2).

It was in examining the practical application of
these statements that inconsistencies were revealed. In
the Recommendation for Reappointment, Promotion or Tenure
Action forms used by the Office of the Provost at
Michigan State University, public service included: (1)
Lifelong Education, (2) Cooperative Extension, (3) MSU-
sponsored international public outreach and technical
assistance assignments, (4) Non-MSU-sponsored
international program outreach and consulting activities,
(5) professional/clinical services, (6) Urban Affairs
Programs, and (7) other activities, which may include
consulting with individuals, business, industry,
government or other educational institutions,
professional appearances before lay groups and
professional media (MSU Office of Management and Budgets
Memorandum, 1988, p. 3). However, when departments and
colleges were asked to provide a record of "Professional
Accomplishments" each year, faculty members were not
permitted to include private consulting (MSU Office of
Planning and Budgets Memorandum, 1988, p. 3).

In his 1988 State of the University address,
President John A. DiBiaggio mentioned public service as

being "ALWAYS based upon scholarship and faculty

expertise, upon the dissemination of knowledge . . ."

(DiBiaggio, 1988, p. 5, emphasis his). He acknowledged

that there was a need "to pay our civic rent, so to

speak, as citizens and as caring human beings," but

contended that public service goes beyond that.

DiBiaggio asserted that there is

> a special obligation of the scholar at
> Michigan State University to reach out to
> members of the human family in need of
> knowledge, insight, and assistance that
> can be provided so effectively by those
> in the academy (DiBiaggio, 1988, p. 5).

He saw the mission of Michigan State University as a

land-grant institution to transmit knowledge, generate

new knowledge and apply knowledge (DiBiaggio, 1988, p.

5).

Major Works on Public Service

A comprehensive review of the literature by the

investigator found that, while public service is

mentioned often in books and articles dealing with the

purposes of higher education, there were only two major

works devoted exclusively to public service. In

addition, there were three major university studies on

public service reported in ERIC documents, as well as six

recent doctoral dissertations on the subject, two of

which were done at Michigan State University.

Books

Patricia Crosson authored the most comprehensive
major work on public service. Published in 1983 as an
ASHE-ERIC Higher Education Research Report, Public
Service in Higher Education: Practices and Priorities
looked at public service as "a further extension of
academe's curator [of knowledge] role" (Crosson, 1983,
p. iii). She argued that "through public service, higher
education institutions enable society to use knowledge
more effectively" (Crosson, 1983, p. iii).

Crosson began her report by acknowledging that
"service is commonly listed among the three major
missions and functions of higher education" and
describing the types of activities that have commonly
been categorized as service activities (Crosson, 1983, p.
5). Her first chapter outlined alternative concepts and
perspectives on service as a mission in higher education
institutions. She focused upon "three popular metaphors
of higher education--ivory tower, social service station,
and culture mart . . ." and examined how the public
service function was carried out in each (Crosson, 1983,
p. 10). The author also dealt with

> four different propositions concerning
> how the service role in higher education
> is best fulfilled--service through ideas
> of value, service through social criticism,
> service through social problem solving, and
> service through social activism (Crosson, 1983,
> p. 18).

The first chapter concluded by tracing the historical evolution of service and the various forms it has taken in contemporary times, including "municipal service" as a ideal in urban universities (Crosson, 1983, p. 26).

The main body of Crosson's book was devoted to service in terms of its intended recipients: service to communities, service to state and local governments and service to business and industry. She stated that

> each type of activity is undertaken to
> some degree by all types of colleges and
> universities, but community colleges are
> the major force in community service, state
> universities are the primary providers of
> service to state and local government, and
> research universities, both public and
> independent, have become the major actors
> in new patterns of providing service for
> business and industry (Crosson, 1983, p. 7).

Crosson concluded her book with a chapter on organizing for public service and a chapter on recommendations for further study. She reported that, while colleges and universities were structured "primarily to fulfill the missions for teaching and research," little, if any, attention was given to organizing to fulfill the public service mission (Crosson, 1983, p. 95). In most cases, "it is assumed that the public service mission will be fulfilled by the existing academic and administrative units," which, she argued, was an erroneous assumption (Crosson, 1983, p. 95). She described how some colleges and universities

had made an attempt to alleviate this problem, with such methods as special institutes and centers and continuing education programs or divisions (Crosson, 1983, pp. 99-100).

Crosson recommended changes in institutional policies, patterns of activity and reward structures so that the public service function could be more adequately fulfilled. She stated that "common wisdom holds that public service is not rewarded in academic communities" and "because public service is not rewarded, faculty members are reluctant to engage in it" (Crosson, 1983, p. 103).

Crosson's final chapter included four areas she identified which need further research:

1) investigation of service as a mission,
2) analysis of the role of community colleges in community service,
3) evaluation of arrangements for providing service to government, and
4) development of a system for gathering and disseminating information about service to industry (Crosson, 1983, pp. 111-112).

The second major work on service located by the investigator was a volume of the Jossey-Bass New Directions in Higher Education series entitled, Redefining Service, Research and Teaching. It was edited by Warren B. Martin and published in 1977. Martin argued that service has been "poorly conceptualized and erratically expressed" in the past and, consequently,

"more than equivalent attention must be given to service now compared to teaching and research, if it is to have an equal place in education's future" (Martin, 1977a, p. viii).

In the first chapter, Martin advocated that "faculty members and administrators should seek to persuade the public that higher education serves society best as a center of independent thinking" (Martin, 1977a, p. ix). He noted that there is a time when, "in the interests of creativity and criticism, professionals will sometimes bite the hand that feeds them . . ." (Martin, 1977a, p. ix).

Other chapters in this book dealt with service in its applied form, "demonstrat[ing] its value in action" (Martin, 1977a, p. ix). One of the chapters, which discussed the concept of service-learning, included three dimensions of service. The author saw service "(1) as a vehicle for learning, (2) as a creative response to careerism, and (3) as the primary function of faculty in teaching" (Duley, 1977, p. 23). Duley argued that the first two dimensions were dependent on the third and believed that

> the best way for faculty members to
> teach and encourage the development of
> a disposition toward service is to
> demonstrate it in the manner in which
> they serve students and fulfill their
> teaching function (Duley, 1977, p. 34).

Another relevant chapter in this book addressed "the
contemporary view of American public colleges and
universities [as] that of a commons to be used by all
citizens for meeting as many of their needs as possible"
(Long, 1977, p. 75). He warned, however, that

> public service programs must be natural
> by-products of research and teaching if
> universities are not to degenerate into
> omnibus social service organizations (Long,
> 1977, p. 75).

In order to prevent this from happening, Long asserted
that a "more precise operational definition of the public
service mission itself" is needed (Long, 1977, p. 82).
He concluded that while

> institutions of higher learning should
> not and cannot shirk their public service
> role [they] must continue to demonstrate
> the essential connection of service to
> instruction and research by which current
> and new knowledge is created and transmitted
> (Long, 1977, p. 85).

Martin concluded his book by arguing that one way
faculty members could "find meaning and delight once
again in [their] work" would be to "change from a concern
for specialization as technique to specialization as
service" (Martin, 1977b, pp. 96-97). He believed faculty
members "true professionals" when they "provide a social
service, utilizing their skill in a service that shows
not only their technical expertise but also their social
commitment" (Martin, 1977b), p. 96).

Major Studies

In addition to the two books cited above, a computerized search of the ERIC database located three major studies on public service which had been conducted in recent years. One of these studies was conducted in the University of California System, the second at the University of Minnesota, and the third studied a group of five state universities in Ohio.

The California study, conducted in 1986, was designed to measure the motivation and role of faculty in public service activities (Dowling, 1986, p. 1). In the University of California system, public service was facilitated by the organizational structures within the university, including cooperative extension, university extension and two national laboratories, all of which "are semi-autonomous organizations which provide a large segment of the university's public service role in society" (Dowling, 1986, p. 8). In addition, Dowling found that there was "relatively high participation of all members of the professional schools and the College of Agriculture and Environmental Science . . ." (Dowling, 1986, p. 13).

Dowling's study included a specialized section on faculty members at University of California at Davis who had participated in "advising in policy related issues where their expertise could be used to help legislators"

(Dowling, 1986, p. 16). These faculty members reported

that the important incentives for such involvement in

public policy advising, in rank order, included

>-efficient utilization of their time,
>-utilization of advice in a professional manner,
>-relevance of their expertise to policy in question,
>-intellectual stimulation,
>-influence on policy decisions,
>-additional publications and grants,
>-notification of contribution in personnel file,
>-monetary reimbursement,
>-enhanced professional prestige, and
>-association with well-known officials (Dowling,
>1986, p. 19).

The 1975 University of Minnesota study was an

opinion questionnaire administered to all faculty

members, of whom 2,346, or seventy per cent, responded

(Kanun, 1975, p. 1). She found that

> a faculty member's characteristic
> participation in community programs is
> similar to his on-campus professional
> activity. The unique aspect of community
> programs is that teaching and professional
> service occurred in non-traditional
> settings with non-traditional clientele
> (Kanun, 1975, p. 6).

Kanun's questions dealt with several themes,

including individual faculty obligations and

responsibilities for community services, professional

concerns and professional risks. In this section, there

was majority agreement among respondents on the

following:

> Faculty members as citizens have an
> obligation to actively commit themselves
> to the solution of community problems.

> Current political visibility of faculty
> involvement in community service programs
> is appropriate.
>
> The faculty can and should be protected
> from political consequences of community
> service activity.
>
> Community service is not antithetical to
> the individual faculty member's professional
> interest.
>
> Teaching and research are the major forms of
> community service (Kanun, 1975, p. 6).

A second section of the survey dealt with "societal" questions, asking "opinions about the University and the faculty in relation to social problems" (Kanun, 1975, p. 7). This section did not reveal clear majorities, as the previous sections had, but rather found "contrast among the colleges in response to a number of the items in this group" (Kanun, 1975, p. 7). There was consensus, however, on the item, "The University can survive whether or not it is involved in redressing current social injustices" (Kanun, 1975, p. 7).

The final section of the Minnesota survey addressed "the necessary conditions and ambiguities of University involvement in community programs and services" (Kanun, 1975, p. 8). Kanun reported majority agreement that:

> Faculty participation in community
> programs and service is not tied to
> specialized skills and specific academic
> disciplines.
>
> Competent solution of community problems
> depends upon faculty communication and
> cooperation across disciplinary lines.

> Participation in community programs is
> not limited to specialized academic
> disciplines.
>
> Appointment of a special staff for
> participation in community programs
> should not be made. (Kanun, 1975, p. 8).

The 1984 study of five state universities in Ohio centered upon attitudes of faculty members toward university-sponsored service programs (Johnson, et al, 1984, p. 2). Subjects were asked

> to indicate the extent of previous
> experience in service activities . . .
> to respond to various aspects of service
> in relation to the institution and their
> roles as faculty members, and finally, to
> indicate their feelings about the possible
> expansion of service programs (Johnson,
> et al, 1984, p. 19).

Results indicated that "a substantial majority of the faculty sample" were found to be "favorably inclined towards the expansion of service programs and prepared to participate themselves" (Johnson, et at, 1984, p. 21). Other results of interest were: 1) that despite positive attitudes toward service, faculty members were concerned about constraints on their time and, 2) that "external service had 'very little impact' on their regular salary or on promotion and tenure decisions" (Johnson, et al, 1984, pp. 26,28).

Dissertations

Finally, the investigator did a computerized data base search in Dissertation Abstracts International.

Although the database was searched back to 1856, the small yield of relevant dissertations on public service were all written in the last twenty years.

A case study on the public service function at the University of Delaware in 1981 compared results of "a 1980 study of University leaders' perceptions of public service" with an earlier faculty opinion survey conducted in the 1974-75 academic year (Sills, 1981, p. 549-A). In addition, data from selected university historical and contemporary written materials on public service were presented (Sills, 1981, p. 549-A).

Another case study, conducted in 1979 at the University of Cincinnati, dealt with the "issue of community service as an activity contributing to the core mission" of the institution (Wells, 1979, p. 1827-A). Results of this study indicated that "implementation (direct involvement) was the urban activity having greatest impact on teaching, although most faculty engaged in consultation" (Wells, 1979, p. 1827-A). Of particular interest were findings which indicated that

> reward was not determined by frequency of participation. In fact, there appeared to be an inverse relationship . . . the higher the level of urban participation, the least likelihood of reward. Reward by the University for community service was predicted by recognition from groups outside the university . . . Practitioners received recognition by outside groups, but were not rewarded by the University (Wells, 1979, p. 1827-A).

Wells concluded from her study that the "'espoused theory' (community service is a valued activity) conflicted with the 'theory-in-use' (publish or perish)" (Wells, 1979, p. 1827-A). The stated mission of the University was not supported in practice.

An identical conclusion was found in a 1982 study conducted for the American Association of State Colleges and Universities. Data was collected from some 255 member institutions. The questionnaire yielded results "that gave an indication of the relative emphasis placed upon academic pubic service as an institutional responsibility" (Smith, 1982, p. 695-A). Many of the institutions which "placed greater emphasis upon academic public service . . . adapted in order to accommodate the public service function" (Smith, 1982, p. 695-A). Smith concluded by recommending that individual institutions

> undertake reviews of policy and procedures
> with a goal of making them more consistent
> with institutional claims of responsibility
> for academic public service (Smith, 1982, p.
> 695-A).

A study of community college faculty members' involvement in community service programs was conducted in 1972. Connolly identified a sample of 350 faculty members randomly selected from catalogues provided by 31 member institutions of the American Association of Junior Colleges. Through use of critical incident technique, Connolly discovered that "the community college faculty

sampled were not substantially involved in community service activities" (Connolly, 1972, p. 2730-A). In addition, Connolly found that most of the faculty members were involved in "none or only one community service activity" and "the mean number of activities engaged in was 1.88" (Connolly, 1972, p. 2730-A).

Connolly also discovered that the attitude of administrators toward community service involvement had an "overwhelming impact," both positively and negatively, on the degree of faculty participation (Connolly, 1972, p. 2730-A).

Dissertations From Michigan State University

Several dissertations which studied Michigan State University were also reviewed. A 1971 study of perceived and preferred university goals at MSU collected data from students, faculty, administrators and trustees (Stead, 1971, p. 57). Of the goals which dealt directly with the public service function of the university, Stead found that, in almost every case, the perceived importance of public service goals was higher than their preferred importance to faculty members (Stead, 1971, pp. 75-79). The one item on which faculty members agreed that the preferred importance should be higher was

> make sure that salaries, teaching assignments
> and privileges always reflect the contribution
> that the person involved is making to his own
> profession or discipline" (Stead, 1971, p. 76).

Davis conducted a study in 1974 which dealt with how

state legislators viewed the public service function of

state-supported universities, including Michigan State

University. She constructed a questionnaire and

administered it by personal interview to a random sample

of the "membership of the legislative committees that

work directly with higher education legislation" (Davis,

1974, p. ii).

Among Davis' conclusions were the following:

1) The public service function of universities
is an appropriate function of state-supported
universities.

2) Universities should increase the amount of
time spent on university-sponsored public
services.

3) A public service option should be incorporated
into the university procedures for faculty
promotion, assessment and professional
advancement (Davis, 1974, pp. iii-iv)

A 1983 study on perceptions of faculty members

toward public service activities was limited to the

College of Education at Michigan State University. Shuib

developed both a questionnaire and "card-sort" to

determine what activities faculty members felt should

receive "load credit" (be considered part of the job) and

which should not (Shuib, 1983, p. ii). Shuib discovered

that faculty members in the MSU College of Education felt

that activities which should receive load credit

included:

1) on-going projects, university sponsored,
and payment goes to the university;

2) on-going projects, non-credit producing,
[in which] faculty volunteer their
time and receive no payment from the
client institutions;

3) on-going projects, credit producing;

4) one-shot projects, non-credit producing,
and payment goes to the university; and

5) state/federal committees. (Shuib, 1983, p. iii).

Conversely, there was consensus among faculty members in the College of Education that "generally on-going and one-shot projects in which faculty involved received payments from the client institutions" should not receive load credit (Shuib, 1981, p. iii). An undecided category also emerged, in which many faculty members placed such activities as "committee roles and one-shot projects in which faculty members volunteered their time and were not paid by the client institutions" (Shuib, 1983, p. iii).

The Role of Public Service in Faculty Workload Expectations

Faculty workload was defined by one author as "any combination of activities that adds up to the total work output normally expected of a faculty member employed full-time at his job" (Halstead, 1974, p. 682). Even within the context of this very broad, general definition, public service played a small part in faculty

workload expectations and, in some instances, was not
mentioned at all (Clark, 1987; Feasley, 1978; French,
1965).

Quigley maintained that "during recent decades few
authorities in higher education have done much more than
give lip service to public service" (Quigley, 1986, p.
175). Another author, in a book directed toward new
faculty members, made participation in any service
activity sound like something akin to taking one's
medicine when he stated, "service to the institution must
be taken as part of one's academic responsibilities"
(Higham, 1974, p. 233).

The role of public service in faculty workload
expectations cannot be properly understood, however,
unless it is considered within the larger context of the
mission and purpose of higher education.

Educational Mission

There was general agreement in the literature that
"the traditional formulation of the mission of a
university in this country is tripartite: teaching,
research and public service" (Smith, 1978, p. 2). Smith
went on to argue, however, that there was a "precondition
of effective conduct of any of the three activities . . .
knowledge" (Smith, 1978, p. 2). Smith also believed that

>   the purpose of universities requires two
>   assumptions about knowledge: (1) it exists,
>   even though concepts about its nature, scope,
>   organization, and uses may be eternally

controverted and subject to modification;
and (2) it is both an inherent need of
humankind and a contribution to the public
good that the realms of knowledge be
identified, organized, refreshed, criticized
to rank-order their relative worth or utility
(Smith, 1978, p. 2).

Nevitt Sanford, in his landmark work, The American
College, argued that "the business of the university is
the advancement of knowledge" (Sanford, 1962, p. 952).
Bowen expressed the "need for 'knowledge transfer' from
the discoverers to the users" (Bowen, 1986, p. 20).
Another author agreed, by asserting that the university
has two functions, "the discovery of knowledge and the
delivery of knowledge" (Johnson, 1972, p. 29).

A group of scholars at the University of Wisconsin -
Madison, when asked to address the question of the
purpose of higher education, made the following
statement:

The primary purpose of the University
is to provide an environment in which
faculty and students can discover, examine
critically, preserve and transmit the
knowledge, wisdom, and values that will
help ensure the survival of the present
and future generations with improvement
in the quality of life (Potter, et al,
1970, p. 1591).

Kaysen saw the "social functions of the system of
higher education" as being ". . .the creation of new
knowledge, . . .the transmission of knowledge, . . .
[and] . . .the application of knowledge. . ." (Kaysen,
1969, pp. 5-7). Perkins advocated "the dynamic nature of

knowledge" and saw the three functions as being

inextricably interrelated:

> The acquisition of knowledge through
> the exercise of reason is only part
> of the story. Knowledge acquired must
> be transmitted, or it dies. Knowledge
> acquired and transmitted must be used,
> or it becomes sterile and inert. . . the
> very process of transmission, together
> with the discipline of application,
> stimulates and guides those who work at
> the frontiers of knowledge (Perkins, 1967,
> p. 115).

Perkins went on to conclude that "taken separately, the

three aspects of knowledge lead nowhere; together they

can and have produced an explosion that has changed the

world" (Perkins, 1967, p. 115). Johnson agreed, stating

that "the discovery, the transmission and the application

of knowledge [are] a replenishing cycle" (Johnson, 1972,

p. 29). McAllister also agreed, saying

> these three functions are not seen as
> separate and distinct enterprises but
> rather, because of the way in which
> they have evolved, as complementary
> phases of the same general activity
> (McAllister, 1976, p. 480).

Perkins put the tripartite nature of knowledge in

practical terms, arguing that

> the three aspects of knowledge have
> their institutional reflections in
> the three missions of the university:
> the acquisition of knowledge is the
> mission of research; the transmission
> of knowledge is the mission of teaching;
> and the application of knowledge is the
> mission of public service (Perkins, 1967,
> p. 116).

Thus the educational mission of the institution was seen
as the driving force behind the expectations of faculty
workload. However, to separate the three functions so
distinctly was very difficult for several authors (Kalab,
1986; McAllister, 1976).

Workload Expectations

Robert Blackburn, in his chapter The Meaning of Work
in Academia, argued that analyzing the component parts of
a professor's workload by breaking it down into "separate
roles and finer and finer phases" was predicated upon the
"fundamental assumption that analyzing parts will somehow
produce understanding of the whole" (Blackburn, 1974, p.
76). He went on to argue for the "indivisibility of
academic work," with each of the professorial roles in
research, teaching and public service having an effect on
each of the others (Blackburn, 1974, p. 77). McAllister
concurred, stating that

> there are forms of research which may have
> payoff in the teaching arena and in the
> service arena and that in fact there are
> forms of all three which may be seen as
> examples of each of the others (McAllister,
> 1976, p. 473).

The importance of each role, however, was not
equivalent. McAllister recognized that "the blessed
trinity of academe has three parts: teaching, service,
and research and, paraphrasing St. Paul, the greatest of
these is research" (McAllister, 1976, p. 471). While he

stated that "professors must not be one-dimensional

persons. . .especially. . .if that one dimension would be

service," he also went on to argue that "clearly we are

dealing with a hierarchy of virtues" (McAllister, 1976,

p. 471). McAllister concluded with "a fundamental belief

that there may be useful interplay (even feedback)

between different virtues" (McAllister, 1976, p. 472).

The amount of time devoted to each of these three

dimensions of faculty workload differed from the

perceived relative importance of each. While research

was seen as most important and was most highly rewarded,

Bowen found that "about three fourths of faculty time is

devoted to teaching" (Bowen, 1977, p. 293). Since

"administrative work absorbs some of the time" remaining,

he postulated that "perhaps one fifth of total faculty

time is available, on the average, for research and

public service" (Bowen, 1977, p. 293). Since Blackburn

found that "both historically and currently, faculty tend

to work between fifty-five and sixty hours a week," this

would mean that only 10 to 12 hours of work time would go

toward research and public service (Blackburn, 1974, p.

77). Bowen also asserted that "most studies of faculty

working time find that the total time is far above the

conventional forty hours a week" (Bowen, 1977, p. 293).

The disparity in importance of these three

components of faculty workload was also evident in other

studies. One analysis of institutional expenditures for instruction, research and public service found that 65% of institutional expenditures went toward instruction, 24% toward research, and only 11% toward public service functions (Bowen, 1977, p. 294). McAllister stated "that there is a relationship between the importance of any of the three virtues and the ease of articulating or measuring that virtue" and that "the way in which. . . service is to be measured is rarely spelled out and generally of little consequence anyway" (McAllister, 1976, p. 472). Blackburn argued that

> in many respects the faculty service
> role remains taboo. It has not been
> studied, and faculty seldom raise the
> topic or request official guidelines
> about it. But administrators extol
> its importance . . . (Blackburn, 1974,
> p. 89).

In examining this issue of the public service role in faculty workload expectations, the investigator discovered almost as much disparity as in the previous section on definitions of the term. Bowen and Schuster agreed that "the public service activities of faculties are perhaps less recognized and less understood than their other functions" (Bowen and Schuster, 1986, p. 19).

Several authors choose to divide service into two component parts: 1) those services performed within the academic community, and 2) those performed outside the institution. Morrill and Spees included in the first

category such specific services as committee work within the department and/or college, as well as institutional service such as governance representation (Morrill and Spees, 1982, p. 183). In addition to those cited above, Blackburn added participation in

> commencements and receptions and time
> spent with visitors from other colleges
> and countries, forms and questionnaires
> and correspondence, negotiations with
> foundations and governmental agencies,
> and a potpourri of other activities that
> over a period of a year fill a tremendous
> number of hours (Blackburn, 1974, p. 89).

Higham cited such activities as "assisting as a host at some social function or parents' day. . .[or] collecting funds for one of the perennial charity drives" as examples of service as well (Higham, 1974, p. 234). He also mentioned serving on a search committee or writing speeches as other possible internal service functions (Higham, 1974, p. 236).

A wide diversity of external activities were cited as examples of public service by faculty members. Higham divided external activities into four categories "professional, community, political and personal" (Higham, 1974, p. 244). He included in these four categories such activities as being a panelist at a professional meeting, holding an office in a professional organization, serving as a consultant, lobbying, going into politics and service within the community (Higham,

1974, pp. 244-246). Startup mentioned participation in professional associations, "fee paid employment" or consulting, and "locally based activities" or participation by the faculty member in community-based activities (Startup, 1979, p 79).

In addition to those listed above, Blackburn added such activities as "referee[ing] articles for their journal editors, and communicat[ing] with peers at other institutions across the country and around the world" (Blackburn, 1974, p. 89). He also listed several examples of "community relations" activities, including "contribut[ing] their expertise to the city council, the local school board, and social agencies and organizations . . .[and] speak[ing] for service clubs and organizations" (Blackburn, 1974, p. 89). Morrill and Spees also mentioned union organization and collective bargaining, lobbying, campaigning for "larger social issues such as environmental problems," and "area community services" such as holding memberships in local groups or giving speeches (Morrill and Spees, 1982, p. 184).

Consulting

Some disparity was also found in the literature regarding whether or not consulting for pay should be counted toward the public service activities of a faculty member. As Blackburn stated, "If a professor receives

money for engaging in the activity, is it really service?" (Blackburn, 1974, p. 90).

