



Faculty development in the Montana University System from 1980 to 1987
by Larry Joseph Baker

A thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Education
Montana State University

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Abstract:

The problem of this study was three-fold: (1) to describe faculty development as it existed in the Montana University System from 1980 to 1987 and in three representative types of institutions within that System, (2) to determine if a relationship existed between participation in faculty development activities and the variables of academic rank and subject-matter affiliation, and (3) to assess how faculty perceived the effectiveness of faculty ' development activities.

Faculty development at the System level consisted of the Faculty Vitality Project, a three-year grant from the Northwest Area Foundation. The project, administered from the Office of the Commissioner of Higher Education, funded development in the six units in the System, especially those activities that encouraged inter- and intra-institutional cooperation. Faculty development at the institutional level consisted of a variety of activities that provided assistance to the faculty to conduct research, to design instruction, and to pursue other areas of personal and professional development. These activities included competitive grants to the faculty, sabbatical leaves, and travel to professional meetings.

The population consisted of 544 faculty members at the three institutions of higher learning. A random sample of 192 was drawn for the purpose of conducting semi-structured interviews. Sixty-five (33.9%) faculty members agreed to be interviewed.

Participation in faculty development was independent of academic rank and subject-matter affiliation at Eastern Montana College and Montana College of Mineral Science and Technology. Participation was not independent of academic rank and subject-matter affiliation at Montana State University. Faculty perception of effectiveness of faculty development activities was independent of academic rank, subject-matter affiliation, and participation. Faculty members participated in development activities in order to remain current in the profession and to avoid professional isolation. The majority of the respondents suggested that faculty development was effective, but inadequate. The perception was that faculty development was encouraged by faculty and administrators, but the necessary resources were limited or nonexistent. The limited resources created tensions among faculty members and institutions in the System.

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MONTANA UNIVERSITY SYSTEM
FROM 1980 TO 1987**

by

Larry Joseph Baker

**A thesis submitted in partial fulfillment
of the requirements for the degree**

of

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**MONTANA STATE UNIVERSITY
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APPROVAL

of a thesis submitted by

Larry Joseph Baker

This thesis has been read by each member of the graduate committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

5/8/90 *Earl Stohmeyer*
Date Chairperson, Graduate Committee

Approved for the Major Department

5/7/90 *Donald Robson*
Date Head, Major Department

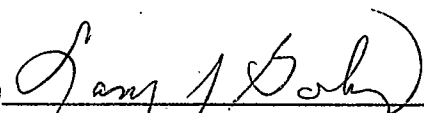
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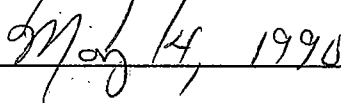
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ABSTRACT

The problem of this study was three-fold: (1) to describe faculty development as it existed in the Montana University System from 1980 to 1987 and in three representative types of institutions within that System, (2) to determine if a relationship existed between participation in faculty development activities and the variables of academic rank and subject-matter affiliation, and (3) to assess how faculty perceived the effectiveness of faculty development activities.

Faculty development at the System level consisted of the Faculty Vitality Project, a three-year grant from the Northwest Area Foundation. The project, administered from the Office of the Commissioner of Higher Education, funded development in the six units in the System, especially those activities that encouraged inter- and intra-institutional cooperation. Faculty development at the institutional level consisted of a variety of activities that provided assistance to the faculty to conduct research, to design instruction, and to pursue other areas of personal and professional development. These activities included competitive grants to the faculty, sabbatical leaves, and travel to professional meetings.

The population consisted of 544 faculty members at the three institutions of higher learning. A random sample of 192 was drawn for the purpose of conducting semi-structured interviews. Sixty-five (33.9%) faculty members agreed to be interviewed.

Participation in faculty development was independent of academic rank and subject-matter affiliation at Eastern Montana College and Montana College of Mineral Science and Technology. Participation was not independent of academic rank and subject-matter affiliation at Montana State University. Faculty perception of effectiveness of faculty development activities was independent of academic rank, subject-matter affiliation, and participation. Faculty members participated in development activities in order to remain current in the profession and to avoid professional isolation. The majority of the respondents suggested that faculty development was effective, but inadequate. The perception was that faculty development was encouraged by faculty and administrators, but the necessary resources were limited or nonexistent. The limited resources created tensions among faculty members and institutions in the System.

CHAPTER 1

INTRODUCTION

American higher education from the mid-1950s to the mid-1980s encountered dramatic changes, unparalleled in history. Student enrollments increased from 2.5 million in 1955 to 6.8 million in 1974 as the "Baby Boom Generation" moved through colleges and universities. This rapid increase in enrollments precipitated growth in personnel and facilities. Demand for faculty grew from 266,000 in 1955 to 633,000 in 1975 and the physical facilities for higher education doubled during this same time (Keller, 1983). By the mid-1970s, however, enrollments at most institutions began to stabilize or drop. Financial resources, which were directly related to enrollments, declined as well.

From the mid-1970s to the mid-1980s higher education continued to experience declining enrollments and diminishing resources. The fixed costs of salaries and services increased while funding often fluctuated from one year to the next. An obvious result has been the reduction and elimination of faculty positions, programs, and services. Forecasts indicated that many of these conditions would prevail into the 1990s (Cameron, Whetten, Kim & Chaffee, 1987; Hansen, 1985). As a consequence, higher education in the

United States encountered difficulty adjusting to change. Institutions shifted from long-range planning for program expansion to strategic planning for survival, with a significant impact on the faculty (Keller, 1983).

Socio-economic conditions affected institutions of higher education in such a way as to make faculty less mobile. Job mobility, which had been considered to be a primary factor in faculty promotion and performance, all but disappeared (Shulman, 1983). The annual turnover rate in tenure-track positions in the 1960s was about eight percent. That figure dropped to two percent in the 1970s and declined further in the 1980s. As the options for job mobility decreased, faculty and institutions made more long-term commitments, and the professional careers of the faculty became more closely tied to the institution. Hansen (1985) suggested that most faculty were likely to remain in their current positions until retirement. The resulting phenomenon has been called "the graying of the professoriate" (Levin & Stephan, 1989). Corwin and Knepper (1978) reported that the median age of faculty in 1978 was 47 years. Within the next decade that age could climb into the upper 50s (Hansen, 1985). Loss of job mobility and decline in new hires created a closed institutional climate (Gaff, Festa & Gaff, 1978). Fewer faculty members had the option of moving from one institution to another.

There continued to be widespread agreement among scholars in higher education, however, that the faculty is at the heart of an institution (Smith, 1978). In the performance of their duties, faculty members give meaning and

identity to colleges and universities. Institutional prestige or reputation, whether in teaching or research, resulted from the faculty's efforts, and the well-being or vitality of the faculty often indicated the health of the institution (Dressel, 1981).

Thus, institutions of higher learning, including public institutions in Montana and the northwest region, were confronted with finite resources and declining student enrollments. Economic instability generated concern about adequately funding quality education (Commissioner of Higher Education, 1986). Institutions needed to make decisions critical for maintaining faculty vitality in times of instability. Such decisions have been subsumed under the general term faculty development.

The Montana University System promoted faculty development (also called renewal or vitality) in two specific areas: the Faculty Vitality Project in the University System as a whole, and faculty development activities at each of the six institutions comprising the System. The Faculty Vitality Project, a grant from the Northwest Area Foundation, funded a System-wide effort for renewal in three areas: (1) faculty retraining and reallocation, (2) faculty exchanges, and (3) instructional improvements responsive to shifting student needs and interests within the state (Rice, 1985). The development activities at the six institutions in the Montana University System were intended to support the respective needs of each faculty. Thus, efforts for vitality have

been at the System and the institutional levels, although System support has dwindled over the past few years.

Faculty development, a concept that has become popular in higher education circles in the last two decades, had no one universally accepted definition (Gaff et al., 1978). A wide range of activities and programs occurred under any of the definitions. Moreover, Centra (1976) found that different types of faculty development programs existed at different types of colleges and universities. For example, large universities tended to use such traditional practices as sabbatical leaves while smaller colleges emphasized instructional improvement programs.

Research indicates that faculty development existed for the general purpose of improving faculty performance (Bergquist & Phillips, 1975; Mathis, 1980; Menges, Mathis, Halliburton, Marincovich & Svinicki, 1988). Performance measures ranged from simply counting the number of research publications at one extreme, to determining a "service" component by faculty membership on institutional committees at the other extreme. Between these extremes were such measures as student ratings of teaching effectiveness and the dollar amounts of grants received. Blackburn, Pellino, Boberg and O'Connell (1980) and Lawrence and Blackburn (1988) suggested that faculty who are productive are productive in all areas. Allison and Stewart (1974) found that productive faculty members remained productive throughout their careers.

Studies demonstrated that faculty attitudes and behaviors intended to improve performance were influenced significantly by such characteristics as academic rank (Braskamp, Fowler & Ory, 1982), age (Baldwin & Blackburn, 1981), and subject-matter affiliation (Stark & Morstain, 1978). Thus, many attributes affected faculty performance; i.e., faculty are not monolithic, and differences must be taken into account.

Research findings (Baldwin, 1985; Baldwin & Krotseng, 1985; Bland & Schmitz, 1988; Centra, 1985) identified a comprehensive list of incentives for enhancing faculty vitality and improving performance. The list emphasized the need to create a climate conducive to vitality, to maintain flexibility that allows for individual faculty differences, and to strengthen the important role of academic leadership. Yet different types of institutions of higher learning must choose from this list only those incentives or activities which seem most likely to be effective for their own respective climates. Such choices or decisions must take into account differences not only in faculty characteristics, but also differences in and among campus climates.

Statement of the Problem

The problem of this study was three-fold:

- (1) to describe faculty development as it existed in the Montana University System from 1980 to 1987 and in three representative types of institutions within that System;

- (2) to determine if a relationship existed between participation in faculty development activities and the variables of academic rank and subject-matter affiliation; and
- (3) to assess how faculty perceived the effectiveness of faculty development activities.

Need for the Study

This study was intended to contribute to the research literature in the following ways:

- (1) by providing information about the commitment to faculty development at two levels -- the institution and the state system;
- (2) by providing information about the relationships between the variables of academic rank, subject-matter affiliation, and participation in faculty development activities; and
- (3) by providing information relevant to faculty effectiveness in public institutions that are not major research universities in urban or suburban settings, but instead are smaller, regional institutions of higher learning in a rural setting.

Conrad and Blackburn (1985) identified a need for research about faculty in colleges and universities which are neither prestigious nor major research institutions in relatively large urban areas. Blackburn (1985) suggested that

future research examine the relationships between selected variables and subsequent faculty performance.

Research in the area of faculty development may affect decision-making at the state and institutional levels by indicating whether or not faculty development is perceived as being successful and/or effective with whom and under what conditions. Since institutions of higher learning in the state of Montana serve a diverse and sparse population that is predominantly rural, research in the area of faculty development in a rural setting adds a potentially important context for understanding faculty behavior and productivity. The importance of investigating faculty development could help plan for the future of higher education in the state (Blackburn, 1985; Bland & Schmitz, 1988; Centra, 1985; Smith, 1978).

General Questions to Be Answered

The general questions to be answered in this study were:

- (1) What types of activities constituted faculty development at the System level in the Montana University System from 1980 to 1987?
- (2) What types of activities constituted faculty development at the three representative institutions from 1980 to 1987?
- (3) What were the characteristics of the population who participated in faculty development activities from 1980 to 1987 at each institution in terms of academic rank and subject-matter affiliation?

- (4) What were the characteristics of the population who did not participate in faculty development activities from 1980 to 1987 at each institution in terms of academic rank and subject-matter affiliation?
- (5) How did the respondents define faculty development?

The following null hypotheses were tested at the .05 level of significance:

- (1) Participation in faculty development activities is independent of academic rank.
- (2) Participation in faculty development activities is independent of subject-matter affiliation.
- (3) Faculty perception of effectiveness of faculty development activities is independent of academic rank.
- (4) Faculty perception of effectiveness of faculty development activities is independent of subject-matter affiliation.
- (5) Faculty perception of effectiveness of faculty development activities is independent of participation.

General Procedures

The general methodology employed both empirical and anthropological inquiry. Research was conducted during 1987 at three institutions in the Montana University System: (1) Eastern Montana College (EMC), (2) Montana College of Mineral Science and Technology (TECH), and (3) Montana State University (MSU). The data for this study came from a comprehensive review

of the documents relevant to faculty development activities at the System level and at each institution. Also, data were gathered from interviews with selected members of the faculties as they described their own campus culture and from observations made during the interviews. The general procedures were the following:

- (1) Obtain permission from the three institutions to conduct the research.
- (2) Conduct a review of the documents relevant to faculty development activities at each institution.
- (3) From these documents describe the characteristics of the participants and the non-participants according to the variables of academic rank, and subject-matter affiliation.
- (4) Identify and interview selected members of the faculty at each institution so as to elicit information about the perceived effectiveness of the faculty development activities for improved performance.
- (5) Analyze the data from the document reviews and the interviews using descriptions of the programs, content analysis, and Chi-Square Test of Independence.

Limitations and Delimitations of the Study

- (1) This study focused on only three institutions in the Montana University System: Eastern Montana College (EMC), Montana College of Mineral Science and Technology (TECH), and Montana State University (MSU).

These three institutions were chosen to provide a representative set of colleges and universities in the Montana University System and similar types of institutions in American Higher Education (Carnegie Council, 1980). Those selected for purposes of this study were EMC, a liberal arts college with an academic focus on teacher education; TECH, a professional school which serves the mineral sciences and related areas; and MSU, a doctorate-granting university in the land-grant tradition.

- (2) Only those faculty development activities in existence from 1980 to 1987 were considered part of this study.
- (3) The collection of the data was delimited to documents available through the three institutions of higher learning, the Office of the Commissioner of Higher Education of Montana, and interviews with selected members of the faculty currently in residence.
- (4) The size of the sample was potentially small depending on the number of faculty in residence being served by the faculty development activities.
- (5) This study was delimited to those faculty who had a terminal degree and who held the academic rank of assistant professor, associate professor, and full professor. Non-tenure track, part-time faculty, lecturers, instructors, and faculty who were on leave were not included in the population.

Definition of Terms

- (1) Academic rank. Synonymous with professional rank, i.e., assistant professor, associate professor, or full professor. (The term does not include instructor or lecturer.)
- (2) Anthropological method. In anthropology, field work (data gathering) and analysis proceed almost simultaneously. The researcher makes contact with a social group and attempts to understand and describe it by talking with group members in order to identify primary respondents. In turn, interviews with primary respondents literally make sense of the group's social behaviors so as to enable the researcher to perceive the structure of cultural norms and patterns. The purpose of the anthropological method is to understand and describe a culture in terms of itself and not in terms of an externally imposed structure (Fetterman, 1982).
- (3) Culture. Defined as what groups of people do, how they do it, and sometimes why they do it (Tierney, 1988).
- (4) Faculty Vitality Project. A multi-institutional grant from the Northwest Area Foundation to the Montana University System. The project funded faculty renewal in three central areas: (1) faculty retraining and reallocation, (2) faculty exchanges (between campuses), and (3) instructional improvements within the system.

- (5) Montana University System. The Montana University System, established by Congress in 1881, is governed by a Commissioner of Higher Education and a Board of Regents. There are six university units in the System: (1) University of Montana at Missoula, (2) Montana State University at Bozeman, (3) Montana College of Mineral Science and Technology at Butte, (4) Western Montana College of the University of Montana at Dillon, (5) Eastern Montana College at Billings, and (6) Northern Montana College at Havre (Montana Code Annotated, 1989, Sec. 20-25-201, pp. 357-358).
- (6) Non-participants in faculty development. Those faculty members who did not participate in faculty development activities on campus or in the System.
- (7) Participants in faculty development. Those faculty members who participated in faculty development activities on campus and/or in the System.
- (8) Productivity. In this investigation this term is more broadly defined, rather than limited to a counting of published articles, monographs, books, and the like. Here, productivity means publications, research in progress, teaching effectiveness, course or program development, and service to the institution and the profession.
- (9) Subject-matter affiliation. Defined as academic area, not academic discipline or department. That is, this study assumes four subject-matter affiliations (Stark & Morstain, 1978):

- (a) Humanities -- an academic area composed of the following subject-matters: English, Rhetoric, Foreign Languages, History, Speech-Theatre, Art, and Music.
- (b) Social Science -- an academic area composed of the following subject-matters: Psychology, Sociology, Anthropology, Speech Communication, and Economics.
- (c) Natural Science -- an academic area composed of the following subject-matters: Chemistry, Biology, Microbiology, Physics, Math, and Geology (Earth Science).
- (d) Professional Studies -- an academic area composed of the following subject-matter fields: Business, Education, Engineering, and Health Professions (e.g., Nursing).