A number of authors indicated that established policies regarding consulting for pay were scarce or ignored. Teague quoted a 1978 study which "found that most higher educational institutions either lack adequate policies governing extramural activities of faculty or ignore the existing policies" (Teague, 1982, p. 180). He concluded that "current policies, in general, can be described only as piecemeal, lacking sound and consistent guidelines regarding faculty consulting" (Teague, 1982, p. 185). Blackburn concurred, stating that "policy questions of external service are often simply set aside and ignored except when reports are submitted to demonstrate that indeed faculty aid society" (Blackburn, 1974, p. 90).

In a report on a 1978 project regarding "ethical and economic issues of supplemental activities," Watkins found that "most colleges and universities either lack adequate policies covering faculty members' outside activities or ignore the policies they do have" (Watkins, 1978, p. 13). Dillon and Bane prepared a compendium of the consulting policies of almost 100 universities in 1980 and concluded that "many (if not most) universities do not have detailed policy statements" (Dillon and Bane, 1980, p. 54). Aggarwal concluded that

many university policies regarding outside
consulting by faculty may be hard to
enforce, given traditional standards of
work and behavior in the academic profession
(Aggarwal, 1981, p. 19).

When stated policies were examined, the majority

agreed that when consulting for pay was allowed, it

should not take more than 20% of the faculty member's

time, or on the average one day per week during the

regular academic year (Teague, 1982, p. 183; Aggarwal,

1981, p. 19; Burnett and Martin, 1981, p. 195; Watkins,

1978, p. 1).

One possible source of the confusion regarding paid

consulting seemed to be "uncertainty in the definition

of 'faculty load,' which makes it virtually impossible to

determine what is 'overload'" (Marsh and Dillon, 1980, p.

547). Marsh and Dillon went on to say that

it is particularly difficult to determine
when, if at all, these activities that
result in supplemental income should be
considered as part of the regular
responsibility of faculty and when they
might detract from academic activities
that faculty might otherwise undertake
(Marsh and Dillon, 1980, p. 547).

Olswang agreed, stating that "the concept of what

constitutes full-time service for a faculty member has

never been well understood or defined" (Olswang,

1984, p. 32).

Watkins reported that "Stanford's policy defines

consulting as a professional activity for a fee related

to the faculty member's field" (Watkins, 1978, p. 13).

In describing public service, Faiman specifically

inserted this caveat: "Consulting by faculty **acting as**

private citizens is not included in this" (Faiman, 1972,

p. 14, emphasis added). Burnett and Martin recognized

the lack of consistency across campuses, stating that:

> On some campuses consulting for pay **may**
> **not** be considered by administration as
> a public service. If such is the attitude,
> the professor **may not** be able to claim
> credit for service in this category at
> performance evaluation time" (Burnett
> and Martin, 1981, p. 195, emphasis added).

Wildavsky argued that one of the "standard

rationales. . .generally presented for regulating faculty

consulting [is] that it is a privilege, not a right"

(Wildavsky, 1978, p. 13). McAllister expressed the

opinion that "some people consider **free** service to be the

only genuine form of service, but this is debatable"

(McAllister, 1976, p. 477, emphasis added). Thus, it

would seem that most authors did not consider consulting

for pay as part of the traditional public service

function of faculty members.

There were several authors, however, who stated that

consulting for pay could be considered as part of the

traditional public service function of faculty members.

Boyer and Lewis began their article on consulting with

the statement, "faculty consulting has been viewed

traditionally as an important form of public service in

higher education" (Boyer and Lewis, 1984, p. 637).

Dillon and Bane used almost the same wording: "consulting

has traditionally been viewed as an important form of

public service" (Dillon and Bane, 1980, p. 52). Boyer

and Lewis went on to argue that

> consulting is viewed as a traditional
> faculty role and responsibility that
> has long been recognized as an important
> form of public service on the part of
> both individual faculty members and the
> academic institution (Boyer and Lewis,
> 1985, p. 178).

In reporting a study involving Maryland public higher

education institutions, Allard stated that "one mechanism

available for fulfilling part of this public service

responsibility is to permit and encourage individual

faculty to consult or to provide professional services"

(Allard, 1982, p. 8). Thus, it would seem that these

authors disagreed with the majority and would argue that

consulting for pay should indeed be included in the

traditional public service activities of faculty members.

Evaluation of and Reward for Service

The rather large body of literature that dealt with

the evaluation of service and its rewards was quite

consistent: almost all agreed that "public and community

service is infrequently recognized and rewarded" (Centra,

1980, p. 133). There was also consistent agreement in

the literature that ". . . service is the least valued of

faculty activities . . ." (Euster and Weinbach, 1983, p. 108).

Evaluation of Service

Before service activities could be evaluated, they would, of necessity, need to be discretely identified. The expectation that service activities could be separated from the other vital roles a faculty member plays, as teacher and researcher, was questioned by several authors. Blackburn asserted that

> an analysis of service activities made
> as if the faculty role were a job that
> could be dissectable into parts with
> numerical values assigned to each aspect
> misses the fact that service, too, is a
> way of life and not just a work activity
> (Blackburn, 1974, p. 91).

Blackburn believed that "judgments must be made on the total, integrated individual, not on a piece-by-piece analysis in which the parts are somehow weighted and summed" (Blackburn, 1974, p. 91).

McAllister concurred, stating that research, teaching and service "are not seen as separate and distinct enterprises but rather. . .as complementary phases of the same general activity" (McAllister, 1976, p. 480). He went on to say, that "until the reward system is modified to recognize teaching and service as well as research," it would be doubtful that recognition of the three as part of the same general activity would ever be achieved (McAllister, 1976, p. 480).

Few authors made any attempt to identify what activities should "count" as public service, let alone how much weight they should be given in the tenure and promotion process. The investigator also discovered the "quantity vs. quality" argument presented by several authors as well.

Dressel pointed out quite clearly that while public service programs should be "guided by purposes and objectives, . . . the objectives of many of these programs are quite unclear" (Dressel, 1978, pp. 365-366). He asserted that this lack of clarity led to "success be[ing] measured by growing demand rather than by product evaluation" (Dressel, 1978, p. 367). Florestano and Hambrick agreed that evaluation of public service was difficult, but for a different reason.

> Part of the difficulty in evaluating
> public service is the general lack of
> attempts to distinguish between activities
> that are and are not profession based
> (Florestano and Hambrick, 1984, p. 18).

Centra stated that documentation regarding public service activities should be included in a faculty member's annual report, and should include "description of objectives, perceived outcomes, time involved, and remuneration received" (Centra, 1980, p. 135). He went on to say that "merely being involved in public or community service is not a sufficient indicator of effectiveness" (Centra, 1980, p. 135).

Haberman and Quinn offered one of the few articles which outlined suggested guidelines for evaluation of public service activities. They listed several criteria which must be met for an activity to be counted as public service, then provided examples of activities on four levels, each with a successively higher degree of involvement (Haberman and Quinn, 1977, pp. 140, 150). They also outlined documentation necessary to support the faculty member's involvement, as well as six criteria for evaluating such service involvement, including "accurately and clearly perceived relevant problems, . . .demonstrated creativity,. . .[and] effective leadership" (Haberman and Quinn, 1977, p. 150).

Several authors offered samples of evaluation instruments in their articles. Gunn, for example, presented a "bipolar evaluation instrument" on teaching, research and service which utilized a "proficiency scale" from one to ten on a number of measures (Gunn, 1982, p. 26). The service category, weighted at only 10% of the total score, included only service on university-wide and departmental committees (Gunn, 1982, p. 26). Newton also offered a scale of sorts, a "performance-based teacher evaluation system" (Newton, 1982, p. 40). His scale also included a category for evaluation of service but it contained only institutional committee work (Newton, 1982, p. 41).

Miller's evaluation scale, on the other hand, was
not as elaborate, including only two categories: 1)
value of the service contribution to those who received
it, and 2) quality of the faculty member's performance as
a contribution to the profession (Miller, 1972, p. 67).
Florestano and Hambrick argued that evaluation of
profession-related service should measure the following
four categories: 1) impact, 2) intellectual and
professional soundness, 3) administrative efficiency and
effectiveness, and 4) marketability and client appeal
(Florestano and Hambrick, 1984, p. 19).

Seldin also offered an evaluation scale, but his was
more a measure of the faculty member's attitude toward
service activities than a measure of actual
participation. He included such things as "makes a
positive contribution to assigned committees,. . .
actively supports departmental and institutional goals,
. . .[and] does an appropriate share of institutional
service assignments" (Seldin, 1980, p. 124).

Magnuson chose to divide his evaluation of service
activities into three categories: 1) university service,
2) professional service, and 3) community service
(Magnuson, 1987, p. 522). Under each, he offered a seven
point rating scale, with one indicating no service in
that category and the other six points including examples
of increasingly higher levels of involvement (Magnuson,

1987, p. 522). Stroup suggested a slightly different categorization: 1) continuing education/public service, 2) university service, 3) school and departmental service, and 4) community service (Stroup, 1983, p. 53).

Several authors agreed that quality rather than quantity measures of faculty participation in public service activities were most appropriate. Florestano and Hambrick stated that "qualitative measures for professional services are weak," thus making it more attractive to fall back upon quantitative measures (Florestano and Hambrick, 1984, p. 19). Blackburn argued, however, that

> simply reporting the nature and amount
> and kinds of activities (committees served
> on, professional meetings attended, and
> the like) fails to reflect the significance
> of the activity (Blackburn, 1974, p. 91).

Stecklein, on the other hand, stated that "no one has come up with a widely accepted definition of effort other than time" (Stecklein, 1974, p. 15).

Reward for Service Activities

Shulman accurately summed up the situation with respect to reward for service activities: "service is not given any significant weight" (Shulman, 1979, p. 29). She went on to quote another study which stated that "service is so underrated they do not include any figures on the weight given it in the evaluation process" (Shulman, 1979, p. 29).

This lack of reward for service has long been an issue in American higher education. Service was given scant recognition as far back as the early decades of the twentieth century. Logan Wilson quoted two studies, from 1913 to 1931, which found that public service accounted for 6.4% and 5.1%, respectively, of the weight given in consideration for promotion (Wilson, 1942, p. 101). He also quoted a 1937 article which asserted that

> although extra-mural service is to receive
> credit, it is of secondary importance and
> 'should not be weighted in such a way as
> to make up for deficiencies in teaching,
> research and services directly to the
> University'" (Wilson, 1942, p. 103).

Euster and Weinbach also recognized that public service was not seen as a "critical factor in evaluating faculty members" (Euster and Weinbach, 1983, p. 109). They quoted Centra's study of department heads which found that "only two percent considered public and community service to be a critical factor in evaluating faculty members, while a third [of the respondents] said it was not a factor at all" (Centra, 1980, p. 133).

A report released at the 1985 annual meeting of the National Association of State Universities and Land-Grant Colleges, maintained that

> outside activities receive 'a great deal of
> lip service' in the university's traditional
> three-pronged mission of teaching, research
> and service, but 'they have never been given
> any status' (Watkins, 1985, p. 23).

As a result of this lack of recognition and reward,

"faculty members themselves express uncertainty about the

value of their service role" (Euster and Weinbach, 1983,

p. 109). Euster and Weinbach summarized the situation by

stating

> there is consensus that faculty members
> are expected to provide public service,
> [but] they also recognize that service
> does not count much in their performance
> evaluations (Euster and Weinbach, 1983,
> p. 109).

Dressel concurred, asserting that "external services

are sometimes ignored or assigned an inferior role . . ."

(Dressel, 1978, p. 367). Seldin stated that

> although community service is considered
> a valuable and proper role for a faculty
> member, it is not included by most
> institutions in tenure and promotion
> decisions. At some institutions, community
> service is regarded as lightweight (Seldin,
> 1984a, p. 151).

Johnson went so far as to say that there was

"discrimination against public service as a justifying

factor for salary increases and promotions" (Johnson,

1972, p. 30).

A 1986 study on dimensions of stress among

university faculty members at doctorate-granting

institutions revealed "five distinct dimensions of

perceived stressful conditions and situations" (Gmelch,

Wilke and Lovrich, 1986, p. 272). The first of these

dimensions addressed the area of faculty reward and

recognition. Gmelch, et al, discovered that three out of

the top four factors which had the highest loading in

this area were

> 1) receiving inadequate university recognition
> for community service,
>
> 2) having insufficient reward for institutional/
> departmental service, [and]
>
> 3) not having clear criteria for evaluating
> service activities (Gmelch, Wilke and Lovrich,
> 1986, p. 273).

Several other studies reported in the literature

found similar disregard for service in the faculty reward

structure. For example, a 1984 study on tenure and merit

pay revealed that

> faculty. . .overwhelmingly agreed that service
> has almost no impact on tenure decisions. All
> faculty are expected to do some service, but,
> as one participant put it, 'no one has ever been
> found lacking in service'" (Kasten, 1984, p. 507).

In other words, Kasten found that there were "rewards for

valued acts without sanction for lack of performance"

(Kasten, 1984, p. 512).

Kohl's 1980 study of incentive/reward systems at a

land-grant university revealed that: 1) faculty members

preferred to do more public service activities than they

actually did, and 2) "faculty ratings of actual

activities and department head ratings of preferred

faculty activities for all categories" were significantly

different "except extension/public service and paid

consulting" (Kohl, 1980, p. 1429-A). Blai's 1982 study

revealed some "expressed dissatisfaction" because

community service had "higher preferred than perceived

importance" (Blai, 1982, p. 7).

Despite the overwhelming evidence that public

service is not rewarded, there were several authors who

asserted that this should not be the case. Florestano

and Hambrick contended that

> public service should be but is not well
> rewarded in most university environments,
> and this absence of reward prevents the
> full development of outreach programs
> (Florestano and Hambrick, 1984, p. 18).

Votruba agreed, stating that

> unless outreach efforts are more fully
> integrated into the traditional faculty
> reward system, continuing education and
> public service stand little chance of
> achieving more than a peripheral status
> in the life of the university (Votruba,
> 1978, p. 639).

Florestano and Hambrick speculated on reasons why service

is not highly rewarded. Their reasons included:

> 1) Public service is so loosely defined that
> profession-related and non-profession-related
> services are not distinguished from one
> another;
>
> 2) Because good measures of professional public
> service do not exist, it is difficult to
> distinguish the excellent from the good, the
> good from the mediocre, or the mediocre from
> the poor;
>
> 3) Professional public service is not highly
> valued by university faculty members and
> administrators and, thus, not well rewarded
> (Florestano and Hambrick, 1984, p. 18).

There were several studies in the literature which went against the common trend, however. These studies acknowledged that, however small, service did have an effect on salary and promotion decisions. Kasten reviewed recent studies in her 1984 article and concluded that although "less highly rewarded, several studies indicated that the effects [of service] are still statistically significant" (Kasten, 1984, p. 501). She went on to conclude that "the service available to a typical faculty member is likely to have a small but measurable effect on faculty rewards" (Kasten, 1984, p. 501).

Tuckman reported on research which used data from a 1972-73 national cross-section study of faculty conducted for the American Council on Education. He found that "public service is recognized by a larger salary increment, on the average, than is teaching. Males earn an average $535 more. . .females earn an average $209 more, but this amount [for females] was not statistically significant" (Tuckman, 1976, p. 59).

Seldin reported on a survey of "all the accredited, four-year, undergraduate liberal arts colleges listed in the U.S. Department of Education's Directory" which was conducted in early 1983 (Seldin, 1984b, p. 28). He found that 52.6% of those responding had considered campus committee work as a factor in evaluating overall faculty

performance, while 24.5% included activity in professional societies as a factor (Seldin, 1984b, p. 29). In addition, public service and consultation with government and/or business were considered as factors in 17.4% of cases and 2.4% of cases respectively (Seldin, 1984b, p. 29).

Summary

This chapter has provided a comprehensive overview of the pertinent literature on public and community service. It included five sections: 1) history of service, 2) definitions, 3) major works on public service, 4) the role of public service in faculty workload, and 5) evaluation of and reward for service.

History of Service

Although the concept of service to society has been a part of American higher education since colonial times, the birth of land-grant colleges in the latter half of the nineteenth century marked the beginning of service as it is known today. The creation and expansion of land-grant institutions served the nation through two methods: 1) opening the doors of higher education to the common people, and 2) disseminating practical knowledge to farmers through agricultural experimentation.

Other services to American society by the land-grant institutions included stimulation of growth in the public

high school system, adult and continuing education,

military leadership through officer training programs,

and provision of cultural activities for the communities

in which they were located.

Since World War II, American higher education has

expanded the concept of public service far beyond the

improvement of agricultural methods attributed to early

land-grant colleges. The shift in population from rural

to urban to suburban areas necessitated a shift in

college and university service to a broader range of

constituencies than ever before. In the process, many

institutions re-examined their traditional missions to

test for relevance to contemporary times.

Definitions

The second section dealt with the numerous

definitions of public and community service found in the

literature. Not only was there no unanimity in

definitions, but authors did not even agree on the

terminology which should be used to describe this mission

of higher education. For example, Crosson advocated the

use of the term "university service" to denote

participation in institutional governance and on internal

committees, "professional service" for committee work and

other efforts on behalf of professional organizations or

academic disciplines, and "public service" to denote

activities which involved direct relationships with

groups outside the university (Crosson, 1983, p. 5).

Almost all of the definitions did agree on one factor, however: that recipients of service were external to the academic community. Many authors also specified that service involved the application of professional expertise or competence to a particular problem, situation, or community group. There was also an underlying agreement in the definitions that society, in some way, would benefit by the service mission of higher education institutions.

Michigan State University documents were also found to contain conflicting definitions of public service. While the current (1982) form of the MSU Mission Statement only addressed public service indirectly, the Faculty Handbook specifically defined public service as the application of the faculty member's professional competence to issues and problems of significance to constituencies (MSU Office of Planning and Budgets Memorandum, 1988, p. 1).

The MSU Recommendation for Reappointment, Promotion or Tenure Action forms included seven specific categories of activities in the public service section. The instructions for a faculty member's annual report, however, specifically excluded private consulting, which often involved use of the same skills and professional expertise called for in unpaid public service.

Major Works on Public Service

The section dealing with major works on public

service in the literature included summaries of two

books, three major university studies and six recent

doctoral dissertations. Crosson's 1983 book contained

the most comprehensive overview of the subject. In order

to establish public service in context, she began by

examining higher education as ivory tower, social service

station and culture mart. The main body of the book was

devoted to public service in terms of its three most

common recipients: 1) communities, 2) state and local

governments, and 3) business and industry. While

acknowledging that all types of colleges and universities

provide service to each of the three groups, she argued

that community colleges most often provided service to

communities, state colleges and universities most often

provided service to state and local governments, and

research universities were most likely to be involved in

service to business and industry.

Warren B. Martin edited the second book, a volume in

the Jossey-Bass New Directions in Higher Education

series, entitled Redefining Service, Research and

Teaching. He admitted that public service has been

poorly conceptualized in the literature. Long, the

author of one of the chapters in this volume, agreed that

public service needed to have a more precise operational

definition and went on to argue that it must not be divorced from its essential connection to instruction and research.

The three case studies conducted in recent years highlighted different aspects of public service. While the University of California System study dealt with motivational factors for faculty participation in public service, the University of Minnesota study reported faculty opinions toward public service. The third study focused on five state colleges in Ohio and studied attitudes of faculty members toward university-sponsored service programs.

The doctoral dissertations reviewed also focused on different aspects of public service. One studied the role of public service in institutional mission, while a second one reported the degree of faculty involvement in service activities. Several of the dissertations were specific to Michigan State University.

Service in Workload Expectations

The fourth section dealt with the role of public service in faculty workload expectations. Because this subject is inextricably linked to the purpose and mission of higher education, a discussion of the larger issue was presented first. There was general agreement in the literature that the mission of higher education was threefold: the creation or discovery of knowledge, its

dissemination and practical application. These three purposes have traditionally been manifested in research, teaching and public service.

Studies of faculty workload revealed that while public service is extolled as an important component of the mission of higher education, little time has been devoted to it and little importance attached to its performance. Different authors included different activities in the public service category, ranging from service on departmental committees to lobbying the government.

There was considerable discussion in the literature on paid consulting and whether or not it should be given credit toward a faculty member's public service. Most authors agreed that, while current policies regarding consulting were piecemeal at best, paid consulting should not count toward fulfillment of a faculty member's public service responsibilities. Several authors took the opposite stance, however, and argued that it should count.

Evaluation and Reward

The fifth and final section of the chapter focused on the evaluation of and reward for service. While several authors offered sample evaluation scales, only Dressel presented the need for creation of objectives in service activities, then a systematic evaluation of how

well those objectives were met. The quality vs. quantity issue was also raised in the literature.

This section concluded with an examination of the reward for service activities. There was almost universal agreement in the literature that public service was not sufficiently rewarded to warrant spending much time on it. Despite the evidence that public service was not adequately rewarded, several authors believed that this should not be the case and made an argument for improvement of the reward structure.

CHAPTER III

METHODOLOGY

Introduction

This research was undertaken in order to develop an understanding of the service component of the institutional mission of Michigan State University, a land-grant institution. The study employed descriptive, relational, analytical and definitional research questions to accomplish that purpose. It was designed:

1) to describe the extent of involvement of MSU faculty and academic staff members in public and community service activities, both personally and with/for students; and to describe their perception of the importance of such involvement as professional activities for themselves and as learning opportunities for their students;

2) to identify relationships between described behaviors and perceptions which may have an effect on the achievement of service goals of MSU's institutional mission;

3) to analyze those relationships in order to (a) develop recommendations which may be useable for

enhancing achievement of institutional and faculty service goals, and (b) aid in the generation of hypotheses which then could be tested in further research; and

4) to develop an operational definition of service for Michigan State University.

A total of 12 research questions were generated to address the descriptive, relational and analytical components of this study. They were as follows:

1. To what extent are MSU faculty and academic staff members involved in public and community service?

2. To what extent do MSU faculty and academic staff members consider public and community service important as professional activities?

3. To what extent are MSU faculty and academic staff members involved with students in service-related activities? In other words, if faculty and academic staff members consider public and community service involvement important for themselves, does that consideration translate into involvement with and support for students in service-related activities?

4. To what extent do faculty and academic staff members consider service-related activities to be important as learning opportunities for students?

5. Are there institutional practices which may have an effect upon faculty and academic staff members'

participation in public and community service?

6. What relationship exists between faculty and academic staff members' extent of involvement in public and community service and their perception of the importance of such service as professional activities for themselves?

7. What relationship exists between faculty and academic staff members' extent of involvement with students in service-related activities and their perception of the importance of such activities as learning opportunities for students?

8. What relationship exists between extent of involvement of faculty and academic staff members in public and community service activities and the extent of their involvement with and/or for students in service-related activities?

9. What relationship exists between faculty and academic staff members' perception of the importance of professional public and community service activities and their perception of the importance of service-related activities with and/or for students?

10. What relationship exists between institutional practices and extent of faculty and academic staff members' involvement in professional public and community service activities and their perception of its importance as a professional activity?

11. Are there any additional relationships which emerge from analysis of findings of this study?

12. What patterns, if any, can be identified which may prove useful in developing recommendations to enhance achievement of service goals or in generating hypotheses for testing in further research?

The definitional component of this study was to be achieved by soliciting responses to an open-ended question regarding specific examples of recent public and community service activities.

These questions shaped the methodology and instrumentation of the project.

Instrumentation

The investigator developed a first draft of the survey instrument, drawing from a questionnaire utilized by the MSU Council to Review Undergraduate Education in 1987. A recent survey conducted by the University of California at Los Angeles for the national Campus Compact office was also consulted, as well as definitional statements developed by the National Society for Internships and Experiential Education (NSIEE) in the early 1980's.

Several key MSU faculty members with an interest in this subject were asked to evaluate the content and structure of the first draft of the survey instrument.

They suggested refinements and changes which resulted in a number of additional drafts and subsequent revisions. Suggestions for format and content changes were also solicited from key individuals in the Michigan State University administration, including the Executive Assistant to the President and the Assistant Director of the Office of Planning and Budgets. The final format and content of the instrument were the responsibility of the investigator and were completed during the summer of 1988.

The research instrument was set in a format and printed so that responses could be machine scored. After a brief introductory statement explaining the purpose of the survey and directions for its completion, the instrument consisted of 15 questions and was divided into five sections (see Appendix A):

Section I: Background Information. Included here were five questions soliciting demographic information which would be used to interpret responses from the other four sections of the survey. Respondents were asked to indicate: 1) the longevity of their appointment at MSU, 2) whether their appointment was full-time or part-time, 3) the type of appointment they held, i.e. tenured, 4) their academic rank and, finally, 5) their college/unit affiliation.

Section II: Professional Public and Community
Service Activities. This section consisted of twelve
examples of public and community service activities, plus
a blank space where respondents could present an example
they felt should have been included.

The respondents were asked to assess two things in
this section: 1) the extent of their personal
involvement in each activity, and 2) their perception of
its importance as a professional activity. A three-
point scale was used, ranging from a great extent of
involvement or importance (3) to no involvement or not
important at all (0). In addition, several questions
were included to assess respondents' degree of
satisfaction with their involvement in service activities
as well as reasons for choosing to be involved or not to
be involved in such activities.

Section III: Service-Related Activities as Learning
Opportunities for Students. In this section, respondents
were given examples of ten student activities which could
be considered service-related. Once again, they were
asked to assess their extent of involvement, either for
and/or with students in the particular activities
described. Secondly, respondents were asked how
important they perceived each activity to be as a
learning opportunity for students. A three-point scale
was used in this section as well, ranging from a great

extent of involvement or importance (3) to no involvement or not important at all (0). A blank space was also included at the end so that respondents could provide an example they believed should have been included.