The first procedure in this study was to conduct a review of the literature and related research. This review is found in Chapter 2.

CHAPTER 2

REVIEW OF LITERATURE

The review of literature is organized into three categories: (1) recent trends related to declining enrollments and diminishing resources in American higher education, (2) faculty characteristics, and (3) faculty development.

The first category focuses on societal trends pertinent to this study and is relatively complete. However, the review of literature for faculty characteristics draws primarily from Martin J. Finkelstein's (1984) The American Academic Profession. Finkelstein has undertaken a review of the systematic studies in an otherwise enormous body of literature. Similarly, and for the purpose of this study, the review of literature related to faculty development prior to 1980 concentrates on Barbara Stordahl's (1981) Faculty Development: A Survey of the Literature of the '70s and Claude Mathis' (1982) Faculty Development. The body of literature concerning faculty development and faculty characteristics is immense and the complexity would tend to confound the reader.

Recent Trends Related to Declining Enrollments
and Diminishing Resources in American
Higher Education

The literature on American higher education from the early 1970s to the mid-1980s revealed declining student enrollments and diminishing resources. Centra (1980) found that student enrollments began to shift as the "baby-boom" population moved through the 18 to 22 year-old age bracket. Although enrollments in institutions of higher learning had more than doubled during the 1960s, there had been a modest two to four percent increase by the end of the 1970s. Centra projected enrollments, across institutional types, to decline from eight to nine percent during the 1980s. Parker and Zammuto (1986) found that enrollment decline in their sample of 56 institutions of higher education averaged 12 percent.

Peterson (1984) and Mortimer, Bagshaw and Masland (1985) suggested that a number of environmental factors contributed to the scarcity of resources available to higher education. Declining student enrollments and the economy at the federal and state levels were critical. Enrollment and funding at most public institutions were directly related. A decline in available students precipitated a reduction in financial resources.

Other studies found that the changing educational climate adversely affected administrators and faculty. Shulman (1983) determined that administrators faced loss of flexibility in the performance of their duties and that they

tended to focus on student-faculty ratios and finances. Faculty, on the other hand, confronted job dissatisfaction, stressful working conditions, and loss of the prospects for advancement (Caffarella, Armour, Fuhrmann & Wergin, 1989; Cameron et al., 1987; Kanter, 1979).

According to Furniss (1981), career opportunities for the faculty diminished over the past decade. Fewer positions at most institutions limited the chance for faculty to move from one position to another. Nelson (1983) suggested that this loss of mobility produced two concerns: (1) it forced faculty and institutions to make more long-term commitments, and (2) it threatened faculty morale. Harshbarger (1989) found that faculty commitment to the institution was U-shaped in distribution. Full and assistant professors had identical mean scores of high commitment while associate professors had significantly lower levels. He identified associate professors as being at risk for commitment and low morale.

The Carnegie Council on Policy Studies in Higher Education (1980) revealed that approximately 40 percent of tenured faculty in four-year colleges and universities were between the ages of 36 and 45. These data were projected to change to 40 percent between the ages of 46 and 55 by the year 1990, and 45 percent between the ages of 56 and 65 by the year 2000. The demographic data suggested that the trend was clearly in the direction of older faculty. The resulting phenomena was labelled "the graying of the faculty" (Hansen, 1985; Schuster, 1985).

A body of literature projected the current trends into the year 2000. Glenny (1980) and Peterson (1984) represented a consensus of opinion that the climate in American higher education will be unstable well into the 1990s. With the loss of mobility and a stressful working environment, the aging faculty will require institutional assistance to remain vital and productive (Hanson, 1985; Nelson, 1983; Peterson, 1984; Rice, 1985).

Faculty Characteristics

Related research on faculty characteristics expanded enormously during the 1960s and 1970s as higher education shifted from growth to reduction. Finkelstein (1984) completed a comprehensive review of this literature. He found that much of the research focused on faculty workload (what faculty do when they do what they do). He noted that the variables which influenced the performance of professional tasks included academic rank, age, institutional type, and subject-matter affiliation.

While most studies reported that faculty workload primarily involved teaching and research, the focus of effort was on the former. Finkelstein (1984, p. 87) concluded:

The American academic profession is essentially a teaching as opposed to a scholarly profession. By a three-to-one majority, American professors have consistently reported their interests as focusing more on the teaching than on the research component of their role. . . .

Fulton and Trow (1974) found that institutional context significantly influenced faculty workload. Faculty at research universities reported an integrative role. They tended to teach, to do research, and to be involved with administration. Faculty at most other institutions served in a more fragmented role. Different faculty did different things; some taught, some conducted research, and others were involved in administration.

Studies by Borland (1970) and DeVries (1975) concluded that faculty members determined the particular emphasis that they wanted to place on various professional activities, either in teaching or in research, and in making such decisions faculty were influenced more by internal standards than anything else. External incentives to perform various tasks appeared to have little effect. McKeachie (1979) supported the hypothesis that faculty behavior was motivated more by intrinsic factors than by external rewards.

Finkelstein (1984) found that publication activities and teaching were mentioned most often when reporting workload. The type of institution and its prestige were found to be significant predictors of publication activity and research productivity (Blackburn, Behymer & Hall, 1978; Blau, 1973; Fulton & Trow, 1974; Long, 1978; McGee & Ford, 1987). For example, university faculty at a prestigious institution tended to publish more often than their peers at a less prestigious college.

In addition to institutional type, the related research showed that academic rank, age, and subject-matter affiliation influenced publication activity. Blau

(1973) and Fulton and Trow (1974) reported that natural and social scientists were more oriented to research than faculty in education, humanities, and professional studies. McGee and Ford (1987) concluded that most productive researchers represented the social and biological sciences. In terms of number of publications, the natural scientists tended to be the most productive, followed by the social scientists and then faculty in the education, humanities, and fine arts areas (Blackburn et al., 1978; Blau, 1973; Coltrin & Glueck, 1977; Fulton & Trow, 1974).

Blackburn et al. (1978) and Fulton and Trow (1974) found that faculty at the higher ranks tended to publish at a higher rate. Senior faculty published more often than their junior colleagues, albeit these findings did not fully explain the reasons why. Fulton and Trow (1974) provided some explanations: job constraints, less opportunity, and knowledge of publication procedures.

While publication activity increased with rank, several studies showed that it declined with age (Bayer & Dutton, 1977; Behymer, 1974; Blackburn et al., 1978; Fulton & Trow, 1974; Roe, 1972). Bayer and Dutton (1977) noted that publication activity over time was not linear. They found that the curve of best fit was bimodal or "saddle-shaped." In general, faculty tended to publish early in their careers (about 10 years after award of the doctorate) and just before retirement. Parsons and Platt (1968) suggested that research priorities of faculty shifted with age from empirical to theoretical studies. Levin and

Stephan (1989) concurred with Parsons and Platt in that faculty research emphasis changed over time. However, chronological age was a weak predictor of faculty performance.

Finkelstein (1984) concluded that teaching, like publication activity, was related to the variables of institutional type, academic rank, age, and subject-matter affiliation. Gaff and Wilson (1975) found that institutional type accounted for more variance in teaching practice than individual faculty preferences. Therefore, institutional context influenced teaching practice. Different kinds of institutions had different expectations.

Stark and Morstain (1978) concluded that educational goals for teaching varied by subject-matter affiliation. The approach to teaching depended, in part, on the academic discipline. They found that faculty in the natural sciences were stronger advocates for career preparation while humanities faculty were least likely to support career preparation. Faculty in the social sciences were the strongest proponents for general education, and the natural scientists the weakest.

The related research clearly supported the hypotheses that relationships existed between faculty workload and selected variables of academic rank, age, institutional type, and subject-matter affiliation.

Faculty Development

Faculty development is not a new phenomena in American higher education. Mathis (1982) suggested that leaves of absence and financial assistance for travel represented two ways that institutions helped faculty improve scholarship. Stordahl (1981) found that faculty development expanded during the 1970s to include activities for personal, professional, and organizational improvement. Mathis (1982) identified three major factors that stimulated the literature: (1) student protests in the 1960s that concerned improvement in teaching, especially at the undergraduate level; (2) decline in student enrollment; and (3) the changing nature of traditional careers in higher education.

Mathis (1982) and Stordahl (1981) identified different models for faculty development programs. Stordahl reported that more than 50 percent of the institutions of higher learning had established programs by the mid-1970s. These programs ranged from the very practical (e.g., faculty review their own courses for change) to the more theoretical (e.g., systematic design and implementation of instruction). The type of program varied from one institution to another. However, certain practices were common among the different institutions; for example, most programs addressed instructional and/or personal development.

Translating the principles earlier set forth by Mathis into models, Bergquist and Phillips (1975) proposed a model for faculty development which incorporated three major components: (1) personal development, (2) instructional development, and (3) organizational development. The authors explained:

Since piecemeal efforts to improve college and university teaching have generally proven ineffective, we must turn to a comprehensive approach to faculty development, through which we can develop new methods of evaluation and diagnosis, find viable ways of introducing new technology and curricula, and explore new approaches to instructional improvement. Faculty development must give serious attention to the impact of change on the faculty member himself and on his institution. Organizational and personal development thus become essential to faculty development. (Bergquist & Phillips, 1975, p. 177)

For Bergquist and Phillips an effective faculty development program required change at three levels: attitude, process, and structure.

Toombs (1975) proposed another model for faculty development that emphasized three dimensions: (1) the professional dimension, (2) the curricular dimension, and (3) the institutional dimension. He attempted to link the career stages of faculty with the program. As the faculty progressed through different career patterns, they had different needs for development. Toombs argued that the effective program tried to meet those changing needs.

Francis (1975) presented still another, multistage model for program implementation that also emphasized three stages: (1) the consciousness

raising stage, (2) the focal-awareness stage, and (3) the subsidiary-awareness stage. Stage one challenged the attitudes of faculty to increase awareness of development. Stage two concentrated the attention of faculty toward new attitudes of development, and stage three established more firmly the new attitudes. Francis (1975, p. 730) stated:

It is possible that, in large institutions, the stages of awareness will be different in smaller subdivisions such as colleges, faculties, even departments. Knowing this may lead program planners to design different approaches for different units, or to spend extra time and effort establishing a homogeneous awareness level throughout the institution.

Various other models for faculty development have been utilized. Simerly (1977) proposed a multilevel model that included more faculty involvement in program planning. Bergquist and Shoemaker (1976) used the case study approach for their model. Gaff (1975) encouraged student assessment of teaching effectiveness in his model for faculty development.

Mathis (1982) found that the expansion of faculty development programs in the 1970s was supported primarily by foundation monies. A majority of the related research was a result of the evaluation of these projects. In 1971 the Carnegie Commission supported a project by Eble (1971) to determine effective and ineffective teaching practices in American colleges and universities. In 1975 the Exxon Foundation funded a study by Gaff that identified 200 institutions of higher learning that had programs to improve instruction. The Fund for the Improvement of Post Secondary Education (FIPSE) supported

a major project by the Center for the Study of Higher Education at the University of Michigan in 1978. The Bush Foundation funded faculty development programs in the mid-1980s at colleges and universities in Minnesota, North Dakota, and South Dakota (Jorde & Young, 1987; Wood, 1985). The Northwest Area Foundation funded a series of faculty vitality grants from 1979 to 1984. The Montana University System was a recipient of the second phase of the Northwest Area grants.

While working on a grant from the Exxon Foundation, Centra (1976) identified four types of faculty development programs: (1) those with high faculty involvement, (2) those with an emphasis on instructional assistance, (3) those with traditional practices, and (4) those with an emphasis on assessment. Approximately 60 percent of the institutions surveyed by Centra had faculty development programs. Small four-year colleges established programs that were run by faculty and had high involvement. Public rather than private institutions were more likely to focus on instructional assistance. Programs that offered the traditional practices of visiting scholars, sabbatical leaves, and instructional grants were found in universities and large four-year colleges. Two-year colleges had faculty development programs that emphasized assessment.

Traditionally, faculty development programs provided faculty members with opportunities to improve instructional practices (Creswell, 1985). Although a variety of faculty development models were proposed (i.e., models

developed by Bergquist and Phillips, Toombs, and Simerly), the majority of the programs focused on instructional development. Faculty preference for faculty development activities included sabbatical leaves, professional travel, and assistance with instructional design (Sorcinelli, 1986; Uhlig & Haberman, 1987).

Faculty participation in faculty development activities was voluntary (Centra, 1985; Clarke, Corcoran & Lewis, 1986). Research suggested that those faculty members who needed the most help with improvement in teaching and research were the least likely to participate (Boice, 1985). Universities had lower participation rates than two- or four-year institutions (Centra, 1985).

As institutions of higher education confronted the continued decline of student enrollments and diminishing resources, financial support for faculty development programs decreased (Blackburn, 1984). Activities that were adversely affected by the budget cuts included sabbatical leaves and travel to professional meetings. At some institutions the faculty development programs were discontinued. Many institutions were unable to support faculty development after foundation monies were distributed.

The dilemma for most colleges and universities was the inadequate funding of faculty development during periods of decline (Centra, 1985). Prioritization of diminishing financial resources and budget cuts created an increase in job-related stress for most faculty members (Baldwin & Krotseng,

1985; Schuster, 1985). Stress was related primarily to inadequate rewards, unclear job expectations, and time constraints (Gmelch, Wilke & Lovrich, 1986). The resulting concern for faculty burnout (Brown et al., 1986; Centra, 1985; Melendez & deGuzman, 1983) called for renewed institutional efforts for maintaining the vitality of the faculty through faculty development programs.

Original Findings of the Faculty Vitality Project

The Faculty Vitality Project (FVP) was a three-year grant from the Northwest Area Foundation (NWAf) totaling \$228,000. This project, funded in the Spring of 1980, was one of six proposals funded by NWAf which focused on faculty vitality from multi-institutional efforts (Rice, 1985). The Foundation provided grant funds to cooperative groups of colleges and universities or statewide systems to collaborate in their efforts to address faculty vitality. The primary motivation for collaboration was to ensure continuation of the programs after Foundation funds were depleted. It was anticipated by the Foundation that activities proven to be successful would be continued by institutional or system efforts (Rice, 1985).

The project was the result of efforts made by the Office of the Montana Commissioner of Higher Education (Bergquist, LaTrielle & others, 1983). Responding to a request from NWAf, Commissioner John Richardson appointed a staff member, Dr. Joseph Sicotte, to coordinate the preparation of a proposal. Dr. Sicotte, Director of Labor Relations for the System, called

on representatives from various campuses in the System to assist in the writing of the proposal. Also, Dr. Wayne Kirschling, Deputy Commissioner of the Indiana Postsecondary Commission, served as an outside consultant for the preparation of the proposal. The final draft was submitted to the NWAFF by Dr. Sicotte, Professor George Shroyer from Montana State University, and Professor Ronald Perrin from the University of Montana.

According to the 1980 Faculty Vitality Proposal, the project was based on two concepts: (1) that an individual faculty member's vitality and vitality on a campus as a whole were closely related, and (2) that the System should mobilize resources existing in the State of Montana to solve Montana problems. The predominant theme was "Montanans Helping Montanans." It was postulated by the writers of the grant that inter- and intra-institutional cooperation could bring about shared resources and expertise in the System (Rice, 1985).