Several related questions were included in this section as well. The first dealt with the number of students a faculty member assisted in service-related activities in a typical year, ranging from none to 100 or more. Whether those students were primarily graduate or undergraduate was addressed in the next question. The final two questions dealt with respondents' opinions about the number of hours students should be permitted to earn through service-related activities which would count toward a degree.

Section IV: Institutional Practices Which Affect Participation in Public and Community Service Activities. This section included eight statements about university practices which served as examples of institutional support for public service activities, such as reduced courseload/workload, financial compensation or recognition by the department/unit chairperson. Space was made available for respondents to provide an example which they felt should have been included. A three-point scale was also used in this section, with responses ranging from "(3) this is often the case" to "(0) this is never the case."

Section V: Specific Examples of Public and Community Service Activities. The final question was open-ended, allowing respondents to describe specific examples of public and community service activities in which they had recently been engaged, both personally and with and/or for students. The purpose of this section was two-fold: 1) to validate that respondents indeed understood what was meant by public and community service, and 2) to solicit specific examples of public and community service involvement by faculty and academic staff members outside the immediate university environment.

Permission to proceed with the research was granted by the University Committee for Research Involving Human Subjects (UCRIHS) on July 11, 1988. The instrument was then pilot tested in late July, using twenty faculty and academic staff members who were members of the Career Planning and Placement Council as a fairly representative group of the population to be studied. Further refinements in the instrument were made as a result of the pilot test.

Population and Sample

A decision was made by the investigator to use the entire population for this study rather than draw a representative sample from that group. Several reasons

prompted this decision: (1) because the investigator
desired the broadest possible representation of Michigan
State University faculty and academic staff in the
results from this study, and (2) the relative ease of
accessibility to the population in question.

The MSU Office of Academic Personnel Records was
contacted and subsequently provided the investigator with
name and address labels for the entire faculty and
academic staff population, as of September 10, 1988.
Identical sets of labels were used for distribution of
the advance letter, the survey and the follow-up letter.
Labels were sorted by college/unit affiliation, then
alphabetically by department within each college/unit.
This process yielded an N of 3,531, of which 2,461 were
faculty and 1,070 were academic staff members.

Data Collection Procedures

On September 12, 1988, an advance letter over the
signature of the President was sent to all of the
identified members of the population. There were 3,187
letters delivered via campus mail to on-campus subjects.
An additional 344 were delivered via first-class mail to
members of the population with off-campus addresses,
primarily Cooperative Extension agents. These letters
explained the purpose of the research, why the recipients
had been selected to participate, and solicited their

involvement. It also advised the recipients that the research instrument would be coming to them in approximately one month (see Appendix B).

The survey instrument was sent with a cover letter over the signature of the President during the week of October 10, 1988 (see Appendix C). Along with the survey and cover letter, a return envelope for the survey was provided, including postage for those off-campus. In addition, a separate return postal card was included which had a label affixed that indicated the subject's name and address (see Appendix D).

The cover letter gave instructions for respondents to return the postal card after having completed and mailed the survey instrument. When the cards were returned, those persons' names were pulled from the list of subjects who should receive a follow-up mailing. There was also a place on the return postal cards for the respondents to indicate whether or not they wanted to receive a summary of the survey results. The purpose of including the separate postal card was to maintain the anonymity of respondents, as required by the University Committee for Research Involving Human Subjects.

A follow-up letter dated October 24, 1988, over the signature of the Executive Assistant to the President, was sent approximately two weeks after the initial mailing to all subjects who had not yet returned their

postal cards. It was assumed that all those who had returned their postal cards had completed and returned the survey (see Appendix E).

Of the initial 3,531 instruments sent to the entire population of faculty and academic staff, a total of 2,005 of the surveys were returned. Of these, 1,980 were useable, yielding a response rate of 56%.

The total number of respondents was examined in order to determine their representativeness of the overall population on each of the independent variables. Representativeness was determined by matching the distribution of the respondent pool with the distribution of the total population on "those characteristics that [were] relevant to the substantive interests of the study" (Babbie, 1973, p. 78).

The Office of Academic Personnel Records was able to provide the investigator with data on the distribution of the entire population on four of the five independent variables: (1) full-time/part-time status, (2) type of appointment, (3) academic rank, and (4) college/unit affiliation. These figures were computed as of October 1, 1988, the closest available to the actual figures used on September 10, 1988. They were unable, however, to provide the investigator with a distribution on the longevity variable. A comparison of the respondents to the total population will be presented in Chapter IV.

Procedure for Data Analysis

Data analysis was conducted by using the Statistical Package for the Social Sciences (SPSS-X), after the 1,980 useable returns were machine scored to yield raw data. Preliminary results were obtained by computing frequencies, cross-tabulations, means and standard deviations. Because "statistical power increases automatically with sample size," and the N in this study was 1,980, the level of significance was set at .01 (Borg and Gall, 1983, p. 378).

Because it was desired to determine what relationship existed between a number of pairs of responses, correlation coefficients were calculated, to "express in mathematical terms the degree of relationship between . . . two variables" (Borg and Gall, 1983, p. 573). This was the most appropriate statistical procedure because

> a coefficient of correlation is a statistical
> summary of the degree and direction of
> relationship or association between two
> variables . . . Correlation coefficients
> allow us to compare the strength and
> direction of association between different
> pairs of variables (Glass and Hopkins,
> 1984, pp. 79-80).

It was possible to calculate correlation coefficients because the numbers generated in this study were treated as interval level data, a necessary

prerequisite (Nie, 1975, p. 276). Spearman's rank correlations were also used in analyzing results by college/unit affiliation because not only was the data measured on an interval scale but they were easily converted to rank scores (Hinkle, Wiersma and Jurs, 1979, p. 103).

Because it was also desired to discover the effect of the four relevant independent variables on a number of dependent variables, analysis of variance techniques were employed (Nie, 1975, p. 399). Analysis of variance is the statistical procedure "used to determine whether the differences among two or more means are greater than would be expected by sampling error alone" (Glass and Hopkins, 1984, p. 324).

Before proceeding with analyses of variance, however, several changes in college/unit affiliation distributions were necessary. First, the Cyclotron category was integrated with the College of Natural Science. This was deemed appropriate for several reasons: (1) because of the natural affinity of subject matter, (2) the relatively small size of the category in comparison with college categories, and (3) because the majority in the Cyclotron category had faculty status rather than academic staff status.

Secondly, Intercollegiate Athletics, Lifelong Education, Research/Graduate Studies, and Student Affairs

and Services were clustered and labeled "Other."
These changes were deemed appropriate for several
reasons: 1) because of the smaller size of these non-
college units which could create difficulty with empty
cells during subsequent statistical manipulations, and
(2) because these units consisted primarily of academic
staff rather than faculty.

Summary

This chapter contained a comprehensive overview of
the methodology used in this study. The development of
the survey instrument, method of data collection, and
response rate were described. The methods of analyses
used in computing the data were also included.

CHAPTER IV

PRESENTATION AND ANALYSIS OF THE FINDINGS

Introduction

The purpose of this study was to develop an understanding of the public service component of the institutional mission of Michigan State University, a land-grant institution. To achieve this purpose, this study of the public and community service activities of Michigan State University faculty and academic staff members was conducted during Fall Term, 1988.

The study was designed to accomplish four goals:

(1) To describe the extent of involvement of MSU faculty and academic staff members in public and community service activities, both personally and with/for students. Five research questions were developed for this purpose.

(2) To identify relationships between described behaviors and perceptions which may have an effect upon the achievement of the service component of MSU's institutional mission. Five research questions were developed for this purpose.

(3) To analyze those relationships (mentioned above)

in order to (a) develop recommendations which may be useable for enhancing achievement of institutional and faculty service goals, and (b) aid in the generation of hypotheses which then could be tested in further research. Two research questions were developed for this purpose.

(4) To develop an operational definition of service for Michigan State University. An open-ended question was included in the research instrument asking for examples of respondents' recent service involvement. It was hoped that responses to this optional question would yield an understanding of what MSU faculty and academic staff members consider to be service activities.

After the research questions had been developed, they were transformed into a survey instrument (see Appendix A). The survey instrument was refined and pilot-tested during the 1987-88 academic year, and was administered to the entire population of 3,531 faculty and academic staff members at Michigan State University during early October, 1988. A follow-up questionnaire was mailed approximately two weeks later. Of the 3,531 survey instruments distributed, 2,005 were returned, of which 1,980 were useable, for a 56% return rate.

Distribution of Respondents

The distribution of respondents was compared with the distribution of the population in order to determine representativeness on four of the five independent variables: (1) full-time or part-time status, (2) type of appointment, (3) academic rank, and (4) college/unit affiliation. It was not possible to determine representativeness of the respondents on the fifth independent variable, number of years at MSU, because information regarding that variable for the overall population was not available from the Office of Academic Personnel Records. (All population figures for Table 1 were based on statistics from the Office of Academic Personnel Records as of October 31, 1988, the nearest date to when the study was conducted and for which figures were available.)

Distribution of the population on the full-time or part-time variable proved to be nearly identical to the distribution of the respondents (see Table 1). The extremely high percentage of full-time people represented in both respondents and population meant that this variable was irrelevant for the purposes of this study. Therefore, it was dropped from further consideration.

When the type of appointment variable was examined, however, it was revealed that tenured faculty were substantially over-represented as respondents.

Table 1
Distribution of Respondents
by Full-Time/Part-Time Status,
Appointment Type and Academic Rank

Variable	Number in Population*	%	Number of Respondents**	%
FULL-TIME/PART-TIME STATUS				
Full-time	3,816	95.6	1,875	95.5
Part-time	174	4.4	88	4.5
APPOINTMENT TYPE				
Already tenured	1,780	44.6	1,176	60.7
In tenure stream, not yet tenured	336	8.4	252	13.0
Not tenure stream	592	14.8	265	13.7
Specialist with job security	611	15.3	113	5.7
Specialist w/out job security	671	16.8	132	6.8
ACADEMIC RANK				
Professor	1,243	31.2	756	39.2
Assoc. Prof.	635	15.9	367	19.1
Ass't. Prof.	604	15.1	302	15.7
Instructor	226	5.7	59	3.1
Specialist	867	21.7	188	9.8
Other	415	10.4	254	13.1

*Total population based on 3,990 cases, as of 10/31/88.
**Totals based on number of valid cases in each variable.

Both continuing and temporary academic staff members (specialists) were substantially under-represented. Specialists, once again, were substantially under-represented. Likewise, full professors were somewhat over-represented and associate professors slightly over-represented. These patterns meant that responses to the survey questions would be somewhat more representative of the activities and perceptions of tenured faculty in the higher academic ranks than of academic staff members, whether or not they had job security (tenure).

Table 2
Distribution of Respondents
by College/Unit Affiliation

College/Unit	Number in Population*	%	Number of Respondents**	%
Agriculture	392	11.1	281	14.2
Arts & Letters	350	9.9	177	8.9
Business	155	4.4	95	4.8
Comm. Arts	87	2.4	57	2.9
Education	181	5.1	105	5.3
Engineering	161	4.5	89	4.5
Human Ecology	83	2.5	58	2.9
Human Medicine	289	8.2	153	7.7
James Madison	25	.7	12	.6
Natural Science	497	14.1	228	11.5
Nursing	42	1.2	24	1.2
Osteopathic Med.	172	4.9	90	4.5
Social Science	261	7.4	159	8.0
Veterinary Med.	157	4.4	84	4.2
Urban Affairs	18	.5	10	.5
Co-op. Extension	331	9.4	179	9.0
Cyclotron	47	1.3	21	1.1
Intercol. Athletics	34	1.0	16	.8
Lifelong Education	21	.6	15	.8
Provost/Library	93	2.6	55	2.8
Other	135	3.8	75	3.1

*Total population based on 3,531 cases.
**Total respondents based on 1,980 valid cases.

The response rate by college/unit affiliation was remarkably representative of the overall population (see Table 2). In this table, the total population was based on the 3,531 faculty and academic staff members solicited to participate in the study. The percentage of respondents in each college/unit was accurately representative of the percentage of the total population in each college/unit. In every case except two, these figures were within one percentage point of each other.

The College of Agriculture was very slightly over-represented, while the College of Natural Science was very slightly under-represented. This finding meant that all responses to the survey that were reported by college/unit affiliation closely represented the responses which would have been expected had the entire population responded.

Results of Descriptive Questions

Data analysis for the descriptive questions was conducted by applying the Statistical Package for the Social Sciences (SPSS-X). Results were obtained by computing frequencies, cross-tabulations, and simple statistics including means and standard deviations. Analysis of variance also was employed because it was considered appropriate to "determine whether the differences among two or more means [were] greater than would be expected by sampling error alone" (Glass and Hopkins, 1984, p. 324).

In order to fulfill the descriptive component of this study, five research questions were generated to provide information about faculty and academic staff members' participation in public and community service activities. Their perception of its importance as a professional activity for themselves and as a learning opportunity for students was also explored.

1. To what extent are MSU faculty and academic staff members involved in public and community service?

Analysis of results in the first column of question six on the survey instrument revealed that involvement in public and community service was fairly widespread among responding faculty and academic staff members (see Appendix A). Of the 1,980 useable responses, only 85 or 4.3% explicitly stated that they were not involved in public and community service, or failed to list any such involvement.

Overall Scales

When examined by each of the four independent variables, the overall mean was slightly higher than 11 points on a 39 point scale (see Table 3). Those who had been at MSU for 11 to 15 years and were already tenured at the professor or associate professor level scored higher than the overall mean. Those who were just beginning at MSU, not yet tenured or not in the tenure stream, and at the instructor or assistant professor rank, scored several points lower than the overall mean. Respondents in the Cooperative Extension unit exhibited the highest extent of involvement, with a mean approximately three points higher than the overall mean. Also several points above the overall mean were those in

Table 3
Overall Means on Extent of Involvement Scale
for Professional Public and Community Service
by Independent Variable

Variable	Mean	St.Dev.	Extent of Involvement
LONGEVITY AT MSU			
Just Beginning	7.25	6.50	none
1 to 5 Years	10.07	6.37	low
6 to 10 Years	11.88	6.00	low
11 to 15 Years	12.71	6.43	low
16 or More Years	_12.02_	_6.57_	low
For Entire Population	11.29	6.55	low
APPOINTMENT TYPE			
Already Tenured	12.30	6.33	low
Tenure Stream, Not Ten.	9.76	6.45	low
Not Tenure Stream	9.60	6.42	none
Specialist W/Security	10.83	6.75	low
Specialist No Security	_9.40_	_7.00_	none
For Entire Population	11.31	6.54	low
ACADEMIC RANK			
Professor	12.17	6.34	low
Assoc. Professor	12.03	6.46	low
Ass.t. Professor	9.51	6.09	none
Instructor	8.54	6.44	none
Specialist	10.16	6.93	low
Other	_10.77_	_6.71_	low
For Entire Population	11.23	6.52	low
COLLEGE/UNIT			
Agriculture	12.46	6.28	low
Arts and Letters	10.74	6.91	low
Business	11.20	6.61	low
Comm. Arts & Sciences	11.32	5.92	low
Education	13.43	6.26	low
Engineering	10.95	6.60	low
Human Ecology	13.54	6.29	low
Human Medicine	11.03	5.92	low
Natural Science	7.74	5.77	none
Osteopathic Medicine	11.10	5.78	low
Social Science	11.32	7.05	low
Veterinary Medicine	10.13	6.57	low
Other Colleges	12.84	6.36	low
Cooperative Extension	14.09	5.68	low
Provost/Library	7.83	5.03	none
Other	_12.18_	_7.17_	low
For Entire Population	11.29	6.53	low

* 0.00-9.75=no involvement; 9.76-19.50=low extent of involvement; 19.51-29.25=moderate extent of involvement; 29.26-39.00=high extent of involvement.

the College of Human Ecology, College of Education, "Other Colleges" (which included James Madison, Nursing and Urban Affairs clustered together), and the College of Agriculture and Natural Resources. The College of Natural Science and Provost/Library categories revealed a lower extent of involvement, with means approximately 2.5 points lower than the next lowest category, Veterinary Medicine, and 3.5 points lower than the overall mean.

These findings would seem to indicate that those in the traditional land-grant colleges and units (with the exception of Veterinary Medicine) and those whose subject matter was more "service oriented" tended to be more involved in public and community service than their counterparts in other colleges.

The analysis of variance for the overall scale revealed that the amount of variation which was explained by all four of the independent variables was 13.88% of the total (see Appendix F). College/unit affiliation had by far the strongest effect of any of the independent variables. Appointment type had the least effect. These findings meant that, while the independent variables did have some small effect on the extent of involvement in public and community service, fully five-sixths of the extent of involvement was determined by other, unknown factors.

Individual Items and Subscales

There were 13 individual items in Section II of the survey instrument, each scored on a three point scale (see Table 4). Those which displayed a relatively high extent of involvement included, in descending order, MSU committee work, involvement in professional organizations, on-going work with public organizations, and involvement in civic organizations. This meant that, in general, faculty and academic staff members tended to be more involved in service activities which benefited the institution, their profession or the community. When faculty and academic staff members became involved in other service activities, it tended to be with public organizations rather than private ones, and they were more likely to do so as part of their workload than as independent consultants.

Some noticeable exceptions to the overall general pattern emerged when the individual items and sub-scales were analyzed by college/unit. The College of Business ranked highest on the item for consulting in private organizations, with a mean of 2.33 on the three point scale compared with the overall mean of 1.38 for that item. Cooperative Extension was highest on the item for consulting in public organizations as part of workload, with a mean of 2.11 compared with an overall mean of 1.28 on that item.

Table 4
Individual Item and Subscale Means
on Extent of Involvement Scale
for Professional Public and Community Service
by Independent Variable

Item/Subscale	Long.	Appt. Type	Acad. Rank	Col/ Unit
Workload,one-shot,private	.76	.76	.75	.75
Workload,ongoing, private	.76	.76	.75	.75
Workload,one-shot, public	1.14	1.14	1.13	1.14
Workload, ongoing, public	1.29	1.29	1.28	1.29
MSU committee work	1.84	1.85	1.85	1.84
Professional organizations	1.55	1.55	1.55	1.55
Consulting,one-shot,private	.52	.52	.52	.52
Consulting,ongoing, private	.41	.41	.41	.41
Consulting,one-shot, public	.52	.52	.52	.51
Consulting, ongoing, public	.47	.47	.47	.47
Civic organizations	1.22	1.22	1.21	1.22
Community betterment	1.06	1.06	1.05	1.06
Other (fill in)	----	----	----	----

* 0.00-0.75=no involvement; 0.76-1.50=low extent of involvement; 1.51-2.25=moderate extent of involvement; 2.26-3.00=high extent of involvement.

	Long.	Appt. Type	Acad. Rank	Col/ Unit
Private only subscale	2.38	2.39	2.37	2.37
Public only subscale	3.33	3.33	3.31	3.33
One-shot only subscale	2.86	2.87	2.85	2.86
Ongoing only subscale	2.86	2.87	2.84	2.86
As part of workload subscale	3.86	3.87	3.83	3.86
Consulting subscale	1.89	1.90	1.89	1.89

* 0.00-3.00=no involvement; 3.01-6.00=low extent of involvement; 6.01-9.00=moderate extent of involvement; 9.01-12.00=high extent of involvement.

Analysis of subscales within this section revealed that service for public organizations was more common than service for private ones and one-shot and ongoing projects were equally common. Service activities normally considered part of workload were more than twice as common as consulting.

When analysis of variance was conducted on individual items and subscales, the variation on several was found to be higher than the overall variation of 13.88% (see Appendix F). The greater variation found meant that extent of involvement in these particular activities could be attributed slightly more directly to the independent variables. MSU committees had a variation of 20.58% and ongoing service activities with public organizations as part of workload had a variation of 14.32%. The subscale for projects as part of workload showed 14.73% of the variation explained by the independent variables. On each item and subscale, college/unit affiliation had by far the strongest influence of the four independent variables (see Appendix F).

Auxiliary Questions

Section II of the survey instrument contained several auxiliary questions related to participation in professional public and community service activities. Question seven asked about faculty and academic staff

members' satisfaction with their extent of involvement in public and community service (see Appendix A). Two-thirds (66%) of the respondents said that they were satisfied with their level of participation in service activities. An additional 30% said they would like to be more involved in service activities.

Only those who were not actively involved in public and community service activities were asked to respond to question eight, regarding reasons for non-involvement. Of those who responded to this question, 60% reported a workload that was too heavy to allow for more involvement, 39% faulted the lack of consideration of service activities in tenure/promotion decisions, 27% found no relevant projects at the present time and 11% had no interest in public and community service involvement.

2. To what extent do MSU faculty and academic staff consider public and community service important as professional activities?

Faculty and academic staff members indicated their perceptions of the importance of public and community service in the second column of question six on the survey instrument (see Appendix A).

Overall Scales

The overall means by independent variable were nearly 17 points on a 39 point scale (see Table 5). When analyzed by longevity, appointment type and academic rank, category means were tightly clustered. Little more than one point separated the highest and lowest means for each independent variable. Respondents who had been at MSU from 11 to 15 years, were already tenured and at the assistant professor, associate professor or professor rank gave slightly higher responses in this section. When results were analyzed by college/unit affiliation, there was found to be a greater degree of spread between highest and lowest means than there had been using the other three independent variables.

The College of Human Ecology was the only college/unit to reach the "moderate" level of importance range. It was followed in descending order by "Other Colleges" (James Madison, Nursing and Urban Affairs clustered), the College of Education, and "Other" (composed of respondents whose appointments were outside colleges). These findings meant that the faculty and academic staff members in those colleges/units perceived service activities as somewhat more important than did their colleagues in, for example, the College of Natural Science or the Provost/Library category.

Table 5
Overall Means on Perception of Importance Scale
for Professional Public and Community Service
by Independent Variable

Variable	Mean*	St.Dev.	Level of Importance
LONGEVITY AT MSU			
Just Beginning	16.81	7.13	low
1 to 5 Years	16.70	7.03	low
6 to 10 Years	16.30	6.48	low
11 to 15 Years	17.89	7.05	low
16 or More Years	16.82	7.22	low
For Entire Population	16.87	7.03	low
APPOINTMENT TYPE			
Already Tenured	17.06	6.97	low
Tenure Stream, Not Ten.	16.74	7.46	low
Not Tenure Stream	16.71	6.67	low
Specialist W/Security	16.33	7.23	low
Specialist No Security	16.20	7.31	low
For Entire Population	16.87	7.03	low
ACADEMIC RANK			
Professor	16.94	7.12	low
Assoc. Professor	16.99	7.02	low
Ass't. Professor	16.89	7.15	low
Instructor	16.20	6.28	low
Specialist	16.25	7.47	low
Other	16.78	6.59	low
For Entire Population	16.83	7.05	low
COLLEGE/UNIT			
Agriculture & Nat.Res.	17.51	6.31	low
Arts and Letters	15.74	7.56	low
Business	15.97	6.64	low
Comm. Arts & Sciences	17.33	6.04	low
Education	18.88	6.76	low
Engineering	16.47	7.05	low
Human Ecology	19.60	7.88	moderate
Human Medicine	16.67	5.98	low
Natural Science	13.90	6.99	low
Osteopathic Medicine	17.28	7.23	low
Social Science	17.71	8.18	low
Veterinary Medicine	17.01	6.51	low
Other Colleges	19.33	6.50	low
Cooperative Extension	17.77	5.91	low
Provost/Library	14.24	7.97	low
Other	18.54	7.23	low
For Entire Population	16.85	7.03	low

* 0.00-9.75=not important at all; 9.76-19.50 low level of
importance; 19.51-29.25=moderate level of importance;
29.26-39.00=high level of importance.

Analysis of variance calculated in this section revealed that the amount of variation in responses which could be accounted for by the four independent variables was 5.73% of the total (see Appendix F). This finding meant that slightly more than 94% of faculty and academic staff members' perception of the importance of service activities could be explained by other, unknown variables. Once again, college/unit affiliation had by far the strongest effect on responses of any of the four independent variables.

Individual Items and Subscales

When individual item and subscale means were considered, respondents indicated that service in professional organizations was most important, followed in descending order by service on MSU committees and both one-shot and ongoing projects with public organizations (see Table 6). Service as a part of workload was perceived to be the most important of the identified subscales.

When analysis of variance was calculated for individual items, several were found to have a slightly higher variation than the 5.73% which had been found overall (see Appendix F). These included ongoing projects with public organizations as a part of workload in which 9.90% of the variation could be attributed to the independent variables. Initiatives for betterment of

Table 6
Individual Item and Subscale Means
on Perception of Importance Scale
for Professional Public and Community Service
by Independent Variable

Item/Subscale	Long.	Appt. Type	Acad. Rank	Col/ Unit
Workload,one-shot,private	1.24	1.24	1.23	1.23
Workload,ongoing, private	1.25	1.25	1.25	1.25
Workload,one-shot, public	1.76	1.76	1.76	1.77
Workload, ongoing, public	1.91	1.91	1.91	1.91
MSU committee work	2.03	2.03	2.03	2.03
Professional organizations	2.05	2.05	2.05	2.05
Consulting,one-shot,private	.94	.95	.95	.94
Consulting,ongoing, private	.87	.87	.87	.87
Consulting,one-shot, public	1.05	1.05	1.05	1.05
Consulting, ongoing, public	1.05	1.05	1.06	1.05
Civic organizations	1.67	1.67	1.66	1.67
Community betterment	1.69	1.69	1.69	1.69
Other (fill in)	----	----	----	----

* 0.00-0.75=not important at all; 0.76-1.50=low level of importance; 1.51-2.25=moderate level of importance; 2.26-3.00=high level of importance.