During the three years of operation of the Faculty Vitality Project, an extensive evaluation was conducted. At the end of the first year of the grant, a formative evaluation was completed for the general purpose of measuring the project's ongoing progress. In May 1983, a final evaluation was completed for submission to the Northwest Area Foundation. External evaluators, Drs. William Bergquist of the Wright Institute and Jack LaTrielle of the University of Montana Law School, were hired as principal investigators. They assembled 12 faculty members, two each from the six units in the System, to

evaluate the FVP. This evaluation team conducted more than 120 interviews with faculty and staff at all colleges and universities in the System, researched appropriate documents at the System and institutional levels, and recorded numerous observations from on-site visitations (Bergquist et al., 1983).

The evaluation team identified environmental factors in the state of Montana that significantly affected higher education and the Faculty Vitality Project. The first major factor concerned the geographical isolation of the state. The predominantly rural nature of Montana presented difficulty for most faculty in the System in maintaining contact with peers in the profession and in keeping abreast of professional activity in their fields of study. The perception of the majority of faculty interviewed during the evaluation of the FVP was that they were isolated from colleagues in the field -- locally, in the System, and nationally. The faculty had little or no critical mass of peer support with whom to concur on professional matters.

The second environmental factor referred to a "deep split in the state" (Bergquist et al., 1983, p. 7). Historically, there had been divisions within the state of Montana between the prairie region of the east and the mountain region of the west. These two regions had different histories, different cultures and, at times, conflicting interests. The Montana University System encountered these differences in attempting to promote a unified approach to higher education in the state.

Bergquist et al. (1983) found that a third environmental factor concerned the Montana University System and its governance. The perception of the faculty interviewed for the evaluation of the FVP was that the System was becoming more "managerial." The locus of control for decision-making had shifted from the faculty to central administration and to the Commissioner's Office. Faculty perceived that they were being removed from the decision-making process and that they were losing their collegial culture. Accompanying the change in culture was a more adversarial role between faculty and administration as collective bargaining became a major factor in four of six institutions (and one of the three in this study).

A fourth environmental factor related to the "newness of leadership" in top administrative positions in higher education in the System. There were changes in personnel at the Office of the Commissioner, including the Commissioner himself, the Deputy Commissioner for Academic Affairs, and in other key positions. Moreover, at all six institutions there had been changes in central administration, and five of the six presidents had been in office fewer than five years (Bergquist et al., 1983).

After defining a context for Faculty Vitality in the Montana University System, the evaluation team addressed the organization and administration of the grant. The project originated and remained under the supervision of the Commissioner's Office. The project was administered by an Executive Group and a Steering Committee. The Executive Group consisted of Dr.

Joseph Sicotte from the Commissioner's Office, Professor Ronald Perrin from the University of Montana, and Professor George Shroyer, Assistant Dean of Education from Montana State University. The Executive Group managed the FVP from the preparation of the final draft of the proposal that was funded by the Northwest Area Foundation to the completion of the Final Evaluation.

According to Bergquist et al. (1983), the role of the Executive Group in the project caused some administrators and faculty members to question project ownership. The Executive Group was perceived as being "administration oriented." While the Group made decisions which affected all six institutions, the four colleges had little input into the decisions that were made which affected their campuses. A point of contention with the project surrounded the role of Dr. Sicotte. His primary responsibility as Director of Labor Relations for the System conflicted, at times, with his responsibilities to the FVP. This dual role of negotiator for faculty contracts and facilitator for faculty vitality sent conflicting messages to many faculty and administrators. Often, his loyalties were questioned. Whom did he represent, the faculty or the Office of the Commissioner?

The Steering Committee members, composed of one faculty member and one administrator from each of the six units, were chosen by an administrator on campus, providing additional support for the perception that the FVP was administration-oriented. The Committee, as a whole, was responsible for the promotion of the FVP at the six units in the System. Also, it reviewed and

selected proposals for funding. Some Committee members served in the role of screening all proposals submitted at that institution before going to the Steering Committee. Committee members were not given released time from institutional duties to devote the necessary time to the FVP. Membership on the Committee changed over the five rounds, and commitment to the project varied significantly from one unit to another (Bergquist et al., 1983). At some institutions the project was heavily promoted by Committee members. However, efforts at other institutions were minimal and success was due mainly to individual faculty who were either grant fund recipients or evaluation team members.

The Faculty Vitality grant contained three major areas for faculty development: (1) faculty exchange between campuses, (2) faculty reallocation and development, and (3) revision of existing academic programs and development of new programs (Rice, 1985). Faculty exchange involved inter-institutional efforts to utilize resources within the System to meet personnel needs. Faculty members from one institution transferred temporarily (for one quarter or one semester) to another institution in the System to assist in academic areas that required teaching or research assistance. Faculty reallocation provided intra-institutional retraining of faculty members from one academic area to another or to a related area. The intent of reallocation was to assist faculty move from academic areas with decline in enrollment to areas that were experiencing growth. Also, faculty who were required to obtain

terminal degrees in their subject areas were considered part of reallocation.

The revision of academic programs involved instructional design. Grant funds were provided for faculty to establish new courses or to modify existing ones.

CHAPTER 3

PROCEDURES

In this chapter the following general topics are discussed: (1) population description and sampling procedures; (2) method of collecting data, (3) method of organizing data, (4) general research questions and statistical hypotheses, and (5) analysis of data.

Population Description and Sampling Procedures

The population of this study consisted of all full-time faculty members currently employed, or who were employed, during the faculty development projects at the three institutions: Eastern Montana College (EMC), Montana College of Mineral Science and Technology (TECH), and Montana State University (MSU). Only those faculty who had terminal degrees and who held the academic rank of assistant professor, associate professor, or full professor were considered part of the population. Non-tenure track, part-time faculty, lecturers, instructors, and faculty who were on leave were not included in the population.

The population at each institution was divided into two primary subgroups: (1) those faculty members who participated in faculty development activities from 1980 to 1987, and (2) those faculty who did not participate in faculty development activities from 1980 to 1987. Within each of the two subgroups of the population, further groupings were based on academic rank and subject-matter affiliation.

For the purpose of sampling, the population at each institution was classified into four subject-matter areas: (1) Humanities, (2) Natural Sciences, (3) Social Sciences, and (4) Professional Studies (Stark and Morstain, 1978). From the population, a sample of 192 was drawn. The sample consisted of an equal number of participants and non-participants in faculty development activities. All members of the sample were contacted via letter (refer to Appendix B) for the general purpose of conducting one-hour interviews. A list of interview questions is found in Appendix C.

Method of Collecting Data

In order to collect the data for this study, the researcher gained entry to the respective institutions and received permission to review relevant documents. The Academic Vice President (AVP) at each institution was contacted by letter (refer to Appendix A) for permission to search the permanent records relevant to faculty development and to conduct interviews with the faculty.

Once permission was granted, visits to the respective campuses were made by the researcher for initial introductions to people and records.

The methodology for this study employed empirical and anthropological inquiry. The empirical analysis addressed faculty who participated and faculty who did not participate in faculty development according to the characteristics of academic rank and subject-matter affiliation. These data were collected from the documents available at each institution under study. For example, current catalogues or bulletins listing faculty by academic rank and subject-matter affiliation were verified from permanent records.

The second method of collecting data employed anthropological techniques of examining faculty in cultural terms, specifically institutional type as culture (B. Clark, 1986). Culture is a primary domain of anthropology, a subject-matter in which "culture" is defined simply as what groups of people do, how they do it, and sometimes why they do it. In anthropology, theory is used to explain, not predict (Kaplan & Manners, 1972), and models are derived organically (systemically) rather than imposed arbitrarily (Geertz, 1973). Methodology proceeds in terms of primary respondents whom the researcher talks with in order to determine the respondents' perceptions and conceptions of their own cultural norms, rules, procedures, and relationships so as to describe that culture's world view. For example, in this study, faculty development was defined culturally, i.e., how the respondents defined the term within their own campus climate, their own culture.

The narrative analyses for this study were derived from data gathered at the three institutions and the Office of the Commissioner of Higher Education for the State of Montana. The methodology employed triangulation as a means of data collection. The technique of triangulation, according to Lincoln and Guba (1985), uses data collection from multiple sources, specifically from documentation, interviews, and observations, to provide for cross-reference on accuracy and credibility.