Private only subscale	4.16	4.16	4.16	4.15
Public only subscale	5.60	5.61	5.61	5.61
One-shot only subscale	4.84	4.85	4.85	4.85
Ongoing only subscale	4.92	4.93	4.92	4.91
As prt of workload subscale	6.01	6.01	6.00	6.01
Consulting subscale	3.85	3.86	3.87	3.85

* 0.00-3.00=not important at all; 3.01-6.00=low level of importance; 6.01-9.00=moderate level of importance; 9.01-12.00=high level of importance.

the community had the next highest percentage of the
variation explained, at 7.56%. The lowest amount of
variation which could be attributed to the four
independent variables was on the item for service on MSU
committees, at 2.74%.

Analysis of variance by subscales revealed that
slightly more of the variation on perception of
importance of service to public organizations (6.24%)
could be attributed to the four independent variables
than the perception of importance of service to private
ones (4.34%). The amount of variation for perception of
importance of ongoing programs (6.40%) was slightly
higher than for one-shot projects (3.99%). Finally, the
amount of variation which could be attributed to the four
independent variables for projects as a part of workload
and those that were consulting were approximately
equivalent, with 6.57% and 6.35% respectively.

3. To what extent are MSU faculty and academic staff involved with students in service-related activities?

Analysis of responses in the first column of
question nine on the survey instrument revealed that
faculty involvement in service-related activities with
students was evidenced, but not nearly to the extent of
professional service involvement (see Appendix A).

Overall Scales

The overall means by independent variable in this section were nearly seven points on a 33 point scale (see Table 7). Respondents who were at the associate professor level, either with tenure or seeking it, and had been at MSU from 11 to 15 years were the most likely to be involved in service-related activities either with or for students.

Individual college/unit means were widely scattered, ranging from a high of 10.31 for the College of Education to a low of 2.71 for the Provost/Library category. A respondent in the College of Education was almost twice as likely to be involved with students in service-related activities as a faculty or academic staff member in the College of Engineering and almost four times as likely to be involved in service-related activities with students as a librarian.

Analysis of variance using all four independent variables revealed that the amount of variation in respondents' involvement in service-related activities with students which could be explained by the four independent variables was 10.61% (see Appendix F). This finding meant that nearly 90% of the extent of involvement could be explained by other, unknown factors. Once again, college/unit affiliation had by far the strongest effect of any of the independent variables.

Table 7
Overall Means on Extent of Involvement Scale
for Service-Related Activities With Students
by Independent Variable

Variable	Mean*	St.Dev.	Extent of Involvement
LONGEVITY AT MSU			
Just Beginning	5.74	5.74	none
1 to 5 Years	6.72	5.77	none
6 to 10 Years	7.46	6.00	none
11 to 15 Years	7.86	6.63	none
16 or More Years	<u>6.82</u>	<u>6.14</u>	none
For Entire Population	6.98	6.09	none
APPOINTMENT TYPE			
Already Tenured	7.47	6.16	none
Tenure Stream, Not Ten.	7.10	5.89	none
Not Tenure Stream	6.62	5.99	none
Specialist/W Security	5.09	5.65	none
Specialist No Security	<u>5.67</u>	<u>5.79</u>	none
For Entire Population	7.05	6.08	none
ACADEMIC RANK			
Professor	7.47	6.13	none
Assoc. Professor	8.34	6.03	low
Ass.t. Professor	7.88	6.01	none
Instructor	7.61	6.59	none
Specialist	5.52	5.83	none
Other	<u>3.58</u>	<u>4.79</u>	none
For Entire Population	7.04	6.10	none
COLLEGE/UNIT			
Agriculture & Nat. Res.	7.44	6.13	none
Arts and Letters	7.40	6.35	none
Business	6.05	5.71	none
Comm. Arts & Sciences	9.88	5.92	low
Education	10.31	6.35	low
Engineering	5.51	4.86	none
Human Ecology	9.07	6.33	low
Human Medicine	8.00	6.36	none
Natural Science	5.09	4.89	none
Osteopathic Medicine	8.01	5.64	none
Social Science	7.57	6.01	none
Veterinary Medicine	9.30	6.22	low
Other Colleges	8.33	5.14	low
Cooperative Extension	3.79	4.59	none
Provost/Library	2.71	4.99	none
Other	<u>6.73</u>	<u>7.33</u>	none
For Entire Population	6.98	6.09	none

* 0.00-8.25=no involvement; 8.26-16.50=low extent of
involvement; 16.51-24.75=moderate extent of involvement;
24.76-33.00=high extent of involvement.

Table 8
Individual Item Means on Extent of Involvement Scale
for Service-Related Activities With Students
by Independent Variable

Item	Long.	Appt. Type	Acad. Rank	Col/ Unit
Field Study	.91	.92	.91	.91
Internship	.88	.89	.88	.88
Practicum	.71	.71	.71	.71
Independent Study	1.13	1.14	1.15	1.13
Course Modification	.70	.71	.71	.70
Clinical Experience	.66	.66	.66	.66
Cross-cultural Experience	.55	.56	.55	.55
Service Learning	.72	.73	.73	.73
Co-op Education	.34	.34	.33	.34
Career or Service Club	.57	.58	.58	.57
Other (fill in)	---	---	---	---

* 0.00-0.75=no involvement; 0.76-1.50=low extent of
involvement; 1.51-2.25=moderate extent of involvement;
2.26-3.00=high extent of involvement.

Individual Items

Examination of responses to the individual items

revealed several patterns (see Table 8). A somewhat

higher extent of involvement was found in the more

"traditional" activities: independent study, field

study, internship and practicum. Service learning and

course modifications, however, were almost equally as

frequent as practica.

Analysis of variance by individual item revealed

that there were two items where a percentage of the

variation explained was larger than the 10.61% found

overall (see Appendix F). These were the item on

independent study, in which 15.36% of the variation could

be explained by the independent variables, and the clinical experience item, where the variation was 27.70%.

4. To what extent do faculty and academic staff members consider service-related activities important as learning opportunities for students?

Responses recorded in the second column of question nine of the survey instrument showed that faculty and academic staff members perceived service-related activities for students as quite important (see Appendix A).

Overall Scales

The overall means in this section were nearly 17 points on a 33 point scale, in the "moderate" level of importance range (see Table 9). In general, those who were fairly new to MSU and in the temporary faculty or temporary specialists ranks perceived involvement with students in service-related activities as more important that did their colleagues who had been at MSU longer and were already tenured or had job security.

The overall means found when results were analyzed by college/unit affiliation yielded the widest range of means, with the average at 16.77 points. Respondents whose appointments were in the traditional land-grant colleges (with the exception of Veterinary Medicine) and in the colleges/units whose subject matter was amenable

Table 9
Overall Means on Perception of Importance Scale
for Service-Related Activities With Students
by Independent Variable

Variable	Mean*	St.Dev.	Level of Importance
LONGEVITY AT MSU			
Just Beginning	19.51	7.29	moderate
1 to 5 Years	17.48	7.98	moderate
6 to 10 Years	16.38	8.41	low
11 to 15 Years	17.31	7.98	moderate
16 or More Years	15.85	8.26	low
For Entire Population	16.79	8.17	moderate
APPOINTMENT TYPE			
Already Tenured	16.20	8.01	low
Tenure Stream, Not Ten.	17.56	7.56	moderate
Not Tenure Stream	17.31	8.29	moderate
Specialist W/Security	16.67	9.52	moderate
Specialist No Security	19.90	8.11	moderate
For Entire Population	16.80	8.14	moderate
ACADEMIC RANK			
Professor	16.00	7.80	low
Assoc. Professor	16.89	7.73	moderate
Ass't. Professor	18.33	7.32	moderate
Instructor	16.51	8.35	moderate
Specialist	18.56	9.02	moderate
Other	16.07	9.52	low
For Entire Population	16.82	8.13	moderate
COLLEGE/UNIT			
Agriculture & Nat. Res.	18.05	7.21	moderate
Arts and Letters	17.38	7.93	moderate
Business	12.28	8.15	low
Comm. Arts & Sciences	18.23	6.79	moderate
Education	19.62	7.07	moderate
Engineering	13.33	6.90	low
Human Ecology	20.75	7.88	moderate
Human Medicine	17.16	7.89	moderate
Natural Science	14.03	8.19	low
Osteopathic Medicine	16.62	8.23	moderate
Social Science	17.90	7.48	moderate
Veterinary Medicine	17.14	6.49	moderate
Other Colleges	18.70	7.27	moderate
Cooperative Extension	16.22	9.34	low
Provost/Library	14.80	10.51	low
Other	18.07	9.74	moderate
For Entire Population	16.77	8.17	moderate

* 0.00-8.25=not important at all; 8.26-16.50=low level of
importance; 16.51-24.75=moderate level of importance;
24.76-33.00=high level of importance.

to service outside the university tended to consider service-related activities with students slightly more important than their counterparts in other colleges and units.

Analysis of variance on the overall scales revealed that the amount of variation in scores on perception of importance which could be explained by the four independent variables was approximately 9.71% (see Appendix F). This finding meant, however, that slightly more than 90% of the variation was due to other, yet unknown variables. College/unit had nearly ten times more of an effect on the amount of variation explained than did longevity, appointment type or academic rank.

Individual Items

The mean scores on each of the individual items were higher than those which had been found on the involvement scale for question nine on the survey instrument (see Table 10). The highest means were found, in descending order, for internships, field study, and independent study. On the other end of the scale, the lowest means were found for career or service clubs, co-op education and course modification. Two individual items showed a noticeably higher percentage of variation explained by the independent variables than the 9.71% which was found overall. These were the items on clinical experience, with 16.07% of the variation explained, and internships,

Table 10
Individual Item Means on Perception of Importance Scale
for Service-Related Activities With Students
by Independent Variable

Item	Long.	Appt. Type	Acad. Rank	Col/ Unit
Field Study	2.03	2.04	2.03	2.03
Internship	2.12	2.13	2.12	2.12
Practicum	1.89	1.90	1.89	1.89
Independent Study	1.98	1.99	1.99	1.98
Course Modification	1.51	1.52	1.51	1.51
Clinical Experience	1.85	1.85	1.85	1.85
Cross-cultural Exper.	1.74	1.74	1.74	1.73
Service Learning	1.76	1.76	1.76	1.76
Co-op Education	1.46	1.46	1.45	1.46
Career or Service Club	1.32	1.32	1.33	1.32
Other (fill in)	----	----	----	----

* 0.00-0.75=not important at all; 0.76-1.50=low level of importance; 1.51-2.25=moderate level of importance; 2.26-3.00=high level of importance.

with 11.39% of the variation explained by the independent variables (see Appendix F).

Auxiliary Questions

Section III of the survey instrument also included several related questions (see Appendix A). Question 10 asked about numbers of students assisted in service-related activities, while question 11 asked whether those students were undergraduate or graduate level. Questions 12 and 13 solicited respondents' opinions about the number of credit hours a student should be allowed to earn toward an undergraduate or graduate degree through service-related activities.

Approximately 30% of the respondents to question 10 stated that they did not assist any students in service-related activities in a typical academic year. However, there were 50.4% of the respondents who were involved with up to 24 students in a typical academic year. On the upper end of the scale, 6.8% reported that they were involved with over 100 students in service-related activities.

Respondents were approximately evenly divided on question 11. There were 26.9% who worked primarily with undergraduates, 27.4% who worked primarily with graduate students, and 24.1% checked both. Remaining respondents indicated that this question did not apply to them.

The majority of respondents to question 12 indicated that less than nine hours toward an undergraduate degree should be earned through service-related activities. There were 16.4% of the respondents who checked 1-3 hours, 26.5% at 4-6 hours, and 12.2% at 7-9 hours. There were 16.1%, however, who indicated that no credit at all should be earned through service-related activities.

Twenty-three per cent of the respondents to question 13 stated that students should not be allowed to earn any credit toward a graduate degree through service-related activities. An additional 42.5% checked that students should be allowed to earn 6 hours or less toward a graduate degree in this manner.

5. Are there institutional practices which may have an effect upon faculty and academic staff members' participation in public and community service?

Analysis of results from Section IV, question 14 of the survey instrument revealed that faculty in general perceived very little institutional support for their involvement in service activities (see Appendix A).

Overall Scales

On a scale of 24 points in this section, the overall means were nearly seven points (see Table 11). When the overall means were examined by longevity at MSU, appointment type and academic rank, it became clear that responses were highly clustered. These three independent variables seemed to have very little effect on the answers supplied by respondents in this section.

A small but discernible difference between overall mean scores was evident, however, when responses were examined by college/unit affiliation. Means ranged from a high of 8.40 points for the College of Agriculture and Natural Resources to a low of 5.15 for the College of Business. Once again traditionally land-grant colleges had means on the high end of the scale, indicating that respondents in those colleges perceived a slightly higher degree of support from the institution for service than did their counterparts in other colleges/units.

Table 11
Overall Means on Institutional Practices Scale
by Independent Variable

Variable	Mean*	St.Dev.	Perception of Support
LONGEVITY			
Just Beginning	6.03	5.26	rarely
1 to 5 Years	6.56	4.80	rarely
6 to 10 Years	7.29	5.16	rarely
11 to 15 Years	7.98	5.52	rarely
16 or More Years	6.52	4.99	rarely
For Entire Population	6.85	5.10	rarely
APPOINTMENT TYPE			
Already Tenured	6.99	5.10	rarely
Tenure Stream, Not Ten.	6.77	4.86	rarely
Not Tenure Stream	6.49	4.91	rarely
Specialist W/Security	6.15	5.33	rarely
Specialist No Security	7.20	5.70	rarely
For Entire Population	6.86	5.10	rarely
ACADEMIC RANK			
Professor	6.86	5.06	rarely
Assoc. Professor	6.99	4.92	rarely
Ass't. Professor	6.70	4.76	rarely
Instructor	6.45	4.51	rarely
Specialist	6.49	5.72	rarely
Other	6.99	5.26	rarely
For Entire Population	6.83	5.06	rarely
COLLEGE/UNIT			
Agriculture & Nat. Res.	8.41	5.76	rarely
Arts and Letters	5.47	4.25	never
Business	5.15	3.99	never
Comm. Arts & Sciences	6.25	4.55	rarely
Education	7.48	5.43	rarely
Engineering	5.84	4.64	never
Human Ecology	7.19	4.87	rarely
Human Medicine	7.34	4.86	rarely
Natural Science	5.63	4.89	never
Osteopathic Medicine	7.11	4.60	rarely
Social Science	6.39	4.89	rarely
Veterinary Medicine	7.63	5.15	rarely
Other Colleges	7.49	4.43	rarely
Cooperative Extension	7.81	5.25	rarely
Provost/Library	6.66	5.27	rarely
Other	7.07	5.23	rarely
For Entire Population	6.85	5.07	rarely

* 0.00-6.00=never receive support; 6.01-12.00=rarely receive support; 12.01-18.00=sometimes receive support; 18.01-24.00=often receive support.

Analysis of variance on the overall scales revealed that 6.06% of the variation on perception of institutional practices could be explained by the four independent variables (see Appendix F). Once again, college/unit affiliation had by far the strongest effect on respondents' perceptions, with academic rank the weakest of the four independent variables.

Individual Items

Each individual item on questions 14 was scored on a three point scale (see Table 12). Three points meant they often received support from the university; two points meant they sometimes received support, one point meant that they rarely received support and zero points meant they never received support.

Four of the eight individual items had means above one, the "rarely" rating: colleague support, adequate space, official recognition and tenure consideration. Approximately 70% of the respondents indicated that they never received financial compensation, a reduced workload or released time in support of their public and community service activities. More than 60% said university transportation was never available for service-related activities, nor did they have graduate assistant or support staff help available for service-related activities. These responses indicated that what little support faculty and academic staff members perceived as

Table 12
Individual Item Means on
Institutional Practices Scale
by Independent Variable

Item	Long.	Appt. Type	Acad. Rank	Col/ Unit
Financial compensation	.53	.53	.53	.53
Reduced work/rlse.time	.31	.31	.32	.32
Tenure consideration	1.03	1.03	1.03	1.03
Official recognition	1.20	1.21	1.20	1.20
Colleague support	1.49	1.49	1.49	1.49
Grad/staff support	.54	.54	.54	.54
Univ. transportation	.72	.72	.72	.72
Adequate space	1.26	1.26	1.26	1.26
Other (fill in)	----	----	----	----

* 0.00-0.75=never receive support; 0.76-1.50=rarely receive support; 1.51-2.25=sometimes receive support; 2.26-3.00=often receive support.

coming from the university came primarily from their colleagues and, on rare occasions, from official recognition or tenure consideration by their department chair, college dean or unit head.

Analysis of variance revealed that the item on colleague support was the only item for which the variation, 7.51%, was higher than the 6.06% found overall (see Appendix F).

Results of Relationship Questions

In order to fulfill the relational component of the purpose of this study, a series of five research questions was generated. They were designed to identify relationships by drawing comparisons between described

behaviors and perceptions which may have an effect on achievement of the service goals of the institution.

The Statistical Package for the Social Sciences (SPSS-X) was employed to analyze results in this section. Means which had been generated for the descriptive questions in this study were compared. Pearson correlations, using a one-tailed test of significance, were employed "to compare the strength and direction of association between different pairs of variables" (Glass and Hopkins, 1984, p. 80). Spearman's rank correlations were also used in analyzing results by college/unit affiliation (see Appendix G). This was an appropriate method to employ because those data were measured on an interval scale and were easily converted to rank scores (Hinkle, Wiersma and Jurs, 1979, p. 103).

6. What relationship exists between faculty and academic staff members' extent of involvement in public and community service and their perception of the importance of such service as professional activities for themselves?

Section II of the survey instrument dealt with faculty and academic staff members' professional public and community service activities (see Appendix A). This research question was designed to draw a comparison between the responses in the extent of involvement column

and responses in the perception of importance column in Section II, question six of the survey instrument.

Comparison of Means

Overall means on the extent of involvement scale were consistently smaller than overall means on the perception of importance scale (see Table 13). Respondents in general seemed to perceive participation in service activities as more important than would be expected from the extent of their own involvement.

In addition, respondents exhibited much more variation in their answers on the extent of involvement scale than they did on their responses to the perception of importance scale. There was a three or four point spread between highest and lowest means on the extent of involvement scale when longevity at MSU, appointment type and academic rank were taken into consideration. On the perception of importance scale, however, approximately one point separated the highest and lowest means for those three independent variables.

College/unit affiliation was the only one of the independent variables which had a similar effect on both scales. The largest spread between means on the extent of involvement scale for this variable was 6.35 points. On the perception of importance scale the largest spread between means was 5.44 points.

Table 13
Comparison of Means
for Professional Public and Community Service
by Independent Variable

Variable	Extent of Invlvmnt.	Range	Prcptn.of Imprtnce	Range
LONGEVITY AT MSU				
Just Beginning	7.25	none	16.81	low
1 to 5 Years	10.07	low	16.70	low
6 to 10 Years	11.88	low	16.30	low
9 11 to 15 Years	12.71	low	17.89	low
16 or More Years	_12.02_	low	_16.82_	low
For Entire Population	11.29	low	16.87	low
APPOINTMENT TYPE				
Already Tenured	12.30	low	17.06	low
Tenure Stream, Not Ten.	9.76	low	16.74	low
Not Tenure Stream	9.60	none	16.71	low
Specialist W/Security	10.83	low	16.33	low
Specialist No Security	_9.40_	none	_16.20_	low
For Entire Population	11.31	low	16.87	low
ACADEMIC RANK				
Professor	12.17	low	16.94	low
Assoc. Professor	12.03	low	16.99	low
Ass't. Professor	9.51	none	16.89	low
Instructor	8.54	none	16.20	low
Specialist	10.16	low	16.25	low
Other	_10.77_	low	_16.78_	low
For Entire Population	11.23	low	16.83	low
COLLEGE/UNIT				
Agriculture & Nat.Res.	12.46	low	17.51	low
Arts & Letters	10.74	low	15.74	low
Business	11.20	low	15.97	low
Comm. Arts & Sciences	11.32	low	17.33	low
Education	13.43	low	18.88	low
Engineering	10.95	low	16.47	low
Human Ecology	13.54	low	19.60	moderate
Human Medicine	11.03	low	16.67	low
Natural Science	7.74	none	13.90	low
Osteopathic Medicine	11.10	low	17.28	low
Social Science	11.32	low	17.71	low
Veterinary Medicine	10.13	low	17.01	low
Other Colleges	12.84	low	19.33	low
Cooperative Extension	14.09	low	17.77	low
Provost/Library	7.83	none	14.24	low
Other	_12.18_	low	_18.54_	low
For Entire Population	11.29	low	16.85	low

* 0.00-9.75=no involvement/not important; 9.76-19.50=low
extent of invlvmnt/imprtnce; 19.51-29.25=moderate extent
of invlvmnt/imprtnce; 29.26-39.00=high extent of invlvmnt

<u>Correlations</u>

A Pearson correlation was computed using the overall means found in the two columns in Section II, question six of the survey instrument (see Appendix A). This comparison of overall extent of involvement to overall perception of importance yielded a coefficient of .5159 (p<.001), which meant that 26.6% of a representative respondent's involvement in service activities could be associated with his/her perception of its importance as a professional activity (see Table 14).

The highest correlations were found to exist between extent of involvement and perception of importance for ongoing projects with private organizations as a part of workload, ongoing projects with public organizations as a part of workload, and one-shot programs with private organizations as a part of workload. Between 35% and 40% of the extent of involvement in these top three categories could be associated with a faculty or academic staff members' perception of the importance of such activities. At the other end of the scale, only 22.2% of the involvement on MSU committees could be attributed to respondents' perception of the importance of such involvement.

Examination of correlation coefficients for the subscales revealed that the percentage of involvement in projects with private organizations could be attributed

Table 14
Correlation Coefficients for
Individual Items and Subscales
Drawn from Comparison of
Extent of Involvement and
Perception of Importance Scales
for Professional Public and Community Service

Item/Subscale	Correlation Coefficient
Workload,one-shot,private	.5950
Workload,ongoing, private	.6244
Workload,one-shot, public	.5415
Workload, ongoing, public	.6154
MSU committee work	.4714
Professional organizations	.5602
Consulting,one-shot,private	.5744
Consulting, ongoing,private	.5456
Consulting,one-shot, public	.5047
Consulting, ongoing, public	.5119
Civic organizations	.5583
Community betterment	.5154
Other (fill in)	-----
Private only subscale	.5909
Public only subscale	.5139
One-shot only subscale	.5422
Ongoing only subscale	.5398
As part of workload subscale	.5719
Consulting subscale	.5321
Total scale to total scale	.5159

* p<.001

to perception of their importance about 35% of the time, while involvement in projects with public organizations could be associated with perception of their importance 26.4% of the time.

One-shot and ongoing projects and programs were approximately equally represented. The activities as a part of workload subscale yielded a slightly higher coefficient than did the consulting subscale.

While a definite positive relationship between the extent of involvement and perception of importance scales existed, nearly 75% of the variation between the two was caused by other, yet unknown factors.

A Spearman's rank correlation coefficient of .9059 was discovered when overall means for extent of involvement and perception of importance by college/unit affiliation were compared. This "very high positive correlation" indicated an unusually strong relationship between responses on the two scales by college/unit affiliation (Hinkle, Wiersma and Jurs, 1979, p. 85).

7. What relationship exists between faculty and academic staff members' extent of involvement with students in service-related activities and their perception of the importance of such activities as learning opportunities for students?

Section III of the survey instrument dealt with faculty and academic staff members' involvement in service-related activities with students (see Appendix A). This research question was designed to draw a comparison between the responses in the extent of involvement column and responses in the perception of importance column in Section III, question nine of the survey instrument.

Comparison of Means

The overall means for extent of involvement in this section were considerably smaller than the overall means for perception of importance (see Table 15). A spread of nearly 10 points was found between the overall means when examined by each of the four independent variables. The size of the spread between overall means in this section was nearly twice the size of the spread found in the previous section on professional public and community service activities.

It was also notable that while the overall means for extent of involvement differed considerably, the overall means for perception of importance remained relatively constant, although not nearly as clustered as they had been in the previous section on professional public and community service activities. This pattern was particularly true when individual item means were examined under the college/unit affiliation variable.

Correlations

Pearson correlation coefficients were calculated for the overall extent of involvement scale and perception of importance scale as well as for each individual item in this section on service-related activities with students (see Table 16).

Table 15
Comparison of Means
for Service-Related Activities With Students
by Independent Variable

Variable	Extent of Invlvemt.	Range	Prcptn.of Imprtnce.	Range
LONGEVITY AT MSU				
Just Beginning	5.74	none	19.51	moderate
1 to 5 Years	6.72	none	17.48	moderate
6 to 10 Years	7.46	none	16.38	low
11 to 15 Years	7.86	none	17.31	moderate
16 or More Years	6.82	none	15.85	low
For Entire Population	6.98	none	16.79	moderate
APPOINTMENT TYPE				
Already Tenured	7.47	none	16.20	low
Tenure Stream, Not Ten.	7.10	none	17.56	moderate
Not Tenure Stream	6.62	none	17.31	moderate
Specialist W/Security	5.09	none	16.67	moderate
Specialist No Security	5.67	none	19.90	moderate
For Entire Population	7.05	none	16.80	moderate
ACADEMIC RANK				
Professor	7.47	none	16.00	low
Assoc. Professor	8.34	low	16.89	moderate
Ass't. Professor	7.88	none	18.33	moderate
Instructor	7.61	none	16.51	moderate
Specialist	5.52	none	18.56	moderate
Other	3.58	none	16.07	low
For Entire Population	7.04	none	16.82	moderate
COLLEGE/UNIT				
Agriculture & Nat. Res.	7.44	none	18.05	moderate
Arts and Letters	7.40	none	17.38	moderate
Business	6.05	none	12.28	low
Comm. Arts & Sciences	9.88	low	18.23	moderate
Education	10.31	low	19.62	moderate
Engineering	5.51	none	13.33	low
Human Ecology	9.07	low	20.75	moderate
Human Medicine	8.00	none	17.16	moderate
Natural Science	5.09	none	14.03	low
Osteopathic Medicine	8.01	none	16.62	moderate
Social Science	7.57	none	17.90	moderate
Veterinary Medicine	9.30	low	17.14	moderate
Other Colleges	8.33	low	18.70	moderate
Cooperative Extension	3.79	none	16.22	low
Provost/Library	2.71	none	14.80	low
Other	6.73	none	18.07	moderate
For Entire Population	6.98	none	16.77	moderate

* 0.00-8.25=no involvement/not important; 8.26-16.50=low
level of invlvmnt/imprtnce; 16.51-24.75=moderate level of
invlvmnt/imprtnce; 24.76-33.00=high invlvmt/imprtnce.

Table 16
Correlation Coefficients for Individual Items
Drawn From Comparison of
Extent of Involvement and
Perception of Importance Scales
for Service-Related Activities With Students

Item	Correlation Coefficient
Field Study	.4563
Internship	.4026
Practicum	.4420
Independent Study	.4623
Course Modification	.5144
Clinical Experience	.4370
Cross-cultural Experience	.4180
Service Learning	.4462
Co-op Education	.3392
Career or Service Club	.4937
Other (fill in)	-----
Total Scale to Total Scale	.3681

* p<.001

Comparison of the overall means yielded a correlation coefficient of .3681 (p<.001). A coefficient of this size meant that 13.5% of the overall extent of involvement in these activities was associated with respondents' perception of their importance. The .3681 coefficient in this section compared with a .5159 coefficient found in the previous section.

Correlation coefficients calculated on individual items ranged from a low of .3392 (p<.001) for co-op education to a high of .5144 (p<.001) for course modification. A range from 11.5% to 26.5% of the involvement in any of these individual activities could be accounted for by the respondent's perception of its

importance. In the previous section on professional public and community service activities, the range of variations was from a low of 22.2% to a high of 39.0%.

8. What relationship exists between extent of involvement of faculty and academic staff members in public and community service activities and the extent of their involvement with and/or for students in service-related activities?

This research question was designed to compare responses in the extent of involvement column of Section II, question six of the survey instrument with responses in the extent of involvement column of Section III, question nine of the survey instrument (see Appendix A).

Comparison of Means

A comparison of means by independent variable revealed that responses on the extent of involvement scale for professional public and community service were consistently higher than responses on the extent of involvement scale for service-related activities with students (see Table 17). The average spread between the two means was approximately five points. The size of the difference was actually more, however, because the scale for professional public and community service was based on 39 points overall, while the scale for service-related activities with students was based on 33 points overall.

Table 17
Comparison of Means on Extent of Involvement Scales
by Independent Variable

Variable	Prof. Invlvmnt*	Range	Invlvmnt W/Students**	Range
LONGEVITY AT MSU				
Just Beginning	7.25	none	5.74	none
1 to 5 Years	10.07	low	6.72	none
6 to 10 Years	11.88	low	7.46	none
11 to 15 Years	12.71	low	7.86	none
16 or More Years	12.02	low	6.82	none
For Entire Population	11.29	low	6.98	none
APPOINTMENT TYPE				
Already Tenured	12.30	low	7.47	none
Tenure Stream, Not.Ten.	9.76	low	7.10	none
Not Tenure Stream	9.60	none	6.62	none
Specialist W/Security	10.83	low	5.09	none
Specialist No Security	9.40	none	5.67	none
For Entire Population	11.31	low	7.05	none
ACADEMIC RANK				
Professor	12.17	low	7.47	none
Assoc. Professor	12.03	low	8.34	low
Ass't. Professor	9.51	none	7.88	none
Instructor	8.54	none	7.61	none
Specialist	10.16	low	5.52	none
Other	10.77	low	3.58	none
For Entire Population	11.23	low	7.04	none
COLLEGE/UNIT				
Agriculture & Nat.Res.	12.46	low	7.44	none
Arts & Letters	10.74	low	7.40	none
Business	11.20	low	6.05	none
Comm. Arts & Sciences	11.32	low	9.88	low
Education	13.43	low	10.31	low
Engineering	10.95	low	5.51	none
Human Ecology	13.54	low	9.07	low
Human Medicine	11.03	low	8.00	none
Natural Science	7.74	none	5.09	none
Osteopathic Medicine	11.10	lcw	8.01	none
Social Science	11.32	low	7.57	none
Veterinary Medicine	10.13	low	9.30	low
Other Colleges	12.84	low	8.33	low
Cooperative Extension	14.09	low	3.79	none
Provost/Library	7.83	none	2.71	none
Other	12.18	low	6.73	none
For Entire Population	11.29	low	6.98	none