The anthropological approach to education has been explained by Fetterman (1982), who suggested that ethnographic techniques and a cultural perspective were appropriate and necessary for collecting research data. In such a mode of inquiry, the investigator is guided by the respondent's or "insider's" point of view. The data fit into an environment where the respective parts make up a whole cultural system. In higher education, Conrad (1978) explained the anthropological approach in terms of "grounded theory."

In general, then, data for this study were collected from three primary sources: (1) document review, (2) semi-structured interviews, and (3) observations (Koul, 1986). A review of the documents at each institution identified contextual data about faculty development activities and demographic data about the characteristics of faculty who participated and did not participate in the activities.

The researcher conducted semi-structured, but open-ended, interviews with selected members of the faculty. The semi-structured interview allowed

for flexibility in the sequence of established questions. The interviews solicited information about the attitudes of the faculty regarding the effectiveness of the faculty development activities. The interview questions are found in Appendix C of this document.

The researcher reviewed all the necessary documents and conducted all the interviews. Responses to the interviews were recorded using written notes by the researcher, allowing for consistency in observation. The perception was that the use of a tape recorder would be more threatening to the respondents and hand notes were less likely to interrupt the flow of the conversation than a tape recorder (Koul, 1986).

Method of Organizing Data

The data for this investigation were collected from two main sources: permanent records and interviews. The data were organized into contingency tables and frequency distributions. Demographic and other information that did not lend itself to inference were presented in descriptive and/or narrative form. A content analysis was used for interview data (Weber, 1985). The data from the interviews were coded by categories or themes that explained the descriptions and perceptions of the faculty.

General Research Questions and
Statistical Hypotheses

One component of the research addressed the context of the faculty development programs at each institution and was descriptive. Since faculty development programs exist in a context, one must necessarily describe context in terms of culture or subculture. This description tended to be narrative and addressed the following research questions:

- (1) What types of activities constituted faculty development at the System level in the Montana University System from 1980 to 1987?
- (2) What types of activities constituted faculty development at the three representative institutions from 1980 to 1987?
- (3) What were the characteristics of the population who participated in faculty development activities from 1980 to 1987 at each institution in terms of academic rank and subject-matter affiliation?
- (4) What were the characteristics of the population who did not participate in faculty development activities from 1980 to 1987 at each institution in terms of academic rank and subject-matter affiliation?
- (5) How did the respondents define faculty development?

The following null hypotheses were tested at the .05 level of significance:

- (1) Participation in faculty development activities is independent of academic rank.

- (2) Participation in faculty development activities is independent of subject-matter affiliation.
- (3) Faculty perception of effectiveness of faculty development activities is independent of academic rank.
- (4) Faculty perception of effectiveness of faculty development activities is independent of subject-matter affiliation.
- (5) Faculty perception of effectiveness of faculty development activities is independent of participation.

Analysis of Data

This study utilized two methods of analysis: (1) an empirical and statistical analysis derived from data in the permanent records of the faculty development activities at each institution under study, and (2) a content, or narrative, analysis of data derived from the interviews with a selected sample of faculty from the institutions of higher learning. The documents yielded data about the types of faculty development activities from 1980 to 1987 as well as characteristics of the faculty who participated and did not participate in the activities. These data were displayed as tabular comparisons, frequency distributions, and percentages. The content analysis (Weber, 1985) examined data obtained from semi-structured interviews with the sample of selected faculty. Responses to specific questions were recorded using written notes.

The researcher analyzed the notes looking for categories, trends, and substantive patterns which emerged from the communication (Kerlinger, 1973).

In order to determine whether or not perceptions of effectiveness were independent of academic rank and subject-matter affiliation, the researcher used the Chi-Square (X^2) Test of Independence. Since the variables being measured yielded categorical data, the Chi-Square was the most useful statistic (Ferguson, 1981; Williams, 1979). The null hypotheses were tested at the .05 level of significance. This level, commonly used in the behavioral sciences, established the probability of committing a Type I error (Ferguson, 1981).

Data derived from investigating a culture is often lengthy and complex with analysis concurrent with data collection (Masland, 1985). These data came mainly from interviews with selected faculty members. Open-ended interview questions allowed the faculty to respond with descriptions and perceptions of their own culture. An analysis of the interview data involved a systematic coding of the information into categories or themes (Kerlinger, 1973). Although these data tended to be lengthy and, at times, fragmented, the analysis investigated the connections between the various categories or themes and an understanding of the culture as a whole (Spradley, 1980).

CHAPTER 4

ANALYSES AND FINDINGS

In this chapter the results of the study are presented in three major sections: (1) faculty development at the System level, (2) faculty development at the institutional level, and (3) characteristics of the faculty who participated and did not participate in faculty development.

The first section, faculty development at the System level, utilizes a narrative analysis. Data were gathered during interviews with faculty and chief administrators at the three institutions, from documents available from the Office of the Commissioner of High Education for the State of Montana, and from the archives of the College of Education, Health and Human Development at Montana State University. The interviews, documents, and observations concerned the Faculty Vitality Project (FVP). This project involved a grant totalling \$228,000 from the Northwest Area Foundation to the Montana University System to promote faculty vitality in the System.

The second section, faculty development at the institutional level, also utilizes a narrative analysis. Data were obtained from interviews and observations with a sample of faculty and administrators, and from documents available at the three institutions of Eastern Montana College (EMC), Montana

College of Mineral Science and Technology (TECH), and Montana State University (MSU).¹ This investigation identified the faculty development activities at the three institutions.

The third section, characteristics of the faculty who participated and did not participate in faculty development, employs a statistical analysis. The population consisted of 544 faculty at the three institutions. These faculty were categorized: (1) by the variables of academic rank and subject-matter affiliation, and (2) as participants or non-participants in the faculty development activities.

Faculty Development at the System Level

Faculty development at the System level from 1980 to 1987 consisted, essentially, of the Faculty Vitality Project. The project, funded in the Spring of 1980, was a three-year grant of \$228,000 from the Northwest Area Foundation to the Montana University System. Faculty members from the six units in the System competed for grant funds by submitting proposals to a steering committee for approval.

¹A random sample of the faculty to be interviewed, according to the variables of academic rank and subject-matter affiliation, was not possible at all three institutions in each category. The number of faculty in each category was not sufficiently large to provide for anonymity of response or statistical analysis. For example, in the case of gender there was one instance where the entire number of females to be interviewed was two. In the categories or variables that contained 10 or fewer faculty members, attempts were made to interview all the members. Where categories or variables involved members of 20 or more, random selection was used.

Data for the investigation into faculty development at the System level were gathered from documents, interviews with faculty and administrators, and observations made during the interviews. The documents for the study were found in two locations: (1) the archives of the Office of the Commissioner of Higher Education for the State of Montana, and (2) the archives of the College of Education, Health and Human Development at Montana State University. These documents included personal correspondence (letters and memos), official reports, and formative and summative evaluations of the project.

Evaluations of the Faculty Vitality Project were conducted on two levels simultaneously. Drs. William H. Bergquist of the Wright Institute and Jack Latrielle of the University of Montana served as external evaluators to the project. They contracted with the Commissioner's Office to conduct both formative and summative evaluations of the project. Dr. Eugene Rice served as external evaluator to the Northwest Area Foundation to assess the Foundation's efforts to support faculty vitality in the northwest region. The evaluation reports by Bergquist and Latrielle and by Rice provided the majority of the original findings about the Faculty Vitality Project.

The interviews and observations were gathered during on-site visits to the Commissioner's Office and to the three campuses. Interviews were conducted with academic vice presidents, members of their staff, officers of faculty development programs, and a sample of the faculty. The population of faculty

at the three institutions who met the criteria established for this study totalled 544. From this total, a sample of 192 was drawn to be interviewed. Sixty-five faculty members (34 percent) consented to be interviewed.

The Faculty Vitality grant contained three major areas for faculty development: (1) faculty exchange between campuses, (2) faculty reallocation and development, and (3) revision of existing academic programs and development of new programs (Rice, 1985). Faculty exchange involved inter-institutional efforts to utilize resources within the System to meet personnel needs. Faculty members from one institution transferred temporarily (for one quarter or one semester) to another institution in the System to lend expertise in academic areas that required teaching or research assistance. Faculty reallocation provided intra-institutional retraining of faculty members from one academic area to another or to a related area. The intent of reallocation was to assist faculty to move from academic areas with decline in enrollment to areas that were experiencing growth. Also, faculty who were required to obtain terminal degrees in their subject areas were considered part of reallocation. The revision of academic programs involved instructional design. Grant funds were provided for faculty to establish new courses or to modify existing ones.