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*   0.00- 9.75=no involvement  **  0.00- 8.25=no involvement
    9.76-19.50=low             "       8.26-16.50=low          "
   19.51-29.25=moderate        "      16.51-24.75=moderate     "
   29.26-39.00=high            "      24.76-33.00=high         "
```

Longevity at MSU had a greater effect on extent of involvement in professional public and community service than it did on extent of involvement in service-related activities with students, as evidenced by the smaller range of means on the extent of involvement with students scale. Academic rank and college/unit affiliation, however, had less of an effect on the extent of involvement in professional public and community service than they did on extent of involvement with students in service-related activities. Appointment type had approximately the same effect on both scales.

The greatest difference between means was found for those who had been at MSU 16 years or more and were already tenured full professors or specialists with job security. Those who were academic staff members but did not fall into the "specialist" category were much more likely to be involved in professional public and community service than be involved with students in service-related activities. This was to be expected because those in the "Other" category would be much less likely to have direct contact with students.

Those in the Cooperative Extension unit evidenced the greatest spread between means, with a very high mean in extent of involvement in professional public and community service and a very low mean in extent of involvement with students in service-related activities.

Once again, this was only to be expected because of the nature of Cooperative Extension work and the lack of opportunity for direct involvement with students.

Correlations

Calculation of a Pearson correlation with a one-tailed test of significance found that a definite positive relationship existed between the two overall extent of involvement scales, with a coefficient of .4346 (p<.001) (see Table 18). This coefficient meant that the amount of variation in one extent of involvement scale which could be associated with variation in the other was 18.89%.

Correlation coefficients were also calculated for comparison of the sub-scales and individual items in the extent of involvement in professional public and community service section with the overall mean for the extent of involvement for service-related activities with students (see Table 18). Likewise, correlation coefficients were calculated for comparison of the overall mean for extent of involvement in professional public and community service with each of the individual items in extent of involvement in service-related activities for students. None of these individual calculations yielded coefficients as high or higher than that which had been found overall, suggesting there were no individual points of greater relationship.

Table 18
Correlation Coefficients for
Individual Items and Subscales
Drawn from Comparison of
Extent of Involvement Scales

Item/Subscale	Correlation Coefficient
Workload,one-shot,private	.1843
Workload,ongoing, private	.1936
Workload,one-shot, public	.2639
Workload, ongoing, public	.2822
MSU committee work	.2024
Professional organizations	.2603
Consulting,one-shot,private	.2414
Consulting, ongoing,private	.2306
Consulting,one-shot, public	.2985
Consulting, ongoing, public	.2840
Civic organizations	.2893
Community betterment	.2722
Other (fill in)	-----
Private only subscale	.2743
Public only subscale	.3677
One-shot only subscale	.3301
Ongoing only subscale	.3554
As part of workload subscale	.2967
Consulting subscale	.3331
Field study	.3287
Internship	.2822
Practicum	.2697
Independent study	.2416
Course modification	.2230
Clinical experience	.1816
Cross-cultural experience	.2650
Service learning	.3015
Co-op education	.2705
Career or service club	.2915
Other (fill in)	-----
Total scale to total scale	.4346

* p<.001

A Spearman rank correlation coefficient with a one-tailed test of significance was also calculated on the overall means by college/unit affiliation on both extent of involvement scales. This calculation yielded a coefficient of .2181, which suggested that there was very little relationship, college/unit by college/unit, between the two types of involvement.

9. What relationship exists between faculty and academic staff members' perception of the importance of professional public and community service activities and their perception of the importance of service-related activities with and/or for students?

This research question was designed to compare the responses in the perception of importance column of Section II, question six on the survey instrument with the responses in the perception of importance column of Section III, question nine (see Appendix A).

Comparison of Means

Overall means on the two perception of importance scales were very similar (see Table 19). The overall mean for perception of importance on the professional public and community service scale ranged from 16.83 to 16.87, depending on independent variable. The overall mean on perception of importance for the service-related activities with students scale ranged from 16.77 to 16.82

Table 19
Comparison of Means on Perception of Importance Scales
by Independent Variable

Variable	Prof. Imprtnce.*	Range	Importance W/Students**	Range
LONGEVITY AT MSU				
Just Beginning	16.81	low	19.51	moderate
1 to 5 Years	16.70	low	17.48	moderate
6 to 10 Years	16.30	low	16.38	low
11 to 15 Years	17.89	low	17.31	moderate
16 or More Years	16.82	low	15.85	low
For Entire Population	16.87	low	16.79	moderate
APPOINTMENT TYPE				
Already Tenured	17.06	low	16.20	low
Tenure Stream, Not Ten.	16.74	low	17.56	moderate
Not Tenure Stream	16.71	low	17.31	moderate
Specialist W/Security	16.33	low	16.67	moderate
Specialist No Security	16.20	low	19.90	moderate
For Entire Population	16.87	low	16.80	moderate
ACADEMIC RANK				
Professor	16.94	low	16.00	low
Assoc. Professor	16.99	low	16.89	moderate
Ass't. Professor	16.89	low	18.33	moderate
Instructor	16.20	low	16.51	moderate
Specialist	16.25	low	18.56	moderate
Other	16.78	low	16.07	low
For Entire Population	16.83	low	16.82	moderate
COLLEGE/UNIT				
Agriculture & Nat. Res.	17.51	low	18.05	moderate
Arts & Letters	15.74	low	17.38	moderate
Business	15.97	low	12.28	low
Comm. Arts & Sciences	17.33	low	18.23	moderate
Education	18.88	low	19.62	moderate
Engineering	16.47	low	13.33	low
Human Ecology	19.60	moderate	20.75	moderate
Human Medicine	16.67	low	17.16	moderate
Natural Science	13.90	low	14.03	low
Osteopathic Medicine	17.28	low	16.62	moderate
Social Science	17.71	low	17.90	moderate
Veterinary Medicine	17.01	low	17.14	moderate
Other Colleges	19.33	low	18.70	moderate
Cooperative Extension	17.77	low	16.22	low
Provost/Library	14.24	low	14.80	low
Other	18.54	low	18.07	moderate
For Entire Population	16.85	low	16.77	moderate

* 0.00- 9.75=not important   ** 0.00- 8.25=not important
  9.76-19.50=low importance   8.26-16.50=low importance
  19.51-29.25=moderate "   16.51-24.75=moderate "
  29.26-39.00=high   "   24.76-33.00=high   "

points. It should be kept in mind, however, that the two scales were figured on different point bases.

All four independent variables were found to have less of an impact on the perception of importance scale for professional public and community service that they had on the perception of importance scale for service-related activities with students. Longevity at MSU, appointment type and academic rank all showed very little spread between category means. College/unit affiliation generated a slightly larger spread between means.

Correlations

When a Pearson correlation was calculated between the overall means on the two perception of importance scales, using a one-tailed test of significance, a coefficient of .4378 (p<.001) was found (see Table 20). A coefficient of that size meant that 19.17% of the variation in one could be associated with the variation in the other.

Correlation coefficients were also calculated for comparison of the sub-scales and individual items in the perception of importance of professional public and community service section with the overall mean for the perception of importance of service-related activities with students (see Table 20). Likewise, correlation coefficients were calculated for comparison of the overall mean for perception of importance of professional

Table 20
Correlation Coefficients for
Individual Items and Subscales
Drawn from Comparison of
Perception of Importance Scales

Item/Subscale	Correlation Coefficient
Workload,one-shot,private	.2215
Workload,ongoing, private	.1995
Workload,one-shot, public	.2807
Workload, ongoing, public	.2996
MSU committee work	.2200
Professional organizations	.2551
Consulting,one-shot,private	.1959
Consulting,ongoing, private	.2066
Consulting,one-shot, public	.2447
Consulting, ongoing, public	.2375
Civic organizations	.3289
Community betterment	.3474
Other (fill in)	-----
Private only subscale	.2671
Public only subscale	.3545
One-shot only subscale	.3168
Ongoing only subscale	.3323
As part of workload subscale	.3230
Consulting subscale	.2633
Field study	.3334
Internship	.3236
Practicum	.3064
Independent study	.3019
Course modification	.3117
Clinical experience	.2777
Cross-cultural experience	.3017
Service learning	.3404
Co-op education	.3137
Career or service club	.3269
Other (fill in)	-----
Total scale to total scale	.4378

* P<.001

public and community service with each of the individual

items in perception of importance of service-related

activities for students.   In every case the correlation

coefficient was smaller than that which was found when

the overall scales were compared, indicating there were

no points of greater relationship than that which had

been found overall.

A coefficient of .7012 was obtained when a Spearman

rank correlation was calculated between the overall means

on the two perception of importance scales by

college/unit affiliation. This suggested a high positive

relationship college/unit by college/unit between

responses on the two perception of importance scales.

10. What relationship exists between institutional practices and extent of faculty and academic staff members' involvement in professional public and community service activities and their perception of its importance as a professional activity?

Section IV, question 14 of the survey instrument

included a series of nine statements regarding

institutional practices which may have an effect on

faculty and academic staff involvement in public and

community service activities (see Appendix A).

Correlation coefficients were calculated between

responses in Section IV, question 14 and responses on

both the extent of involvement and perception of importance scales in Section II, question six of the survey instrument.

Institutional Practices and Extent of Involvement

A coefficient of .2641 (p.<001) resulted when the overall mean on the institutional practices scale was correlated with the overall mean on the extent of involvement scale for professional public and community service (see Table 21). This finding meant that, while a positive relationship between the two was present, institutional practices could account for only 6.97% of the variation in extent of involvement in professional public and community service.

When individual items on the institutional practices scale were correlated with the overall extent of involvement in professional public and community service, none of the coefficients were larger than the .2641 obtained overall (see Table 21). However, there were two coefficients which were higher than .2641 when the overall institutional practices mean was correlated with the individual item and subscale means on the extent of involvement scale. A coefficient of .2886 (P<.001) was obtained when the overall institutional practices scale was correlated with service as a part of workload. Correlation of the overall institutional practices scale with the item on ongoing projects with public

Table 21
Correlation Coefficients for
Individual Items and Subscales
Drawn from Comparison of
Institutional Practices Scale and
Extent of Involvement Scale in
Professional Public and Community Service

Item/Subscale	Correlation Coefficient
Financial compensation	.1881
Reduced workload	.1801
Consideration in tenure,promotion	.1475
Official recognition	.1396
Colleague support	.2305
Grad asst./support staff help	.1606
University transportation	.1203
Classroom/meeting space	.1481
Workload,one-shot,private	.1652
Workload, ongoing,private	.1885
Workload,one-shot, public	.2519
Workload, ongoing, public	.2793
MSU committee work	.0732
Professional organizations	.1205
Consulting,one-shot,private	.1017
Consulting, ongoing,private	.0582
Consulting,one-shot, public	.1209
Consulting, ongoing, public	.0695
Civic organizations	.1443
Community betterment	.1548
Other (fill in)	-----
Private only subscale	.1754
Public only subscale	.2573
One-shot only subscale	.2268
Ongoing only subscale	.2362
As part of workload subscale	.2886
Consulting subscale	.1106
Total scale to total scale	.2641

* P<.001

organizations yielded a coefficient of .2793 (p<.001).
These findings indicated that institutional practices
would have a slightly stronger effect on faculty and
academic staff involvement in these two areas.

Institutional Practices and Perception of Importance

The institutional practices scale was also
correlated with the perception of importance scale on
professional public and community service in Section II,
question six of the survey instrument (see Appendix A).
A coefficient of .1669 (p<.001) was found when the
overall means of the two scales were correlated (see
Table 22). This meant that less than 3% of the variation
in one could be accounted for by the variation in the
other. While this meant that a positive relationship
existed between the two, it also suggested that
institutional practices had practically no effect on
faculty and academic staff members' perception of the
importance of public and community service activities.

Several comparisons of individual items to overall
scales yielded a slightly higher correlation than the
.1669 found overall, suggesting a slightly higher degree
of relationship (see Table 22). The individual item on
colleague support in the institutional practices section
yielded a coefficient of .1691 when correlated with the
overall perception of importance scale in the
professional public and community service section. When

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Table 22
Correlation Coefficients for
Individual Items and Subscales
Drawn from Comparison of
Institutional Practices Scale and
Perception of Importance Scale in
Professional Public and Community Service

Item/Subscale	Correlation Coefficient
Financial compensation	.1127
Reduced workload	.0617
Consideration in tenure,promotion	.0930
Official recognition	.0857
Colleague support	.1691
Grad ass't./support staff help	.0968
University transportation	.1013
Classroom/meeting space	.1383
Workload,one-shot,private	.1237
Workload, ongoing,private	.1236
Workload,one-shot,public	.1710
Workload, ongoing,public	.1948
MSU committee work	.0374
Professional organizations	.0776
Consulting,one-shot,private	.0572
Consulting, ongoing,private	.0286
Consulting,one-shot,public	.0763
Consulting, ongoing,public	.0456
Civic organizations	.0955
Community betterment	.0956
Other (fill in)	-----
Private only subscale	.1089
Public only subscale	.1602
One-shot only subscale	.1441
Ongoing only subscale	.1382
As part of workload subscale	.1913
Consulting subscale	.0664
Total scale to total scale	.1669

* p<.001

the overall institutional practices scale was compared
with the item on service as part of workload, a
coefficient of .1913 resulted. A coefficient of .1710
was found when the overall institutional practices scale
was correlated with the item on one-shot programs with
public organizations.

A Spearman's rank correlation yielded a coefficient
of .6559 when overall means on the two scales were
compared using the college/unit affiliation variable.
This finding indicated that most of the relationship
which existed between the two overall scales could be
accounted for by college/unit affiliation, consistent
with previous analyses of variance findings.

Results of Analytical Questions

In order to fulfill the analytical component of the
purpose of this study, two additional research questions
were generated. They were designed to analyze
relationships, including any which may have emerged
through manipulation of the data. Examination of the
relationships in the data also yielded several important
patterns which could have a bearing on principles to be
developed or hypotheses to be generated in the
conclusions to this investigation.

11. Were there any additional relationships
which emerged from analysis of findings
of this study?

One additional relationship became of interest to
the investigator as the analysis of results progressed:
was there any discernible difference in responses made by
those classified by the university as faculty and those
classified as academic staff members?

Segregating faculty from those classified as
academic staff members for this purpose was problematic
for the following reasons: (1) while the majority of
faculty members held appointments in colleges, there was
a small number with faculty status whose primary
appointments were in other institutional units such as
lifelong education or administrative posts, and (2) while
most of those respondents who were classified as academic
staff members held appointments in administrative or
academic units other than colleges, there were a few
academic staff respondents whose primary appointments
were in colleges.

In order to achieve the best approximation of the
two separate groups of faculty and academic staff, the
decision was made to separate and compare the data from
colleges with data from other institutional units.
However, some manipulations of the data were necessary
before the comparison was made in order to more

accurately represent the two separate groups. First, the Cyclotron category was clustered with the College of Natural Science because most of the people in the Cyclotron category held faculty status in that college. Secondly, intercollegiate athletics, lifelong education, research and graduate studies, student affairs and "other" were clustered because the majority of the people in those institutional units were academic staff members rather than faculty. Finally, Cooperative Extension was left to stand alone because of its uniqueness, although the majority of its members are considered academic staff members, according to the MSU Office of Academic Personnel Records.

Cooperative Extension was considered to be unique for several reasons: (1) the nature of Cooperative Extension work is such that it involves a great deal of service to external constituents, and (2) most Cooperative Extension appointments are in counties throughout the State of Michigan, not on MSU's main campus in East Lansing. The investigator wanted to determine if these two factors might have an effect on the responses of academic staff members in Cooperative Extension that would not be present for other academic staff respondents. Consequently, Cooperative Extension was considered as a discretely separate category in order not to skew the data for other academic staff members.

Table 23
Comparison of Means on
Individual Items, Subscales and Overall Scales
in Professional Public and Community Service
and Service-Related Activities With Students
By Appointment Type

	Involvement			Importance		
	Fac.	Stf.	Ext.	Fac.	Stf.	Ext.
Wkld,one-shot,pri.	.70	.85	1.23	1.25	1.30	1.47
Wkld,ongoing,pri.	.72	.69	1.21	1.27	1.24	1.40
Wkld,one-shot,pub.	1.09	1.23	2.01	1.76	1.83	2.21
Wkld,ongoing,pub.	1.28	1.19	2.11	1.91	1.94	2.30
MSU committees	1.93	1.65	1.48	2.08	2.08	1.92
Prof.organizations	1.54	1.65	1.74	2.17	2.21	2.05
Cnslt,one-shot,pri.	.56	.60	.24	.98	1.00	.71
Cnslt,ongoing,pri.	.43	.40	.21	.97	.86	.60
Cnslt,one-shot,pub.	.56	.69	.32	1.14	1.21	.65
Cnslt,ongoing,pub.	.51	.60	.31	1.14	1.19	.65
Civic organizations	1.24	1.55	1.75	1.70	2.07	2.04
Btrment.intiat.	1.13	1.29	1.65	1.72	2.00	2.15
(*on a 3 point scale)						
Private subscale	2.36	2.50	2.86	4.27	4.34	4.10
Public subscale	3.37	3.64	4.64	5.77	6.11	5.61
One-shot subscale	2.86	3.33	3.71	4.96	5.32	4.88
Ongoing subscale	3.12	2.80	3.79	5.08	5.14	4.83
Workload subscale	3.73	3.91	6.44	6.06	6.22	7.24
Consulting subscale	2.03	2.27	1.08	3.84	4.24	2.61
(*on a 12 point scale)						
Overall means	11.49	12.18	14.09	18.33	18.54	17.77
(*on a 39 point scale)						
Field study	.97	.68	.70	2.05	2.22	2.05
Internship	1.04	1.13	.58	2.19	2.34	2.10
Practicum	.71	.91	.28	1.92	2.19	1.72
Independent study	1.18	.86	.29	1.97	1.93	1.66
Course modification	.76	.54	.19	1.55	1.53	1.41
Clinical experience	.78	.64	.25	1.88	2.04	1.86
Cross-cultural	.63	.68	.36	1.80	2.03	1.61
Service-learning	.80	.68	.41	1.78	1.92	1.74
Co-op education	.29	.38	.27	1.36	1.69	1.57
Career/service club	.64	.53	.49	1.35	1.30	1.39
(*on a 3 point scale)						
Overall means	7.62	6.73	3.79	17.11	18.07	16.22
(*on a 33 point scale)						

Following the redistribution of responses, simple statistics were computed for colleges (faculty), for other institutional units (academic staff) and for Cooperative Extension (see Table 23). Very slight but discernible differences were found when means from the three groups were compared on the extent of involvement scales in both question six and question nine of the survey instrument (see Appendix A). Those in colleges (faculty) had slightly lower means than did their colleagues (academic staff) in other institutional units. Respondents in Cooperative Extension had consistently higher means than either those in colleges or other institutional units on the professional involvement scale (except for consulting) and consistently lower means on the extent of involvement with students scale than did their colleagues in colleges and other institutional units of the university.

Differences between the three groups on the perception of importance scales for both professional service and service-related activities with students were more closely clustered. These findings regarding both perception of importance scales were consistent with previous findings in this study.

12. What patterns, if any, can be identified which may prove useful in developing recommendations to enhance achievement of service goals or in generating hypotheses for testing in further research?

There were six particular patterns in responses which could be identified through the examination of findings from the first 10 research questions in this study which could prove useful in developing recommendations to enhance achievement of service goals or in generating hypotheses for testing in further research. The six patterns were as follows:

1. Extent of involvement scores in both professional public and community service and service-related activities with students were consistently lower than perception of importance scores. In the professional public and community service section, the overall mean for extent of involvement, 11.32, was approximately five and one half points lower than the perception of importance mean, 16.87, on a 39 point scale (see Table 13). In the service-related activities with students section, the overall mean for extent of involvement, 6.98, was almost ten points lower than the overall mean for perception of importance, 16.75, on a 33 point scale (see Table 15).

2. The perception of importance ratings were relatively stable on both professional public and

community service and service-related activities with
students scales, regardless of independent variable,
while the overall means for extent of involvement
differed considerably on the two scales. The means for
perception of importance were at 16.87 on the 39 point
professional involvement scale and at 16.75 on the 33
point service-related activities with students scale (see
Table 19). Also, differences in standard deviations were
of the same relative magnitude on the perception of
importance scales in both sections, indicating a tight
clustering of responses about the mean. On the extent of
involvement scales, however, the overall mean in the
professional public and community service section was
11.32, while the overall mean in the service-related
activities with students sections was 6.98 (see Table
17).

3. The amount of variation in scores which could be
accounted for by the independent variables on the extent
of involvement scales was somewhat higher than the amount
of variation in scores which could be accounted for by
the independent variables on the perception of importance
scales. The amount of variation which could be explained
by the independent variables on extent of involvement in
professional public and community service was 13.88% (see
page 107), compared to 5.73% on the perception of
importance scale (see page 113). In the service-related

activities with students section, 10.61% of the variation
in extent of involvement could be accounted for by the
independent variables (see page 117) compared to 9.71% on
the perception of importance scale (see page 121).

4. Faculty and academic staff members' extent of
involvement in professional public and community service
activities revealed a pattern of stronger relationship
with their own perception of its importance than with any
university practices which may have an effect on such
involvement. A coefficient of .5159 was found when the
overall extent of involvement scale was correlated with
the perception of importance scale in the professional
public and community service section (see Table 14). A
coefficient of .2641 was found when overall extent of
involvement in professional public and community service
was correlated with university practices which may affect
such involvement (see Table 21).

5. College/unit affiliation was by far the
strongest overall predictor of the four identified
independent variables. Results from the analyses of
variance in each section revealed that college/unit
affiliation consistently had a stronger effect on
subjects' responses than longevity at MSU, academic rank
or appointment type (see Appendix F). In addition,
Spearman's rank correlations calculated using
college/unit affiliation found consistently higher

coefficients than those identified when the overall means were correlated.

6. Those who had been at MSU for 11-15 years scored consistently higher than any of the other longevity categories on every scale, with only one exception. Tables 3, 5, 7, and 11 showed 11-15 years as the longevity category with the highest mean. Perception of importance on the service-related activities with students scale (Table 9) is the only place in which those in the 11-15 year category did not score highest.

Results of Definitional Question

The final question on the survey instrument was one which asked for examples of recent involvement in both professional public and community service and service-related activities with students. It was expected that responses to this open-ended question would yield an understanding of what faculty and academic staff members considered to be legitimate service activities. Their responses could then be compared with the definitions of public and community service outlined in Chapter I in order to arrive at an operational definition of service for Michigan State University.

Of the 1,980 useable responses, 907 (45.8%) included answers to the optional open-ended question. In an effort to categorize the responses, a chart was created

Table 24
Summary of Results from Open-Ended Question
Regarding Recent Involvement in
Public and Community Service

Item	No. of Responses
Workload, private	304
Workload, public	631
Consulting, private	85
Consulting, public	22
MSU committees	96
Professional organizations	350
Civic/service organizations	215
Community betterment	75
Church/synagogue involvement*	120
Other#	99
Field study	48
Internship	72
Practicum	26
Independent study	47
Course modification	2
Clinical experience	21
Cross-cultural experience	14
Service learning	7
Co-op education	6
Career/service club	47

*Category not included in original listing, but appeared
   repeatedly in individual responses.
#Included such activities as jury duty, nursing home
     visits, Special Olympics, coaching, translation
     work, hospice, radio talking book, media interviews.

by the investigator which corresponded to the categories
identified in questions six and nine of the survey
instrument (see Appendix A), with one exception. It was
impossible to determine from many of the responses
whether respondents' involvement was one-time or on-
going, so this variable was not taken into consideration
when the tabulations were done. As well, it was
difficult to determine when respondents' involvement
should be considered part of workload, thus necessitating
what may appear to be some arbitrary tabulation decisions
on the part of the investigator. While it may not always
have been readily apparent where to place a particular
example, the chart provided a framework for organizing
responses to this question (see Table 24). A
representative listing of service activities may be found
in Appendix H.

Several observations about the responses in general
need to be made. First, these responses exhibited a
broad range of involvement in public and community
service. It was clear that MSU faculty and academic
staff members who chose to respond to this question were
serving their communities, the university and their
profession on the state, national and even international
levels.

Second, while few respondents listed specific
service-related activities with students, a number of

respondents stated that their public and community service activities involved students as well. Inclusion of students in service activities was most often the case in agriculture, human ecology, the medical schools and in business. For example, faculty members in veterinary medicine routinely took students with them on farm visits.

Third, it was also clear from the variety of responses that some confusion existed about what constituted public and community service and what did not. For example, a substantial number of respondents included their church involvement as an example of a service activity, although such involvement does not fit the definition of either public service or community service as outlined in Chapter I. Also, most respondents did not distinguish between activities which used professional expertise (public service) and those which were done as a private citizen (community service).

Fourth, a number of respondents stated specifically that they were involved in service activities despite a lack of university or college support for such activities. Forty-two (4.6%) of the respondents used the space provided for the open-ended question also to express their opinions about the "university's attitude" toward service (see Appendix I). The majority said that service was neither recognized nor rewarded, and a few

went so far as to say it was "given negative weight in tenure and promotion consideration." In one college, service activities could account for only 10% of workload, in another it was 15% and in a third college it was 20%, although that particular respondent thought that was "a joke" as it really "counted for nothing." A number of respondents did not perceive service as receiving the reward it should, especially in light of the university's land-grant mission.

CHAPTER V

SUMMARY, MAJOR FINDINGS, CONCLUSIONS,

IMPLICATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

Introduction

This chapter contains a summary of the purpose, structure and methodology used in this study, then presents assumptions about and limitations of the data collected. With these caveats in mind, the major findings are then presented along with conclusions which can be drawn from the major findings. The chapter concludes with implications of the study, recommendations for further research and reflections.

Summary

Purpose

The purpose of this study was to develop an understanding of the public service component of the institutional mission of Michigan State University, a land-grant institution. This purpose was achieved by developing and administering a survey of public and community service activities of MSU faculty and academic staff members during Fall Term, 1988.

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There were three primary reasons why the study was undertaken: (1) paucity of research regarding public service, (2) perceived need to clarify the concept and definition of public service, and (3) lack of concrete, comprehensive information regarding the public and community service activities of faculty and academic staff members at Michigan State University.

Structure

The study employed descriptive, relational, analytical and definitional questions to generate information from respondents. Five research questions were formulated to address the descriptive component of this study. The questions were designed to determine the extent of involvement of MSU faculty and academic staff members in public and community service activities, both personally and with and/or for students. Several questions also were included which addressed faculty and academic staff members' perceptions of the importance of such involvement both as professional activities for themselves and as learning opportunities for their students. The five descriptive questions were:

1. To what extent are MSU faculty and academic staff members involved in public and community service?

2. To what extent do MSU faculty and academic staff members consider public and community service important as professional activities?

3. To what extent are MSU faculty and academic staff members involved with students in service-related activities? In other words, if faculty and academic staff members consider public and community service involvement important for themselves, does that consideration translate into involvement with and support for students in service-related activities?

4. To what extent do faculty and academic staff members consider service-related activities to be important as learning opportunities for students?

5. Are there institutional practices which may have an effect upon faculty and academic staff members' participation in public and community service?

Five additional research questions were generated in order to identify relationships between described behaviors and perceptions which may have an effect on the achievement of the service component of the institutional mission. Several comparisons were drawn between responses on extent of involvement scales and responses on perception of importance scales in the survey instrument, as well as comparisons between responses on the institutional practices scale and responses on both scales in the professional public and community services section. The five relational research questions were:

6. What relationship exists between faculty and academic staff members' extent of involvement in public

and community service and their perception of the importance of such services as professional activities for themselves?

7. What relationship exists between faculty and academic staff members' extent of involvement with students in service-related activities and their perception of the importance of such activities as learning opportunities for students?

8. What relationship exists between extent of involvement of faculty and academic staff members in public and community service activities and the extent of their involvement with and/or for students in service-related activities?

9. What relationship exists between faculty and academic staff members' perception of the importance of professional public and community service activities and their perception of the importance of service-related activities with and/or for students?

10. What relationship exists between institutional practices and extent of faculty and academic staff members' involvement in professional public and community service activities and their perception of its importance as a professional activity?

The analytical component of the study was accomplished by generating two additional research questions which were designed to analyze relationships,

including any which may have emerged through manipulation of the data. Examination of the relationships in the data also yielded several important patterns in responses. The questions were as follows:

11. Are there any additional relationships which emerge from analysis of findings of this study?

12. What patterns, if any, can be identified which may prove useful in developing recommendations to enhance achievement of service goals or in generating hypotheses for testing in further research?

Finally, the definitional component of the study was accomplished by analyzing the results of the open-ended question which asked for examples of recent involvement in public and community service, both personally and with and/or for students. It was expected that responses to this open-ended question would yield an operational definition of service for Michigan State University (MSU).

Methodology

A survey questionnaire was developed in order to pursue responses to the 12 research questions outlined above. It was refined, pilot tested and then administered through campus mail to 3,187 subjects and through U.S. mail to 344 additional members of the faculty and academic staff, as identified by the MSU Office of Academic Personnel Records in early October,

1988. A follow-up letter requesting participation and return of the completed instrument was sent approximately two weeks later to all who had not yet responded. Of the total 3,531 instruments distributed, 2,005 were returned, of which 1,980 were useable for a 56% return rate.

The Statistical Package for the Social Sciences (SPSS-X) was used to analyze the data generated in this study. Simple statistics were computed, including means and standard deviations. Computation of correlation coefficients and analyses of variance were employed to determine the relationships among and between means in the various sections of the survey instrument.

Assumptions About and Limitations of the Data

Several assumptions were made regarding the data generated in this study which may influence the value of the resulting conclusions. First, all of the numbers assigned to variables throughout the survey were treated as interval level data.

> Interval measurement involves assigning
> numbers to objects in such a way that equal
> differences in the numbers correspond to
> equal differences in the amounts of the
> attribute measured (Glass and Hopkins, 1984,
> p. 7).

Treating the data in this manner meant that perceived differences between item scores on a single item, across items for a single individual or among all respondents

were assumed to be of the same relative magnitude. Such an assumption may not be an accurate reflection of the perceived differences in the eyes of the subjects. The data should be interpreted with caution in light of this fact.

Second, it was assumed that subjects in this study possessed a reasonably accurate perception of current university practices which may have had an effect on their participation in service activities. It was also assumed that, as they responded, the subjects possessed a reasonably accurate perception of the reward structure of the university. Expectations of the accuracy of such perceptions on the part of all respondents may be optimistic, again indicating the need to approach interpretation of the data with caution.

A number of caveats also must be taken into consideration regarding the representativeness of the respondents in this survey. First, because the subjects who chose to respond were, in a manner of speaking, self-selected, they constituted a "volunteer sample" (Borg and Gall, 1983, p. 251). Since "volunteers have been found in many studies to differ from non-volunteers [and] are likely to be a biased sample of the target population," it would seem reasonable to assume that those who chose to respond to this survey may differ from those who did not respond (Borg and Gall, 1983, p. 251). Thus, even

though the distribution of respondents was fairly representative of the population by college/unit affiliation, for example, that distribution may not necessarily mean that the respondents were representative of all of their colleagues in that particular college or unit.

Second, no effort was made to determine if those who did not participate in the study, the non-volunteers, would have provided significantly different responses to the questionnaire than did the volunteer respondents. Such an "exhaustive method" applied to the procedures used in this study could possibly have resulted in more accurate conclusions being drawn from the data (Borg and Gall, 1983, p. 254).

Third, a chi-square test could have been conducted on the frequency counts during the administration of the questionnaire, in order to determine if the returns were representative as they were being collected (Borg and Gall, 1983, p. 559). This technique would have allowed for some additional follow-up with groups which may have been under-represented at the time. As it was, only sheer luck gave the investigator a sample that was fairly representative of the population being studied.

A number of procedural problems which occurred during the administration of the survey may also have had an adverse effect upon the accuracy of the results.

First, the survey instrument itself was criticized by a number of the subjects because it did not "fit" their particular situation. For example, the investigator received telephone calls from a number of subjects in the Cooperative Extension Unit and in the medical schools who found it particularly difficult to respond to the selections they were given on the questionnaire. While these people fit the university's definition of faculty or academic staff, the unique nature of their appointments was significantly different from more typical faculty appointments, and were not accurately reflected in the questions asked. A small number of respondents also made written comments in the space provided for the open-ended question about how "poorly conceptualized" the survey instrument was.

Second, the sets of labels obtained from the Office of Academic Personnel Records were not as "clean" as the investigator would have liked. An effort was made by the investigator to correct some of the more apparent problems such as eliminating those who were on sabbatical, but it is possible that a few of the labels included in the final count of 3,531 were not valid subjects for this study. Also, the labels for the pilot test group inadvertently were not removed and ended up being used in the study itself. While the pilot test group constituted only 20 of the 3,531 subjects, it is

possible that their inclusion may have slightly skewed the final results of this study.

In light of these assumptions about and limitations of the data generated in this study, the major findings and conclusions are offered as suggestive rather than definitive.

Major Findings and Conclusions

Demographic information collected in the first section of the questionnaire revealed that respondents were very representative of the total population in relationship to the variables of full-time/part-time status and college/unit affiliation and fairly representative of the total population in relationship to the variables of type of appointment and academic rank. It was not possible to tell how accurately the respondents represented the total population in relationship to the variable of longevity at MSU since information about faculty and academic staff longevity for the total population was not available from the Office of Academic Personnel Records.

Major Findings From Descriptive Questions

The first set of five research questions was designed to describe the extent of involvement of faculty and academic staff members in both professional public and community service and in service-related activities

with and/or for students. Several of the questions also were generated to describe faculty and academic staff members' perception of the importance of such involvement both as a professional activity for themselves and as learning opportunities for students. A final question solicited responses regarding university practices which may have an effect on extent of involvement in and perception of importance of professional public and community service activities.

Results indicated that involvement in public and community service as a professional activity was fairly widespread among respondents, with an overall mean slightly higher than 11 points on a 39 point scale. Most activity was concentrated in four areas, in descending order: 1) MSU committee work, 2) involvement in professional organizations, 3) ongoing projects with public groups as a part of workload, and 4) involvement in civic organizations.

Those from traditional land-grant colleges such as Agriculture and Natural Resources and Human Ecology exhibited the highest extent of involvement in professional service activities. This finding was congruent with results from a 1986 study conducted in the University of California system, which found "relatively high participation [in] the College of Agriculture and Environmental Science" (Dowling, 1986, p. 13).

Analysis of variance for the overall scales revealed that the amount of variation which was explained by all four of the independent variables was 13.88% of the total.

The overall mean on the perception of importance scale for professional public and community service was nearly 17 points on the 39 point scale. Individual activities perceived to be most important were, in descending order: 1) involvement in professional organizations, 2) MSU committee work, 3) ongoing projects with public groups as a part of workload, and 4) one-shot programs with public groups as a part of workload. The amount of variation in responses which could be accounted for by the four independent variables was 5.73% of the total.

Involvement with students in service-related activities was not as widespread as professional involvement, with an overall mean at approximately seven points on a 33 point scale. Activities revealing the greatest extent of involvement with students were, in descending order: 1) independent study, 2) field study, 3) internship, and 4) service learning. Analysis of variance revealed that the amount of variation in respondents' scores on the extent of involvement with students scale which could be accounted for by the four independent variables was 10.61%.

An overall mean at nearly 17 points on the 33 point scale was revealed by respondents on the perception of importance scale for service-related activities with students. Individual activities perceived to be most important were, in descending order: 1) internship, 2) field study, 3) independent study, and 4) practicum. Only 9.71% of the variation in scores on the perception of importance scales could be accounted for by the four independent variables.

The final descriptive question addressed institutional practices which may have an effect on faculty and academic staff members' involvement in professional public and community service activities. The overall means in this section were at approximately seven points on a 24 point scale. Respondents found their colleagues to be more supportive of their service activities than was the university, since the item on "colleague support" had a higher overall mean than any of the individual items more directly related to university practices.

Only three of the eight items indicated support more than "rarely" from the university. They were, in descending order: 1) adequate space, 2) official recognition, and 3) tenure consideration. Only 6.06% of the variation in extent of involvement could be related to perception of institutional support.

These findings were congruent with those described
in the general literature. A 1984 study of five state
universities in Ohio found that "external service had
'very little impact' on their regular salary or on
promotion and tenure decisions" (Johnson, et al, 1984, p.
28). A 1986 study on dimensions of stress among
university faculty members at doctorate-granting
institutions found that the factor which created the
greatest amount of stress was "receiving inadequate
university recognition for community service" (Gmelch,
Wilke and Lovrich, 1986, p. 273).

Conclusions from Descriptive Questions

There was much more variation in the means on the
extent of involvement scales than there was in the means
on the perception of importance scales for all four
independent variables in both the professional public and
community service section and the service-related
activities with students section. Even though all of the
independent variables taken together seldom accounted for
more than 20% of the variation in a dependent variable,
analysis of variance revealed a stronger relationship
between the independent variables and the extent of
involvement scales than there was between the independent
variables and the perception of importance scores in both
sections. Finally, means on the extent of involvement
scales were consistently lower than means on the

perception of importance scales for all four independent

variables in both sections.

These patterns of responses would support the

following conclusions:

> 1) there was a shared university-wide value
> present regarding the perceived importance of
> public and community service which transcended
> longevity at MSU, academic rank, appointment
> type and even college/unit affiliation (the
> strongest indicator of the four independent
> variables); and
>
> 2) while respondents considered professional
> service involvement to be quite important and
> service-related activities with students to be
> particularly important, opportunities offered
> (or taken) to enact those values varied
> considerably, especially when considered
> college/unit by college/unit.

Major Findings From Relationship Questions

The second set of research questions was designed to

identify relationships between the extent of involvement

scales and perception of importance scales for

professional public and community service and for

service-related activities with students. Comparisons

were also drawn between the university practices scale

and the two scales in the professional public and

community service section (see Appendix G).

Pearson correlations calculated on the overall means

on the extent of involvement scale and the perception of

importance scale in the professional public and community

service section yielded a coefficient of .5159 (p<.001).

A coefficient of this size meant that 26.6% of a

respondent's involvement in service activities could be associated with his/her perception of its importance as a professional activity.

A Spearman's rank correlation coefficient of .9059 was determined when means on the two scales were compared taking only college/unit affiliation into account (see Appendix G). A coefficient of this magnitude indicated a very strong positive relationship between extent of involvement and perception of importance of professional public and community service by college/unit affiliation.

A Pearson correlation between overall means for the extent of involvement scale and perception of importance scale in the service-related activities with students section yielded a coefficient of .3681 (p<.001). Coefficients calculated between individual item means were all higher, however (except the item on co-op education), indicating that there were points of stronger relationship between extent of involvement and perception of importance on each individual item than was found overall.

A coefficient of .4346 was found when the overall means for the two extent of involvement scales were correlated. However, none of the coefficients generated when individual items were compared were higher than that found when the two scales were compared overall.

A correlation calculated between the overall means on the two perception of importance scales yielded a coefficient of .4378. None of the individual item correlations yielded a coefficient of this size. Spearman's rank correlation computations yielded a coefficient of .7012 when means on the two perception of importance scales were compared college/unit by college/unit, indicating a fairly strong relationship between the two means when only that variable was taken into consideration (see Appendix G).

A coefficient of .2641 resulted when a correlation was computed between the overall university practices scale and the extent of involvement in professional public and community service scale. A coefficient of .1691 was found when the overall university practices scale and the perception of importance scale in professional public and community service were compared. Both coefficients indicated a positive but relatively weak relationship existed between the two overall scales. However, when only college/unit affiliation was taken into consideration, Spearman's rank correlation coefficients were .6868 and .6559 respectively (see Appendix G). Coefficients of this size indicated a fairly strong positive relationship between the two means when comparisons were made college/unit by college/unit.

Conclusions From Relationship Questions

These major findings indicated that a fairly strong relationship existed between faculty and academic staff members' extent of involvement in professional public and community service activities and their perception of the importance of such activities. A positive relationship also existed between involvement in professional public and community service and involvement with students in service-related activities.

The strength of relationship between respondents' perception of institutional practices and their extent of involvement in public and community service activities was tenuous at best when overall means were correlated. There was even less of a relationship between their perception of university practices and their perception of the importance of public and community service as professional activities. However, the strength of the relationship between the university practices scale and both scales in the professional public and community service section was considerably greater when college/unit affiliation alone was taken into consideration.

These patterns of responses would support the following conclusions:

> 1) if the university wished to increase involvement in public and community service, it would do well to capitalize on the university-wide shared value of the importance of service.

2) there must be other factors at work beside university practices which motivated involvement in both professional public and community service and service-related activities with students.

Other factors which motivated involvement in service activities may include such things as a sense of personal gratification from such involvement, a motivation to contribute to the improvement of the community or university or profession itself, or the desire for students to benefit from involvement in learning activities which take them beyond the traditional classroom or laboratory.

Major Findings From Analytical Questions

Two research questions were designed to analyze relationships which had emerged in the data, both those previously identified and those relationships which developed as data analysis progressed. Patterns in responses which emerged through such analysis were also identified.

The question which became of interest to the investigator as the data analysis progressed was if there were any discernible differences between responses made by faculty, by academic staff and those in Cooperative Extension. Results indicated that there were slight but discernible differences in responses on the two extent of involvement scales, but practically no differences on the perception of importance scales.

Analysis of results from the first ten research questions yielded six particular patterns of responses which were considered to be of importance. They were:

1. Extent of involvement scores in both professional public and community service and service-related activities with students were lower than perception of importance scores.

2. The perception of importance ratings were relatively stable on both professional public and community service and service-related activities with students scales, regardless of independent variable, while the overall means for extent of involvement differed considerably on the two scales.

3. The amount of variation in scores which could be accounted for by the independent variables on the extent of involvement scales was somewhat higher than the amount of variation in scores which could be accounted for by the independent variables on the perception of importance scales.

4. Faculty and academic staff members' extent of involvement in professional public and community service activities revealed a pattern of stronger relationship with their own perception of its importance than with any university practices which could have had an effect on such involvement.

5. College/unit affiliation was by far the strongest overall predictor of the four independent variables.

6. Those respondents who had been at MSU for 11-15 years scored consistently higher than any of the other longevity categories on every scale with only one exception, that being on the perception of importance of service-related activities with students scale.

Conclusions From Analytical Questions

Most of the conclusions which could be drawn from the patterns identified in this section have already been

presented in previous sections. The only additional

conclusion which could be drawn from these patterns would

be:

> 1) because respondents who have been at the
> university for 11-15 years were more involved
> in service activities and considered them more
> important than any other longevity category,
> they would be most likely to cooperate in any
> attempts by the university to strengthen the
> service component of the institutional mission.

The purpose of identifying these important patterns

in responses was to determine if any of the patterns

would prove useful in developing recommendations to

enhance achievement of service goals or in generating

hypotheses for testing in further research. These

recommendations and hypotheses are presented under

"Implications of the Study" and "Recommendations for

Further Research."

Major Findings From Definitional Question

The final research question was open-ended and asked

respondents to list specific examples of recent

professional public and community service involvement as

well as involvement in service-related activities with

students. It was expected that responses to this open-

ended question would yield an understanding of what

faculty and academic staff members considered to be

legitimate service activities.

Approximately 46% of the respondents chose to

complete this question. From their responses emerged the

following findings:

1. Responses were quite varied and indicated a broad range of activities which served the respondents' communities, the university and their professions.

2. A small but noticeable number of respondents indicated that their public and community service activities offered the opportunity to involve their students as well.

3. There was some confusion about what constituted public and community service and what did not. Also, most respondents did not or could not distinguish between activities which used professional expertise (public service) and those which were done as a private citizen (community service).

4. A small but noticeable number of respondents stated specifically that they were involved in service activities despite a lack of university or college support for such activities.

Conclusions From Definitional Question

Soliciting responses on an open-ended basis as this study did only served to identify the confusion which exists regarding what constitutes public and community service and what does not. The variety of responses to this question led the investigator to conclude that the expectation of developing an operational definition of public and community service for Michigan State University from responses was not met. In this regard, the need to clarify what constitutes public and community service still exists at MSU. The investigator would offer the definitions by Crosson outlined in Chapter I as appropriate for a land-grant institution such as Michigan

State University. Her definitions were as follows:

> 1) **College or university service:** committee or
> other governance activities internal to the
> department, college, school or campus related
> to program development and institutional
> policy;
>
> 2) **Professional service:** committee, editorial,
> or other work for national or regional
> professional associations and/or academic
> disciplines;
>
> 3) **Public service:** activities other than basic
> research and teaching involving direct
> relationships with groups external to the
> academic community (Crosson, 1983, p.5).

In addition, the definition of community service outlined

in Chapter I is offered for consideration:

> **Community service:** the voluntary performance
> of civic duties (or as the Carnegie Commission
> called them "citizen tasks") by faculty and
> academic staff as individual members of the
> community, which may or may not involve use of
> their professional expertise.

Implications of the Study

As a result of the major findings and conclusions

drawn from this study, the investigator would offer the

following recommendations for enhancing the achievement

of the service goals of Michigan State University:

1. Capitalize upon the shared value regarding the

importance of service activities which already is present

university-wide. The perception of the importance of

service appears to be well imbued among faculty and

academic staff members and only needs encouragment from

the central administration, college deans, department chairs and unit heads for the extent of involvement in service activities to increase.

2. Encourage further development of the personal value of service by emphasizing and supporting the value service is given by the university. This emphasis and support on the part of the university should take the form of increased reward for faculty and academic staff members for being involved in service activities and increased recognition as well.

3. Efforts to encourage more involvement in service activities by increasing reward and recognition should be directed through the college deans, department chairs and unit heads. A determination also needs to be made at the dean and central administration level if there should be flexibility in how much weight is given to service activities college by college or if there should be application of a university-wide standard.

4. Utilize faculty and academic staff members who have been at the university for 11-15 years, are already tenured and have more access to university resources to serve as role models and possibly as mentors to younger faculty and academic staff members in service activities.

5. The central administration needs to make a concerted effort to create operational definitions of public service and of community service, clearly

differentiate the two, then work toward making all
university policies and procedural documents consistent
in their use and application of those definitions.

Recommendations for Further Research

Identification of important patterns in the results
of this study have led the investigator to make the
folowing hypotheses:

1. Expectations and constraints which faculty and
academic staff members experience in their particular
positions greatly condition the level of their
participation in public and community service activities.
Therefore, the investigator recommends that further study
of MSU faculty and academic staff members' extent of
involvement in service activities and their perception of
the importance of such activities be undertaken, but at
the departmental rather than college/unit level.

2. Extent of involvement in public and community
service would be conditioned by such issues as how easily
the academic subject matter of the department would lend
itself to service involvement, how much weight service
activities would be given in tenure and promotion
considerations, and whether the department chair was
perceived as favoring service involvement.

3. If such a study were undertaken at the
departmental level at MSU, the perception of importance

of service activities would remain relatively stable, as
it has done in the current study.

Results from the current study indicated that there
was a very tenuous relationship between university
practices and a respondent's extent of involvement in
service activities and even less of a relationship
between university practices and the respondent's
perception of the importance of service activities. Such
findings suggest that further research needs to be done
on what other factors are at work besides university
practices which may have an effect on both extent of
involvement and perception of importance of service
activities.

Analysis of variance results in the current study
indicated that seldom did the four identified independent
variables account for more than 20% of the variation in
any particular dependent variable. This finding would
suggest that further research would be in order, aimed at
identifying what other independent variables may effect
participation in service activities.

If the current study were to be replicated in the
future, the investigator would recommend the following
changes be made. First, accurate and agreed upon
definitions of public service, community service and
service-related activities should be included in the
questionnaire, in order to eliminate the confusion which

resulted in the current study. This action may also eliminate the need for the open-ended question. Secondly, full-time or part-time status should be eliminated as one of the independent variables since it was found not to be particularly applicable in the current study. Finally, the auxiliary questions in both the professional public and community service section and the service-related activities with students section should be eliminated since they did not provide information of particular importance to the study.

Reflections

Although this research project became much more complex than it was originally intended to be, nevertheless it led to some rather simple conclusions. Throughout the process of data collection and analysis, it became clear to the investigator that faculty and academic staff members at Michigan State University by and large had a genuine desire to serve their community, their profession and the university. It was, in fact, immensely gratifying to see the broad range of activities in which MSU faculty and academic staff members participate.

These observations led the investigator to wonder what created or contributed to the underlying value given to service activities university-wide. Was it created in

part by a feeling of obligation on the part of faculty to give back to the state because they are employed at a public institution? Would any difference be found if this study were replicated at a private institution? How much (if any) of the shared value of service was generated by faculty members' belief in the traditional land-grant mission of the institution? Did the fact that the current provost came from one of the traditional land-grant colleges (Agriculture and Natural Resources) have any bearing on current faculty perceptions of the importance of service? While these questions are purely speculative, they are nonetheless intriguing.

The other message that came through loud and clear from this study was the frustration faculty and academic staff members feel with the current reward system. Many believed strongly that participation in service activities was not adequately rewarded by the university. They expressed frustration with what they perceived as the radical difference between what the university officially says is important and what activities actually are rewarded. As one respondent expressed it, "I'd like to work in the kind of university that President DiBiaggio describes."

While this problem is not unique to Michigan State University, it did prompt several questions in the investigator's mind. First, if service really were

rewarded adequately, how much more involved would MSU faculty and academic staff members be in service activities? Second, if an effort were made to bring more congruence between what is espoused and what is rewarded, which should change? Since research is currently what is rewarded, should the traditional land-grant mission of the institution be abandoned and changed to fit the research university mold? Or since teaching and service are also integral parts of the land-grant mission of the institution, should the reward structure be revamped to genuinely reflect involvement in all three? A strong argument would be made for the latter course of action by this investigator.

As with almost all research, this investigation raised more questions that it answered. However, it did prove to be a genuinely challenging and informative project.

APPENDICES

● ●

PUBLIC AND COMMUNITY SERVICE
ACTIVITIES OF ACADEMIC PERSONNEL
AT MICHIGAN STATE UNIVERSITY

INTRODUCTION:

This survey is being conducted by the Campus Compact/Public and Community Service Committee in order to assess faculty and academic staff involvement in public and community service activities. In addition, we are interested in knowing what you do in support of students in service-related activities. Finally, we would like to identify University practices which may affect faculty involvement in public and community service activities. Completing this survey will take only a few minutes of your time. Thank you in advance for your help.

Your participation in the survey is entirely voluntary. Your responses are completely anonymous and will not be linked to your name or university records in any way.

Please complete the questionnaire and return it in the enclosed envelope to the OFFICE OF THE PRESIDENT, 450 ADMINISTRATION BUILDING, before November 1, 1988.

DIRECTIONS:

When you mark your answers, please be sure to . . .

- Use a #2 black lead pencil only

- Make heavy black marks that fill the circle completely

- Erase any changes completely

- Make no stray marks on the answer sheet

- Unless indicated otherwise, please mark only one answer per question

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SECTION I: BACKGROUND INFORMATION

1. For how many years have you held an academic appointment at Michigan State University?

    ① 0 years (just beginning this year)
    ② 1-5 years
    ③ 6-10 years
    ④ 11-15 years
    ⑤ 16 or more years

2. Is your appointment at MSU full-time or part-time for the 1988-89 academic year?

    ① Full-time
    ② Part-time

3. Please indicate the type of appointment you hold. (MARK ONE ONLY).

    ① Faculty member—currently tenured
    ② Faculty member—not tenured but in the tenure stream
    ③ Faculty member—not tenured, not in the tenure stream
    ④ Specialist—have job security
    ⑤ Specialist—do not have job security

1

4. What is your academic rank?

① Professor
② Associate Professor
③ Assistant Professor
④ Instructor
⑤ Specialist
⑥ Other (please specify) _____

5. Please identify the college/division in which you hold your appointment. If a joint appointment, mark the one in which you hold the major responsibility. (MARK ONE ONLY).

①	Agriculture & Nat. Res.	⑬	Social Science
②	Arts and Letters	⑭	Veterinary Medicine
③	Business	⑮	Urban Affairs & Prog.
④	Communication A&S	⑯	Cooperative Education
⑤	Education	⑰	Cyclotron
⑥	Engineering	⑱	Intercollegiate Athletics
⑦	Human Ecology	⑲	Lifelong Education
⑧	Human Medicine	⑳	Provost
⑨	James Madison	㉑	Research/Grad. Studies
⑩	Natural Science	㉒	Student Affairs & Serv.
⑪	Nursing	㉓	Other
⑫	Osteopathic Medicine		

SECTION II: PROFESSIONAL PUBLIC AND COMMUNITY SERVICE ACTIVITIES

6. MSU faculty and academic staff often contribute their time and expertise in both public and community service activities. Listed below are some typical examples of such activities. They include: (a) activities considered as part of your workload, (b) activities apart from your acknowledged load* and, (c) community service activities.

*Because university documents take a variable stand on the role of private consulting, it has been included here.

In the column on the left, please indicate your degree of involvement in the activity during the present academic year. In the column on the right, please indicate what you believe is its degree of importance as a professional activity.

4 High degree of involvement/importance
3 Moderate degree of involvement/importance
2 Low degree of involvement/importance
1 No involvement; does not apply/not important at all

④③②①	As part of my workload, take my expertise and apply it in a **one-shot** project for a **private** organization.	④③②①
④③②①	As part of my workload, take my expertise and apply it in an **on-going** project for a **private** organization.	④③②①
④③②①	As part of my workload, take my expertise and apply it in a **one-shot** project for a **public** organization.	④③②①
④③②①	As part of my workload, take my expertise and apply it in an **on-going** project for a **public** organization.	④③②①
④③②①	Serve on departmental, college and/or university-wide committees.	④③②①

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④③②①   Become involved (beyond just being a member) in a state and/or national professional organization.   ④③②①

④③②①   Apart from my acknowledged load, take my expertise and apply it in a **one-shot** project for a **private** organization, for which I receive personal payment.   ④③②①

④③②①   Apart from my acknowledged load, take my expertise and apply it in an **on-going** project for a **private** organization, for which I receive personal payment.   ④③②①

④③②①   Apart from my acknowledged load, take my expertise and apply it in a **one-shot** project for a **public** organization, for which I receive personal payment.   ④③②①

④③②①   Apart from my acknowledged load, take my expertise and apply it in an **on-going** project for a **public** organization, for which I receive personal payment.   ④③②①

④③②①   Involvement in and contribution of my services to local, state or national civic/service organizations.   ④③②①

④③②①   Involvement in local or state initiatives for the betterment of the community, i.e. environmental concerns, political representation, legislation, etc.   ④③②①

④③②①   Other (please explain) _____   ④③②①

_____

_____

7. If you are involved at all in public and community service activities, please indicate which of these responses is most true for you: (MARK ONE ONLY)

    ① I am satisfied with my level of involvement in public and community service.
    ② I would like to get more involved in public and community service activities.
    ③ I anticipate that my future involvement in public and community service will decrease.

8. If you are **not** involved in any public and community service activities, please indicate why: (check ALL that apply)

    ① My workload is too heavy to allow for involvement.
    ② Public service does not receive enough consideration in tenure/promotion decisions.
    ③ There are no relevant projects at the present time.
    ④ I am not interested in getting involved.
    ⑤ Other (please describe) _____

_____

    ⑥ Does not apply

3

SECTION III: SERVICE-RELATED ACTIVITIES AS LEARNING OPPORTUNITIES FOR STUDENTS

9. Opportunities for students to participate in experiential learning situations often involve service-related activities. Listed below are a number of such opportunities.

In the column on the left, please indicate your **degree of involvement** with students in each activity during the current academic year. In the column on the right, please indicate its **degree of importance** as a learning opportunity for students

    ₄ High degree of involvement/importance
    ₃ Moderate degree of involvement/importance
    ₂ Low degree of involvement/importance
    ₁ No involvement; does not apply/not important at all

④③②①   FIELD STUDY (A learning experience arranged by an instructor for a student to carry out a project outside the classroom by observation, participation in a work experience or field research)   ④③②①

④③②①   INTERNSHIP (Professional activity under general supervision of an experienced professional, with a high degree of responsibility placed on the student; involves placement as a professional in a job or job-like situation)   ④③②①

④③②①   PRACTICUM (A graduate level internship under the direction of a faculty member with equivalent or higher degree)   ④③②①

④③②①   INDEPENDENT STUDY (Highly individualized planned study which is not addressable through any other format)   ④③②①

④③②①   COURSE MODIFICATION (A learning experience which is arranged by the class instructor in which a student carries out a project as a required assignment or as an alternative for a class requirement)   ④③②①

④③②①   CLINICAL EXPERIENCE (Observation and practice in professional setting under the supervision of an experienced professional, i.e. extern, student teaching)   ④③②①

④③②①   CROSS-CULTURAL EXPERIENCE (Student involvement in another culture or sub-culture of his/her own society in a deep and significant way)   ④③②①

④③②①   SERVICE/LEARNING (Experience which meets a real or established need while supporting the student's career-related or academic needs)   ④③②①

④③②①   CO-OP EDUCATION (Paid work experience for a student in a specific career field, i.e. technical)   ④③②①

④③②①   CAREER OR SERVICE RELATED CLUB OR ORGANIZATION (Advising an activity in the co-curriculum, i.e. service honorary, club or fund-raising event)   ④③②①

④③②①   OTHER (Please describe briefly) _____   ④③②①

_____

_____

_____

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10. Overall, approximately HOW MANY students do you assist in a typical
    academic year (September-June) who are engaged in service-related activities?

    ① no students; does not apply ⑤ 50-74 students
    ② 1-12 students   ⑥ 75-99 students
    ③ 13-24 students   ⑦ 100 or more students
    ④ 25-49 students

11. If you do assist students involved in service-related activities, are they
    primarily:

    ① undergraduate
    ② graduate
    ③ both
    ④ does not apply

12. How many credit hours toward an undergraduate degree should a student be
    allowed to earn through service-related activities?

    ① none; no credit hours   ④ 7-9 credit hours
    ② 1-3 credit hours   ⑤ 10-12 credit hours
    ③ 4-6 credit hours   ⑥ 13-15 credit hours

13. How many credit hours toward a graduate degree should a student be allowed
    to earn through service-related activities?

    ① none; no credit hours   ④ 7-9 credit hours
    ② 1-3 credit hours   ⑤ 10-12 credit hours
    ③ 4-6 credit hours   ⑥ 13-15 credit hours

SECTION IV: INSTITUTIONAL PRACTICES WHICH AFFECT PARTICIPATION IN PUBLIC AND COMMUNITY SERVICE ACTIVITIES

14. MSU faculty and academic staff who are involved in public and community ser-
    vice activities or support service-related learning opportunities for students often
    find that there are institutional practices which may affect such involvement.
    Using the scale below, please indicate your assessment of the practices listed.

    4 This is often the case
    3 This is sometimes the case
    2 This is rarely the case
    1 This is never the case

    ④③②①   I receive financial compensation from the University
                 for public and community service

    ④③②①   I am given a reduced courseload/workload or release
                 time for public and community service

    ④③②①   Public and community service receive consideration
                 in tenure, promotion decisions

    ④③②①   Public and community service receive official recogni-
                 tion by my department/school chairperson, dean or
                 supervisor

    ④③②①   My colleagues support my involvement in public and
                 community service activities

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④③②①   Graduate assistant and/or support staff help is
available to me for service-related activities

④③②①   University transportation is available to me for
service-related activities

④③②①   Adequate and appropriate meeting/classroom space
is available to me for service-related activities

④③②①   Other (please specify) _____

_____

_____

SECTION V: SPECIFIC EXAMPLES OF PUBLIC AND COMMUNITY SERVICE ACTIVITIES

15.   Please use the space below to describe specific public and community service
activities in which you have been engaged during the past year, both personally
and with/for students.

AGAIN, THANK YOU FOR TAKING THE TIME TO FILL OUT THIS SURVEY. YOUR ANSWERS WILL REMAIN STRICTLY
ANONYMOUS. PLEASE RETURN THE COMPLETED SURVEY IN THE ENVELOPE PROVIDED TO THE OFFICE OF THE
PRESIDENT, 450 ADMINISTRATION BUILDING, BY NOVEMBER 1, 1988.

6

ADVANCE LETTER

MICHIGAN STATE UNIVERSITY

OFFICE OF THE PRESIDENT   EAST LANSING • MICHIGAN • 48824-1046

September 12, 1988

MEMORANDUM

TO: MSU Faculty and Academic Staff

FROM: John DiBiaggio, President

SUBJ: Public and Community Service Survey

In about three weeks we will be circulating a survey to you in order to
assess faculty and academic staff attitudes toward and involvement in
public and community service activities. The purpose of the survey is to
develop a comprehensive picture of the importance of public and community
service to MSU academic personnel and what you do in support of this part
of our land-grant mission. This information will be important to give us
a baseline assessment of faculty involvement and attitudes before a proposed
major review of public service is undertaken during the 1989-90 academic year.

In order to provide the most comprehensive data possible, we have chosen
to survey all faculty and academic staff, as was done with the CRUE survey
last year. The broadest possible participation is needed to give us an
accurate picture of current attitudes and practices. Your help and
cooperation will be greatly appreciated.

As a part of the survey, we are also requesting information about your
support for students in their involvement in service-related activities.
As a national leader in student voluntary and community service involve-
ment, MSU provides numerous opportunities for students to integrate their
classroom learning with practical experience.

Finally, the survey will ask about University practices that either encourage
or discourage faculty involvement in public and community service. We are
interested in identifying problem areas that may then be addressed in the
proposed comprehensive review in 1989-90.

The Campus Compact/Public and Community Service Committee (a subcommittee
of the Career Planning and Placement Council) developed the survey. The
summaries of responses will be shared with the committee in some detail
so that they might make recommendations for possible changes through the
appropriate channels.

Thank you in advance for your cooperation.

JD:ca

COVER LETTER

MICHIGAN STATE UNIVERSITY
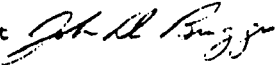
October 10, 1988

MEMORANDUM

TO: MSU Faculty and Academic Staff

FROM: John DiBiaggio, President

SUBJ: Public and Community Service Survey

In an effort to assess faculty attitudes toward and involvement in public
and community service, we are sending the enclosed questionnaire to you.
The purpose of the survey is to develop a comprehensive picture of the
importance of public and community service to MSU academic personnel and
what you do in support of this part of our land-grant mission. In addition
to providing this baseline assessment, we hope to identify possible con-
cerns which can then be addressed when a proposed major review of public
service is undertaken during the 1989-90 academic year.

In order to yield the most comprehensive data possible, we have chosen to
survey all faculty and academic staff, as was done with the CRUE survey
last year. The broadest possible participation is needed to give us an
accurate picture of current attitudes and practices. Your help and
cooperation will be greatly appreciated.

Your participation in the survey is voluntary. Should you choose to partici-
pate, please complete and return the survey in the envelope provided. Your
responses will not be linked to your name or university records in any way.
Only aggregate data will be used in reporting survey results. Dr. Marylee
Davis, my Executive Assistant, and her graduate assistant are the only ones
authorized to have access to the entire data in detail.

In order to monitor progress and avoid duplication in mailing our follow-up
materials, we are enclosing a postcard which you should return separately
from your completed survey. There is a place to check on the card if you
would like a summary of the results. After all the surveys have been
received, the cards will be destroyed so there will be no record of who
participated in the survey.

Based on experience from pilot testing this survey, it should take only
about 15-20 minutes of your time. For many of you it will take even less,
since not all sections of the survey will be applicable to each of you.

*Please complete the survey as soon as possible and return it in the
enclosed self-addressed envelope.*

If you have any questions or any of the necessary materials are missing,
please feel free to call 5-6560 for assistance.

Thank you in advance for your time and cooperation.

JD:ca   MSU is an Affirmative Action/Equal Opportunity Institution

SAMPLE RETURN POSTAL CARD

Please return this postcard AFTER you have completed and returned the Public and Community Service survey to the Office of the President.
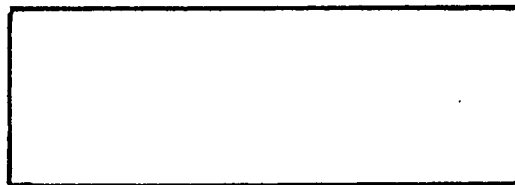
□ If you would be interested in receiving a summary of the survey results, please check the box at the left.

THANK YOU ONCE AGAIN FOR YOUR HELP AND COOPERATION.

O-17685

OFFICE OF THE PRESIDENT
Attn: Dr. Marylee Davis
Executive Assistant to the President
and Secretary of the Board of Trustees
450 Administration Building
CAMPUS

FOLLOW-UP LETTER

MICHIGAN STATE UNIVERSITY

October 24, 1988

MEMORANDUM

TO: MSU Faculty and Academic Staff

FROM: Marylee Davis, Ph.D. *Marylee*
       Executive Assistant to the President
       and Secretary of the Board of Trustees

SUBJ: Public and Community Service Survey

About two weeks ago you should have received in campus mail a copy of
the Public and Community Service Survey, accompanied by a letter of
explanation and instructions from President DiBiaggio.

According to our records, we have not yet received the return postcard
telling us that you have completed and returned the survey. Of course
it is possible that the card was misplaced or lost and you have in fact
returned your survey. If this is the case, would you please give us a
call at 5-6560 and let us know so we will not need to contact you again
needlessly.

If you have not yet completed the survey, won't you take the time right
now to complete it? Your participation is needed to provide us with an
accurate assessment of faculty and staff attitudes toward public and
community service and your involvement in service-related activities.

If you did not receive a copy of the survey or have mislaid it, please
feel free to call us here at 5-6560 and we will send you another copy
as soon as possible.

I can attest to the value placed on service-related activities on this
campus. We are very proud to be among the nation's leaders in this area.
However, we do not yet have concrete data to share with other institutions
regarding the extent of our faculty's involvement in public and community
service. This survey will help to supply us with concrete data.

Thank you for taking the time to complete and return your Public and
Community Service Survey.

MLD:ca

Table 25
Results From Analysis of Variance
For Descriptive Questions

Question 1

Involvement: Overall Scale		Sum of Squares
by Longevity		718.585
Appointment Type		83.413
Academic Rank		560.571
College/Unit Affiliation		6545.855
Explained	(13.88%)	10889.192
Residual		67590.254
Total		78479.446

Involvement: Workload,One-Shot,Private		Sum of Squares
by Longevity		4.335
Appointment Type		.760
Academic Rank		6.520
College/Unit Affiliation		88.140
Explained	(8.17%)	114.385
Residual		1284.401
Total		1398.785

Involvement: Workload,Ongoing,Private		Sum of Squares
by Longevity		.295
Appointment Type		1.639
Academic Rank		10.258
College/Unit Affiliation		84.373
Explained	(6.23%)	102.070
Residual		1536.168
Total		1638.237

Involvement: Workload,One-Shot,Public		Sum of Squares
by Longevity		6.260
Appointment Type		3.867
Academic Rank		12.858
College/Unit Affiliation		196.703
Explained	(13.32%)	253.680
Residual		1650.784
Total		1904.464

Involvement: Workload,Ongoing,Public		Sum of Squares
by Longevity		7.158
Appointment Type		5.441
Academic Rank		5.960
College/Unit Affiliation		265.361
Explained	(14.32%)	334.304
Residual		1999.451
Total		2333.754

Involvement: MSU Committees		Sum of Squares
by	Longevity	15.007
	Appointment Type	17.004
	Academic Rank	31.500
	College/Unit Affiliation	77.090
	Explained (20.58%)	350.416
	Residual	1352.425
	Total	1702.841

Involvement: Professional Organiz.		Sum of Squares
by	Longevity	23.822
	Appointment Type	6.113
	Academic Rank	22.624
	College/Unit Affiliation	78.003
	Explained (9.83%)	201.045
	Residual	1843.005
	Total	2044.050

Involvement: Cnsltng,One-Shot,Private		Sum of Squares
by	Longevity	5.249
	Appointment Type	1.985
	Academic Rank	7.684
	College/Unit Affiliation	37.759
	Explained (7.88%)	83.826
	Residual	979.301
	Total	1063.128

Involvement: Cnsltng,Ongoing,Private		Sum of Squares
by	Longevity	2.872
	Appointment Type	2.890
	Academic Rank	4.731
	College/Unit Affiliation	27.693
	Explained (6.12%)	60.013
	Residual	921.124
	Total	981.137

Involvement: Cnsltng,One-Shot,Public		Sum of Squares
by	Longevity	4.589
	Appointment Type	1.063
	Academic Rank	7.252
	College/Unit Affiliation	39.600
	Explained (7.20%)	79.639
	Residual	1027.973
	Total	1107.612

Involvement: Cnsltng,Ongoing, Public		Sum of Squares
by	Longevity	5.052
	Appointment Type	1.000
	Academic Rank	6.574
	College/Unit Affiliation	36.927
	Explained (5.76%)	68.671
	Residual	1123.333
	Total	1192.004

Involvement: Civic Organizations		Sum of Squares
by	Longevity	13.772
	Appointment Type	6.282
	Academic Rank	.909
	College/Unit Affiliation	100.727
	Explained (8.98%)	164.918
	Residual	1671.684
	Total	1836.602

Involvement: Betterment Initiatives		Sum of Squares
by	Longevity	21.899
	Appointment Type	2.280
	Academic Rank	9.589
	College/Unit Affiliation	67.429
	Explained (8.48%)	150.957
	Residual	1629.592
	Total	1780.549

Involvement: Private Only Subscale		Sum of Squares
by	Longevity	29.568
	Appointment Type	14.211
	Academic Rank	88.236
	College/Unit Affiliation	589.845
	Explained (7.15%)	832.698
	Residual	10804.074
	Total	11636.773

Involvement: Public Only Subscale		Sum of Squares
by	Longevity	70.193
	Appointment Type	12.612
	Academic Rank	91.794
	College/Unit Affiliation	1341.130
	Explained (11.65%)	1739.252
	Residual	13188.172
	Total	14927.423

Involvement: One-Shot Only Subscale	Sum of Squares
by Longevity	66.948
Appointment Type	2.568
Academic Rank	100.135
College/Unit Affiliation	739.007
Explained (9.26%)	1083.000
Residual	10616.960
Total	10699.960

Involvement: Ongoing Only Subscale	Sum of Squares
by Longevity	36.538
Appointment Type	8.509
Academic Rank	70.617
College/Unit Affiliation	855.887
Explained (9.41%)	1116.468
Residual	10753.776
Total	11870.244

Involvement: Workload Only Subscale	Sum of Squares
by Longevity	56.127
Appointment Type	4.808
Academic Rank	97.220
College/Unit Affiliation	1970.549
Explained (14.73%)	2539.350
Residual	14696.199
Total	17235.549

Involvement: Consulting Only Subscale	Sum of Squares
by Longevity	53.262
Appointment Type	15.398
Academic Rank	77.141
College/Unit Affiliation	414.184
Explained (8.88%)	967.221
Residual	9920.612
Total	10887.834

Question 2

Importance: Overall Scale	Sum of Squares
by Longevity	366.766
Appointment Type	36.015
Academic Rank	123.496
College/Unit Affiliation	4601.762
Explained (5.73%)	5224.335
Residual	85883.799
Total	91108.134

Importance: Workload,One-Shot,Private		Sum of Squares
by	Longevity	1.367
	Appointment Type	2.158
	Academic Rank	3.354
	College/Unit Affiliation	50.798
	Explained (4.17%)	63.133
	Residual	1451.802
	Total	1514.934

Importance: Workload,Ongoing,Private		Sum of Squares
by	Longevity	4.056
	Appointment Type	1.857
	Academic Rank	3.722
	College/Unit Affiliation	65.094
	Explained (4.58%)	74.855
	Residual	1560.441
	Total	1635.296

Importance: Workload,One-Shot,Public		Sum of Squares
by	Longevity	9.282
	Appointment Type	2.543
	Academic Rank	4.502
	College/Unit Affiliation	56.611
	Explained (5.76%)	87.545
	Residual	1431.205
	Total	1518.750

Importance: Workload,Ongoing,Public		Sum of Squares
by	Longevity	7.925
	Appointment Type	1.341
	Academic Rank	2.237
	College/Unit Affiliation	133.036
	Explained (9.90%)	154.949
	Residual	1410.519
	Total	1565.468

Importance: MSU Committees		Sum of Squares
by	Longevity	.967
	Appointment Type	2.149
	Academic Rank	3.170
	College/Unit Affiliation	20.212
	Explained (2.74%)	33.576
	Residual	1192.222
	Total	1225.798

Importance: Professional Organizations by	Sum of Squares
Longevity	4.219
Appointment Type	1.509
Academic Rank	8.930
College/Unit Affiliation	35.398
Explained (4.06%)	51.015
Residual	1205.792
Total	1256.807

Importance: Cnsltng,One-shot,Private by	Sum of Squares
Longevity	3.896
Appointment Type	2.763
Academic Rank	8.961
College/Unit Affiliation	39.299
Explained (4.74%)	65.704
Residual	1320.718
Total	1386.422

Importance: Cnsltng,Ongoing,Private by	Sum of Squares
Longevity	6.334
Appointment Type	2.002
Academic Rank	6.364
College/Unit Affiliation	45.287
Explained (5.45%)	75.667
Residual	1312.026
Total	1387.693

Importance: Cnsltng,One-Shot,Public by	Sum of Squares
Longevity	2.515
Appointment Type	1.206
Academic Rank	8.601
College/Unit Affiliation	46.111
Explained (5.91%)	89.034
Residual	1416.686
Total	1505.720

Importance: Cnsltng,Ongoing,Public by	Sum of Squares
Longevity	5.730
Appointment Type	2.619
Academic Rank	7.342
College/Unit Affiliation	63.980
Explained (6.83%)	110.905
Residual	1513.882
Total	1624.787

Importance: Civic Organizations		Sum of Squares
by	Longevity	4.565
	Appointment Type	4.692
	Academic Rank	2.998
	College/Unit Affiliation	71.997
	Explained (6.90%)	106.489
	Residual	1437.562
	Total	1544.050

Importance: Betterment Initiatives		Sum of Squares
by	Longevity	8.763
	Appointment Type	4.783
	Academic Rank	16.686
	College/Unit Affiliation	62.207
	Explained (7.56%)	127.275
	Residual	1555.455
	Total	1682.730

Importance: Private Only Subscale		Sum of Squares
by	Longevity	44.810
	Appointment Type	12.764
	Academic Rank	48.571
	College/Unit Affiliation	548.027
	Explained (4.34%)	663.893
	Residual	14626.725
	Total	15290.618

Importance: Public Only Subscale		Sum of Squares
by	Longevity	90.076
	Appointment Type	13.065
	Academic Rank	57.983
	College/Unit Affiliation	753.816
	Explained (6.24%)	959.707
	Residual	14432.008
	Total	15391.715

Importance: One-Shot Only Subscale		Sum of Squares
by	Longevity	58.072
	Appointment Type	5.032
	Academic Rank	47.676
	College/Unit Affiliation	442.271
	Explained (3.99%)	559.978
	Residual	13482.882
	Total	14042.860

Importance: Ongoing Only Subscale		Sum of Squares
by	Longevity	68.705
	Appointment Type	7.677
	Academic Rank	29.773
	College/Unit Affiliation	750.202
	Explained (6.40%)	895.401
	Residual	13100.625
	Total	13995.666

Importance: Workload Only Subscale		Sum of Squares
by	Longevity	57.360
	Appointment Type	4.365
	Academic Rank	15.678
	College/Unit Affiliation	902.956
	Explained (6.57%)	1075.068
	Residual	15288.562
	Total	16363.630

Importance: Consulting Only Subscale		Sum of Squares
by	Longevity	73.673
	Appointment Type	28.992
	Academic Rank	102.564
	College/Unit Affiliation	579.271
	Explained (6.35%)	1115.744
	Residual	16467.845
	Total	17583.588

Question 3

Involvement: Overall Scale		Sum of Squares
by	Longevity	417.237
	Appointment Type	35.928
	Academic Rank	528.742
	College/Unit Affiliation	3296.915
	Explained (10.62%)	7111.273
	Residual	59876.075
	Total	66987.348

Involvement: Field Study		Sum of Squares
by	Longevity	9.386
	Appointment Type	1.240
	Academic Rank	7.853
	College/Unit Affiliation	120.401
	Explained (8.76%)	179.644
	Residual	1872.166
	Total	2051.810

Involvement: Internship		Sum of Squares
by	Longevity	9.050
	Appointment Type	4.641
	Academic Rank	18.365
	College/Unit Affiliation	141.548
	Explained (9.42%)	204.981
	Residual	1969.278
	Total	2174.259

Involvement: Practicum		Sum of Squares
by	Longevity	15.173
	Appointment Type	5.791
	Academic Rank	16.658
	College/Unit Affiliation	95.834
	Explained (8.50%)	168.814
	Residual	1816.891
	Total	1985.705

Involvement: Independent Study		Sum of Squares
by	Longevity	13.203
	Appointment Type	7.591
	Academic Rank	17.791
	College/Unit Affiliation	104.841
	Explained (15.36%)	311.440
	Residual	1716.117
	Total	2027.557

Involvement: Course Modification		Sum of Squares
by	Longevity	10.798
	Appointment Type	1.965
	Academic Rank	6.988
	College/Unit Affiliation	44.243
	Explained (9.36%)	148.070
	Residual	1432.989
	Total	1581.059

Involvement: Clinical Experience		Sum of Squares
by	Longevity	1.723
	Appointment Type	3.130
	Academic Rank	15.628
	College/Unit Affiliation	473.371
	Explained (27.7%)	577.379
	Residual	1506.821
	Total	2084.200

Involvement: Cross-Cultural Experience		Sum of Squares
by Longevity		4.154
Appointment Type		5.059
Academic Rank		4.246
College/Unit Affiliation		62.476
Explained	(6.29%)	94.000
Residual		1399.390
Total		1493.390

Involvement: Service Learning		Sum of Squares
by Longevity		4.209
Appointment Type		9.967
Academic Rank		3.759
College/Unit Affiliation		87.026
Explained	(7.59%)	129.940
Residual		1582.348
Total		1712.288

Involvement: Co-op Education		Sum of Squares
by Longevity		2.372
Appointment Type		1.824
Academic Rank		.679
College/Unit Affiliation		25.094
Explained	(3.48%)	33.555
Residual		930.407
Total		963.962

Involvement: Career or Service Club		Sum of Squares
by Longevity		6.443
Appointment Type		1.486
Academic Rank		14.321
College/Unit Affiliation		56.233
Explained	(5.97%)	80.902
Residual		1272.883
Total		1353.784

Question 4

Importance: Overall Scale		Sum of Squares
by Longevity		933.250
Appointment Type		774.273
Academic Rank		765.687
College/Unit Affiliation		7700.169
Explained	(9.71%)	11283.624
Residual		104940.270
Total		116223.894

Importance: Field Study		Sum of Squares
by Longevity		11.358
Appointment Type		6.678
Academic Rank		6.781
College/Unit Affiliation		121.550
Explained	(8.81%)	149.783
Residual		1549.740
Total		1699.522

Importance: Internship		Sum of Squares
by Longevity		21.980
Appointment Type		17.878
Academic Rank		26.125
College/Unit Affiliation		135.359
Explained	(11.39%)	197.756
Residual		1538.321
Total		1736.078

Importance: Practicum		Sum of Squares
by Longevity		17.994
Appointment Type		7.581
Academic Rank		8.647
College/Unit Affiliation		111.645
Explained	(8.16%)	163.863
Residual		1843.975
Total		2007.838

Importance: Independent Study		Sum of Squares
by Longevity		8.780
Appointment Type		11.081
Academic Rank		21.298
College/Unit Affiliation		55.426
Explained	(6.73%)	98.313
Residual		1361.566
Total		1459.879

Importance: Course Modification		Sum of Squares
by Longevity		7.144
Appointment Type		2.356
Academic Rank		7.692
College/Unit Affiliation		40.785
Explained	(3.76%)	62.072
Residual		1588.049
Total		1650.121

Importance: Clinical Experience   Sum of Squares
by   Longevity   6.583
     Appointment Type   8.628
     Academic Rank   3.930
     College/Unit Affiliation   311.027
          Explained   (16.07%)   370.605
          Residual   1936.122
          Total   2306.727

Importance: Cross-Cultural Experience   Sum of Squares
by   Longevity   10.253
     Appointment Type   14.742
     Academic Rank   20.666
     College/Unit Affiliation   158.537
          Explained   (10.50%)   211.412
          Residual   1802.989
          Total   2014.402

Importance: Service Learning   Sum of Squares
by   Longevity   8.245
     Appointment Type   10.106
     Academic Rank   13.505
     College/Unit Affiliation   107.069
          Explained   (9.98%)   175.018
          Residual   1579.161
          Total   1754.179

Importance: Co-op Education   Sum of Squares
by   Longevity   11.197
     Appointment Type   6.126
     Academic Rank   7.191
     College/Unit Affiliation   83.199
          Explained   (7.60%)   140.454
          Residual   1707.822
          Total   1848.276

Importance: Career or Service Club   Sum of Squares
by   Longevity   1.354
     Appointment Type   7.050
     Academic Rank   5.166
     College/Unit Affiliation   90.994
          Explained   (7.71%)   120.623
          Residual   1444.653
          Total   1565.275

Question 5