From July 1980 to March 1982, the Steering Committee conducted five rounds for awarding grant funds. Table 1 presents the dates of the rounds and the awards in dollars.

Table 1. Faculty Vitality Project grant funding by date and amount.*

Funding Session	Date	Amount Awarded
Round 1	July 1980	\$ 27,218
Round 2	November 1980	33,004
Round 3	May 1981	50,511
Round 4	December 1981	36,540
Supplemental Round	March 1982	11,515
Final Disbursement	Late 1983	10,000
Total		\$168,788

*Source: Steering Committee, Faculty Vitality Project (Status Report, 1983).

The Steering Committee conducted award sessions approximately every six months from Summer 1980 to Fall 1982. The grant rounds involved final review of selected proposals and the allocation of funds.

Approximately \$170,000 of the \$228,000 was allocated for direct grants to the faculty at the six units in the System. Administrative expenditures which covered the remainder (i.e., approximately \$60,000) of the grant allocations included operational costs, evaluation of the project, workshops, and conferences to promote the Faculty Vitality Project in the Montana University System.

As reported in the Final Evaluation of the Faculty Vitality Project (Bergquist et al., 1983), there were 97 proposals submitted to the Steering Committee for final review. Twenty-eight (29 percent) of the proposals were

funded. Table 2 presents the number of proposals received and funded by institution in the Montana University System.

Table 2. Grant proposals received and funded, by institution.

Institution	Proposals Received		Proposals Funded	
	No.	Percent	No.	Percent
Montana State University	31	32.0	4	12.9
University of Montana	27	27.8	8	29.6
Eastern Montana College	12	12.4	3	25.0
Western Montana College	10	10.3	4	40.0
Northern Montana College	9	9.3	5	55.6
Montana College of Mineral Science & Technology	8	8.2	4	50.0
Total	97	100.0	28	---

The majority of faculty (approximately 53 percent) who submitted proposals to the Steering Committee were interested in faculty retraining, either in another academic area or upgrading an existing one. Faculty members from the two universities submitted 59.8 percent of the total number of proposals. However, the reverse occurred in awarding grants. Faculty members from the four colleges received 57.1 percent of the funded proposals.

Table 3 presents the breakdown of the 28 funded proposals by subject matter. Faculty in the Social Sciences submitted 41 percent of the proposals

but received only 12.1 percent of the grant awards. The Natural Sciences submitted approximately 20 percent of the proposals and received 60.6 percent of the funds.

Table 3. Funded proposals by subject matter.

Subject Matter	Number	Percent
Natural Sciences	17	60.6
Social Sciences	3	12.1
Humanities/Fine Arts	3	12.1
Professional Studies	5	15.2
Total	28	100.0

Interviews and observations that were conducted for this study corroborated the earlier findings by Rice (1985) and Bergquist et al. (1983). Although a time span of three to six years had elapsed between the original reports and recent interviews, the perceptions of faculty members and administrators remained vivid.

For this study, a representative sample of 65 faculty was interviewed at the three institutions of TECH, EMC, and MSU. These faculty members were asked to respond to questions about faculty development at the System level. (The interview questions are found in Appendix C.) The sample was divided into the categories of participants and non-participants in the FVP. Since participation was not recorded in many events sponsored by project funds,

respondents were allowed to identify whether or not they participated. Of the 65 faculty members who were interviewed, 22 (33.8 percent) participated in project activities. Participation included the areas from direct grant recipients to attendance at seminars or lectures sponsored by project funds.

The data gathered from the interviews and observations with the participants corroborated data collected from the documents. For a majority of the respondents, the FVP presented an excellent opportunity for development of vitality. One full professor in a Professional Studies discipline who had received funding for faculty retraining indicated, "This was an outstanding program. It was a great morale builder for me." Another respondent, a full professor in the Natural Sciences who was involved in faculty reallocation, stated, "The project provided a stimulus for contacts with other faculty in the System. However, I have not made the effort to maintain these contacts." And an associate professor in the Natural Sciences explained, "It was an excellent experience for me. I thoroughly enjoyed it. We got a lot for our \$200,000."

Other participants were less supportive of the FVP. They had encountered difficulties with the administration and coordination of the actual day-to-day operations of the project. They experienced problems making contact with appropriate officials, both on-campus and in the Commissioner's Office. One administrator indicated, "It was a good program on paper, but there was very little follow-through." Another grant recipient, an associate professor in

the Social Sciences, suggested, "There were many promises but little follow-up." These comments isolated the perception by the majority of respondents that there was limited long-term commitment to faculty development in the Montana University System. When outside funding was available, the program was successful, but when the funds were terminated, so was the program.

Another theme from the interviews and observations of participants related to cooperation between all units within the System for promoting faculty development. A major goal of the FVP was to promote inter-unit cooperation within the System. The perception by a majority of respondents was that cooperation was lacking from the beginning. One faculty member who had knowledge of the Steering Committee meetings for grant selection stated, "The funding started in an atmosphere of horsetrading. There was a lot of turf protection going on." An associate professor in the Humanities/Fine Arts echoed similar concerns: "The opportunity to truly have a System effort did not materialize. The inter-unit rivalry continues to poison the System."

The non-participants ($N = 43$) who were interviewed were divided into two subcategories: those respondents who were aware of the FVP but did not participate in any activities, and those respondents who were not aware of the FVP. Faculty who had applied for project funding but were refused were considered non-participants, mostly by their own selection. Approximately 51 percent ($N = 22$) of the non-participants indicated that they had no

knowledge of the FVP. Although the majority of the 22 faculty members were on-campus during the time of the grant, they were not aware of its existence.

The non-participants (N = 21) who had knowledge of the project had similar impressions as the participants. For those faculty who elected to participate, the project was "probably" successful. For many of the non-participants, the rewards for participating in the project were lacking. An associate professor in the Professional Studies indicated, "The application process was an erosion of personal time. I don't have enough hours in the day to do what is expected of me and then write a grant."

Non-participants were more outspoken than participants about the organization and administration of the FVP. The perception was that the Commissioner's Office was not supportive of faculty development. A full professor in the Natural Sciences suggested, "Faculty Vitality didn't work because of the people running it. I did not apply because I couldn't get central administration's approval." Other faculty members pointed to the absence of faculty development activities from the System level after the Faculty Vitality funds were used. "Look at post-grant funding," was a common criticism by non-participants.

Faculty Development at the Institutional Level

The investigation into faculty development at the institutional level involved three representative institutions in the Montana University System:

Eastern Montana College (EMC), Montana College of Mineral Science and Technology (TECH), and Montana State University (MSU). Faculty development at the three institutions consisted of a range of activities, resources, and people. These activities provided a diversity of programs designed for the specific needs of individual faculty members and for the faculty as a whole. Faculty development at the institutional level was delimited to those activities on each of the three campuses: (1) that were defined as faculty development by selected faculty and administrators, and (2) that had maintained accurate records of the activities over the period from 1980 to 1987.²

Data collection for these activities consisted, primarily, of a review of the documents available at the three institutions, interviews with key respondents in the faculty and administration, and observations. The documents included a variety of records, i.e., personal correspondence (letters and memos) and official reports. In some cases documentation was missing for periods of time, for example one month to six months. As different faculty members or administrators assumed responsibility for the various ongoing projects, decisions as to the types of records to be maintained shifted from one individual to another. Often the process of record-keeping changed and the

²Those activities that were pertinent to faculty development but had no documentation or documentation was not available for review were not included in this study. For example, the Teaching Fair, sponsored by the Teaching/Learning Committee at Montana State University, provided the faculty at MSU with information and resources for professional development. This annual event addressed faculty development, yet there were no documents establishing faculty participation or the impact of the activity. Another example concerned those organizations, i.e., foundations, that were ancillary to the institution and who funded activities in faculty development.

documents for this study were stored in separate offices. Verification of data missing from the documents was made during interviews with the faculty and administrators.