```
Institutional Practices: Overall Scale    Sum of Squares
by    Longevity                               384.884
      Appointment Type                        235.631
      Academic Rank                            99.399
      College/Unit Affiliation               2039.968
           Explained          (6.06%)        2855.049
           Residual                         44218.916
           Total                            47073.965


Institutional Practices: Financial Compensation
by                                          Sum of Squares
      Longevity                                 6.190
      Appointment Type                          7.391
      Academic Rank                             5.380
      College/Unit Affiliation                 66.203
           Explained          (5.99%)          91.238
           Residual                          1430.747
           Total                             1521.985


Institutional Practices: Release Time    Sum of Squares
by    Longevity                               5.055
      Appointment Type                         .271
      Academic Rank                            .524
      College/Unit Affiliation               28.502
           Explained          (4.37%)         35.121
           Residual                          767.884
           Total                             803.005


Institutional Practices: Tenure Consideration
by                                          Sum of Squares
      Longevity                                 9.688
      Appointment Type                          8.338
      Academic Rank                             6.563
      College/Unit Affiliation                51.284
           Explained          (5.70%)         89.439
           Residual                         1480.578
           Total                            1570.016


Institutional Practices: Official Recognition
by                                          Sum of Squares
      Longevity                                 7.169
      Appointment Type                          2.859
      Academic Rank                             5.432
      College/Unit Affiliation                45.816
           Explained          (3.49%)         60.257
           Residual                         1668.022
           Total                            1728.279
```

Institutional Practices: Colleague Support
by   Sum of Squares
        Longevity   8.593
        Appointment Type   14.526
        Academic Rank   11.182
        College/Unit Affiliation   81.140
                Explained   (7.51%)   131.947
                Residual   1625.629
                Total   1757.575

Institutional Practices: Grad. Ass't., Staff Support
by   Sum of Squares
        Longevity   .936
        Appointment Type   4.491
        Academic Rank   3.454
        College/Unit Affiliation   32.402
                Explained   (3.30%)   42.769
                Residual   1254.605
                Total   1297.375

Institutional Practices: University Transportation
by   Sum of Squares
        Longevity   10.406
        Appointment Type   14.160
        Academic Rank   9.620
        College/Unit Affiliation   72.653
                Explained   (6.13%)   108.138
                Residual   1656.497
                Total   1764.635

Institutional Practices: Adequate Space Sum of Squares
by   Longevity   11.702
        Appointment Type   5.727
        Academic Rank   8.339
        College/Unit Affiliation   69.269
                Explained   (5.09%)   102.279
                Residual   1907.096
                Total   2009.375

Table 26
Summary of Findings:
Comparison of Means and
Correlation Coefficients

Item	Score	

Comparison of Means
  Professional Involvement to Importance*
    Longevity at MSU   11.29 16.87
    Appointment Type   11.31 16.87
    Academic Rank   11.23 16.83
    College/Unit Affiliation   11.29 16.85
      *Based on 39 point scale

  Student Involvement to Importance **
    Longevity at MSU   6.98 16.79
    Appointment Type   7.05 16.80
    Academic Rank   7.04 16.82
    College/Unit Affiliation   6.98 16.77
      **Based on 33 point scale

Correlation Coefficients--Overall Means#
    Prof. Involvement to Importance   .5159
    Stu. Involvement to Importance   .3681
    Involvement to Involvement   .4346
    Importance to Importance   .4378
    Univ. Practices to Prof. Involvement   .2641
    Univ. Practices to Prof. Importance   .1669
      # (p<.001)

Correlation Coefficients--by College/Unit Affiliation#
    Prof. Involvement to Importance   .9059
    Stu. Involvement to Importance   .7294
    Involvement to Involvement   .2181
    Importance to Importance   .7012
    Univ. Practices to Prof. Involvement   .6868
    Univ. Practices to Prof. Importance   .6559
      # (p<.001)

REPRESENTATIVE LISTING
OF SERVICE ACTIVITIES

Workload, Private
Press interviews regarding corporate and tax-related news
     items
Adviser to local clubs dealing with natural history
Developing a set of training materials and serving as a
     resource person on program evaluation for not-for-
     profit agencies
Serve on Board of Directors of a bank
Serve on editorial boards of two journals
National and international programs research and
     extension on commodity production
Initiating union-based drug, alcohol and mental health
     programs
Board of Directors of a local organization to promote
     youth baseball in Greater Lansing
Child Abuse Prevention Society - Board of Directors
Chairman of editorial board of professional journal
Member of the Board of Directors of the Lansing Symphony
     Orchestra
Adjudicator for various musical competitions
Author of numerous articles and three books for national
     professional association (no royalties)
Accreditation visitor
Board member, World Medical Relief
Selected to settle labor disputes and medical malpractice
     disputes
Serve as an officer in a local cultural organization
Grant proposal review for National Science Foundation
Director of a pre-natal screening program with
     educational outreach to the Michigan community
Staff and monitor a blood pressure clinic

Workload, Public
Testifying before state legislative committees
Presentation to City of East Lansing employees
In-service for Flint Public Schools
East Lansing Public Library presentation
Directorship of state-wide high school academic
     competition
Clinics and evaluation of dozens of public school musical
     organizations
Working with local school districts science curriculum

Supervise MSU faculty/staff in international training
    experiences
Community school classes on financial management
Nutritional education with Health Department
Agriculture and Natural Resources public policy
    educational activities, i.e. master gardener program
County Planning Commission
Facilities Committee of local school
Educational tours of the Kellogg Bird Sanctuary
Telephone answering service for natural history questions
Public information articles for newspapers and magazines
Worked with State Safety Commission on traffic safety
Assisted Haslett Community Schools in recreation planning
    and preparation of grant
Designing a nutritional surveillance plan for the State
    of Michigan
Assisting Ingham County Health Department in the
    nutritional assessment of obese children and
    adolescents
Involved in an effort to preserve a tract of Lake
    Michigan dune land through the State Department of
    Natural Resources
Serve on a major federal panel dealing with environmental
    issues in the tropics
Training seminars for University of Michigan on cross-
    cultural communication
Served on advisory board for Michigan Women's Commission
Member of Michigan State Planning Council for
    Developmental Disabilities
Member of Board for Michigan League for Human Services
Involved with ongoing state-wide research on home health
    care for cancer patients
Presentations to members of local emergency planning
    commissions on Title III - Community Right to Know
Volunteer as Ingham County Cancer fund raiser
Serve on State Department of Education ad hoc committees
Serve on a state board - appointed by the governor
Michigan Enterprise Zone Authority
Work in Animal Health Diagnostic Laboratory
Federal agency research review team
Jurying student art exhibitions at other institutions
Theatre in Education Project, Lansing Public Schools
Workshops and seminars for staff at various hospitals
Patient care in public clinics and health care services
    to disadvantaged populations
Consultation with school districts on AIDS and
    communicable disease policies
In-service training workshops for public school teachers
Parent education workshops
Research on food security in Zimbabwe
Michigan Air Pollution Control Commission
County Career Fair Coordinators Association

Consulting, Private
Arbitrator for American Arbitration Association
Serving as a consultant to Kellogg Foundation
Contract researcher
Provide business/technical assessment for over 130
    small/medium sized Michigan businesses
Teaching corporate staff about news organizations
Private teacher to area cello students
Consultation with farmers, industry people and
    installers related to irrigation
Environmental workshop for school teachers

Consulting, Public
Environmental education consulting for school site
    development
Consultant on organizational and personnel problems to
    staffs of County Extension offices
Consult with State Police and other law enforcement
    agencies in the Midwest in the area of human remains
    identification
Contract with State of Michigan Attorney General's office
    as expert witness for Medicaid fraud case
Paid consultant to a city department
Paid consultant to a regional planning commission
Consultation with the Children's Trust Fund of Michigan
Serve on local school board

MSU Committees

Professional Organizations
Society of Women Engineers
National Association of Women Deans, Administrators and
Counselors (NAWDAC)
Michigan Association for Adult and Continuing Education
American Bar Association subcommittee of Tax Section
American Association of University Women (AAUW)
Ingham County Medical Association
Physicians for Social Responsibility
Michigan Women's Studies Association
National Women's Studies Association
American Library Association
American Psychiatric Association
American Medical Association
National Ceramic Educators Association
Association of Women in Science
American Society of Civil Engineers

Civic Organizations
American Red Cross
Lansing Area League of Women Voters
Organize and support 4-H Clubs
Lansing Urban League
Rotary
Lions Club
Boy Scouts
Girl Scouts
Capital Area United Way
Michigan Heart Association
Big Brothers/Big Sisters of Greater Lansing
Kiwanis Club of Okemos
Arthritis Foundation
Michigan Lupus Foundation
American Diabetes Association

Community Betterment
Community fund raising activities for arts-related
purposes
Supporting local hunger-related organizations
Regular service activities for the elderly of the
   community
Serve as a Commissioner on the East Lansing Planning
   Housing and Community Development Commissions
Lansing Recyclers
County Economic Development Commission
Neighborhood Association member
Downtown Development Authority

Church Involvement*
Member of church Board of Directors
Consulting with local church on fund-raising campaign
Active Lay Leader in local church
Tutoring program for elementary age students through
   local church
Sunday school teacher
Elder

*Not included in original listing, but appeared
repeatedly in individual responses

Other
Jury duty
Meals on Wheels
Civilian auxiliary member for Lansing Fire Department
MSU Federal Credit Union Board
Green Peace
Sierra Club
Involvement in political party and party activities
Assistance to visiting foreign professors
Volunteer - Radio Talking Book
Horseback Riding for Handicappers program
WKAR-TV Auction volunteer
Clowning workshop for youth group
Docent of zoo
Softball coach at Okemos Athletic Club
Soccer coaching and referee
Special Olympics

Service Activities Involving Students
Supervise interns with local and state government
Physician accompanied by students on rounds, etc.
Clinical training programs as a part of the regular
    educational program of the College of Osteopathic
    Medicine
Direct activities of MBA candidates
Faculty advisor to Pakistan Students Association
Advise an honorary student organization
Adviser to a student publication
Internship and practicum supervision
Placing interns with companies in German speaking
    countries
Helping international students with personal needs
Co-op education advisory committee member
Internship design and supervision for juniors and seniors
    in the College of Agriculture and Natural Resources

SUMMARY OF UNSOLICITED COMMENTS
ABOUT UNIVERSITY PRACTICES
REGARDING PUBLIC AND COMMUNITY SERVICE

"Involvement in public service, even to the extent of
sponsoring student activities on a one-by-one basis, is
explicitly considered evidence of 'poor professional
judgment' on the part of my department's chair, past
chair and advisory committee members. Faculty who can
arrange lucrative contracting/consulting agreements are
admired as good entrepreneurs; public service as part of
one's professional identity, however, hurts rather than
helps one's departmental evaluations."

"Our department will only allocate a maximum of 15% to
the category of 'public service' in their criteria for
annual salary and merit raises! I consider this to be
far too low for the work I do (and think MSU should be
doing)."

"In my department service counts 20%, so they say. It
really counts about zero. The 'land grant mission' is a
joke. No one ever gets tenure for fulfilling it.
Predominant orientation is generating massive quantities
of vapid articles for research journals. I was told to
do less service in my annual review letter. This forces
me to cut public service stuff and conceal my consulting.
Change the reward structure!"

"My college and department are not interested in my being
involved with public or community service as a part of my
job (my academic workload). If I do public service (and
I do) it has to be on my own time, which I think is
wrong!"

"I am very discouraged by the lack of support given by
the University for service-related activities!"

"Service is fine for some departments--and of course MSU
couldn't justify its existence without 'land-grantism.'
But, in academic fields, service ought not to be a way of
rewarding weak departments and/or professors. When I
hear service, I first think: someone who can't do decent
research and/or teaching. I'm not wrong to think this,
sometimes."

"All public and community service activities are not honored in the College of Education. You do not obtain promotions and salary increases for this type of activity."

"I am manager for a large community study conducted annually. . .The project has been inadequately resourced and I have given one-quarter to one-half (with no compensation) to the success of the activity. At the end of this term I am leaving the position because the activity is not adequately valued by my college. Additional RA funding is necessary and secretarial support on an occasional basis. I still feel the service is important at the community level and regret that the service mission of our university is not better delivered."

"You must provide reward in form of promotion, tenure and raises, recognition, etc. This activity now comes out of your own hide and has negative impact on above areas."

"You fail to point up how chair, dean & provost discourage community-related activities unless they generate money/papers."

"University support (more importantly, college support) for public service is a joke. If our dean didn't invent it, its not worthwhile. I wish I worked in an institution which does what our president says MSU does. There is no support for land-grant philosophy in my college."

"Some service activities often get more weight than others. For example, I believe that in my department 'credit' or recognition is not given for work with women's studies and black studies related activities as it is for work in traditional, established professional sub-fields and organizations. So some service activities 'count' more than others depending on the biases dictated by the existing social norms."

"I serve as a member of a local park commission. This is my last year I intend to work on the commission because it is looked upon by my esteemed colleagues as not representing a significant activity. Also, I serve as chair of a national committee within my professional organization. I am resigning this position because of the lack of support I receive and the low value placed on this activity by my department."

"As you might imagine, this questionnaire is representative of what is wrong with the university's view of community service. My anger is really based on frustration, for if a major university is insensitive to the problem, then who will? Our responsibility is to lead and serve as models and not to reflect the status quo."

"There is a crying need for the University to make clear to departments and colleges that involvement in public and community service activities are indeed legitimate professionally-related activities!--and even that they should receive consideration in tenure, promotion and salary decisions. As it is now, my department and my college do not consider nor recognize nor support involvement in public and community service activities."

"I will not continue to maintain my current level of service due to increased University workload and the University's failure to recognize my contributions in the community on its behalf. And although my work with the University has been evaluated as outstanding, compensation FAILS to be reflective."

"I work regularly with the Michigan Department of Education, etc., etc., yet I receive 'low-average' salary points for service. I've never been given load credit. None of my service is recognized or supported by my college or the University."

"Service activities are given far too little credit in most departments, while excessive emphasis is put on research and publication. This skewed system is so deeply entrenched and the departments so highly autonomous that it will be very difficult to change the system and introduce greater equity without strong guidelines from the provost and central administration. This redirection should be part of 'R-cubed' if MSU intends to truly fulfill its mission as a land-grant university in which public/community service legitimately should play a key, not subsidiary, role. The present reward system forces faculty (and hence MSU as an institution) to try to be an imitation of the University of Michigan."

"University (all college) committee work sometimes [takes] hundreds of hours of study and work, plus preparation of reports. (No recognition, other than my colleagues' verbal comments--but no specific pay raises for same.)"

"In the past members of the ATL Department have been told that both community service activities, such as working with teachers in public schools, and the 'Writing Across The Curriculum Project' on campus are reserved for members of the English Department."

"Departmental and college positions are at odds on matters of public service and the departmental position has changed over the years under negative college pressure."

"My perception of how MSU individual professional [people] perceive this: service-related efforts are not 'academic,' i.e., of substantive value, both for advancement and/or professional growth. Indeed, they may be a 'cop-out' to doing real 'professional' stuff."

"The current reward system in the MSU Libraries not only never rewards such service, but community service is considered irrelevant and unimportant."

"Be aware that such [service] activities, no matter how time-consuming they may be, are, like teaching in this University, of no value whatsoever to a professor at promotion time. The University pays lip service to 'teaching' and 'service,' but that is all."

"I might undertake different types of service if they affected my promotion. As it is, I privately participate for personal satisfaction--environmental and social issues. Being permanently untenured gives me this job-related attitude."

"Performing this public service (i.e. working in the hospital) accounts for 60-70% of my time. Although that time commitment is demanded by my Chair and Dean it is not rewarded as readily as is research or teaching."

"[Service] has its own rewards, but none which are visible on this campus. Its pretty clear that the leadership of my college (Arts and Letters) encourages grantsmanship and publication, and allows teaching and service to fight it out for a very poor third place on the priority list."

"There is a great disparity in encouragement of, and reward for, service across this University. However, when annual peer review and promotion/tenure time comes around, service is given equal weight. We should decide, as a University, whether service is to be important in each college and department and, if so, support faculty who engage in it."

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