A description of the faculty development activities at each of the three institutions and the perceptions of selected faculty members about those activities follow.

Faculty Development at Eastern Montana College (EMC)

Student enrollment at EMC began to decline in the late 1970s and dropped to 2,964 in the Fall of 1980. However, a period of growth in enrollment culminated in 1984 with an enrollment of 3,538 (Montana Comprehensive Annual Financial Report, 30 June 1987). Similar patterns of faculty growth existed during this same period of time. Table 4 presents the faculty at EMC, by academic rank and year, who met the criteria established for this study in Chapter 1.

In 1980, total faculty numbered 81. Of this total, 42 percent (34 faculty) held the rank of full professor, 30 percent (24 faculty) the associate rank, and 28 percent (23 faculty) the assistant rank. By 1987, of a total of 96 faculty, full professors constituted only 39 percent (37 faculty), associate professors 35 percent (34 faculty), and assistant professors 26 percent (25 faculty).

Table 4. Eastern Montana College, academic rank by year.

Year	Full		Associate		Assistant		Total No.
	No.	%	No.	%	No.	%	
1980-81	34	42.0	24	30.0	23	28.0	81
1981-82	30	35.0	28	32.5	28	32.5	86
1982-83	33	35.0	29	31.0	32	34.0	94
1983-84	34	36.0	26	27.0	35	37.0	95
1984-85	35	38.5	25	27.5	31	34.0	91
1985-86	36	34.5	32	31.0	36	34.5	104
1986-87	38	38.3	32	32.4	29	29.3	99
1987-88	37	39.0	34	35.0	25	26.0	96

Table 5 presents the number of faculty members by subject matter and year.

Table 5. Eastern Montana College, subject matter by year.

Year	Natural Sciences		Social Sciences		Humanities/ Fine Arts		Professional Studies		Total No.
	No.	%	No.	%	No.	%	No.	%	
1980-81	18	22.0	18	22.0	20	25.0	25	31.0	81
1981-82	18	21.0	21	24.0	19	22.0	28	33.0	86
1982-83	19	20.0	21	22.5	21	22.5	33	35.0	94
1983-84	18	19.0	23	24.0	23	24.0	31	33.0	95
1984-85	17	19.0	24	26.0	22	24.0	28	31.0	91
1985-86	18	17.0	22	21.0	28	27.0	36	35.0	104
1986-87	17	17.2	21	21.2	27	27.3	34	34.3	99
1987-88	17	17.7	17	17.7	25	26.0	37	38.6	96

In the eight-year period, the greatest growth was experienced in the academic area of Professional Studies. From the total of 81 faculty in 1980, 31 percent (25 faculty) worked in this area. By 1987, total faculty numbered 96; 35 percent (37 faculty) were in the Professional Studies area. The other three academic areas had remained fairly stable during this time span.

Faculty development at Eastern Montana College (EMC) during the years from 1980 to 1987 consisted of a variety of activities that provided assistance to the faculty to conduct research, to design instruction, and to pursue other areas of personal and professional development. The faculty development activities were financed primarily by federal, state, and institutional funds. The funding for faculty development was allocated on a competitive basis where faculty members submitted proposals to selected campus committees for financial support.

Prior to 1983, faculty development at EMC was directed from separate offices across campus. For example, the President's Office, the Title III Office, the Academic Vice President's Office, and the EMC Foundation all administered separate programs for assisting the faculty. In 1983, the Office of Graduate Studies and Research was given the responsibility of coordinating most institutional activities for faculty development from one central office (PRIDE, 1983). The coordinator of the Office of Graduate Studies and Research served as a part-time faculty development officer and part-time administrator.

The reorganization of faculty development activities was intended to simplify operations and to avoid program duplication. The committees, separate bodies with different interests, continued to focus on their respective areas for providing assistance to the faculty, but were housed in the same office. However, not all institutional efforts for faculty development were moved to the Office of Graduate Studies and Research. The President's Office and the Academic Vice President's Office retained a limited number of programs for awarding funds for faculty development. The majority of these programs were for merit awards or for support of sabbatical leave.

The majority of the faculty development activities were administered by four campus committees, the Faculty Development Committee (FDC), the Research and Creative Endeavors Committee (RACE), the EMC Foundation, and the Sabbatical Leave Committee. These four committees were identified by selected administrators and faculty members as representing faculty development as a whole at EMC. Each committee had established criteria for awarding funds to the faculty. The criteria of each committee are outlined below.

The Faculty Development Committee. The Faculty Development Committee (FDC) operated under guidelines established in part by the federal Title III grant to Eastern Montana College, a Developing Institutions Program Grant. The Title III grant began in 1978 and was funded until 1985. Under the conditions of the grant, a faculty member was selected each year to serve as

program coordinator. The FDC evaluated proposals and awarded funds in four specific categories:

- (1) Professional Development Program: This program provided faculty members with the opportunity to prepare long-range career planning. Faculty were encouraged to establish their own priorities for development. Approximately eight awards of \$800 were made each year.
- (2) Visiting Scholars/Lecturers: The funds in this category were used to bring experts in various fields of interest to the campus. Approximately six awards of \$700 were made each year.
- (3) Summer Study Stipends: These awards provided some financial assistance for faculty to pursue extended study. Approximately six awards of \$1,000 were made each summer.
- (4) Faculty Training Program: These funds provided assistance to faculty to participate in workshops and conferences of particular benefit to the individual and to EMC.

The Research and Creative Endeavors Committee. The Research and Creative Endeavors Committee (RACE) promoted faculty development in research and creative interests. Approximately \$10,000 per year was allocated from state funds that were established by the Collective Bargain Contract, section 3.200. Funding was available in two areas. The highest priority was given to projects of scholarly research or creative endeavors that were directed toward peer review. The second priority for funding was given

to support the costs associated with the publication of scholarly or creative works (PRIDE, 1984, pp. 8-9).

The EMC Foundation. The EMC Foundation, a private organization, provided, in addition to other activities, financial assistance for faculty development at Eastern Montana College. The Foundation awarded approximately \$30,000 per year for faculty development in the following categories:

- (1) Faculty Instructional Development Projects: A maximum of \$1,000 was awarded to tenure-track faculty to promote instructional design.
- (2) Faculty Research and Creative Endeavors Project: A maximum of \$1,500 was awarded to tenure-track faculty, preferably junior faculty, for support in research and creative endeavors.
- (3) Seed Money Matching Award: This project provided seed money up to \$5,000 as matching funds for grants that were awarded from sources outside EMC.
- (4) Campus/Community Events: Funding was available for campus-wide or interdisciplinary events that had campus and community appeal.

The Sabbatical Leave Committee. The Sabbatical Leave Committee was responsible for the review and recommendations for sabbatical assignments at EMC. The Committee consisted of five faculty members chosen by the Academic Vice President. By Collective Bargain Contract, section 10.450, faculty with tenurable rank and with six or more years of service at EMC were considered for sabbatical leave. Leaves were approved for not less than two

quarters and not more than one academic year. Faculty salary while on leave was established at two-thirds of the regular academic year contract. Approximately three sabbaticals were awarded each year.

Perception of faculty development at EMC. Data taken from the personnel records of the faculty at EMC revealed that 96 faculty members met the criteria established in Chapter 1 for inclusion in this study. Sixty-five percent of the faculty members had participated, at least once, in the above-described faculty development activities. Faculty participation included a range of options from one faculty member involved in one activity in the eight-year period, to other faculty members participating in multiple activities for five or six successive years. Thirty-four (35 percent) of the faculty did not participate in any of the activities (or there were no records to document their participation).

A representative sample of 59 faculty members was drawn from the total faculty for the purpose of conducting interviews about faculty development at Eastern Montana College. The sample was selected on the basis of the variables of subject-matter affiliation, academic rank, and participation in faculty development. Letters were sent to all 59 faculty members requesting an interview to discuss faculty development. A copy of the interview questions (Appendix C) and potential interview dates were enclosed. Sixteen (25 percent) faculty members responded to the initial request. Two of the 16 were on leave and were not available for interviews. One faculty member

declined to participate. Another faculty member responded favorably to the study, but time constraints did not permit an interview. A second request for interviews was sent to the remaining 43 members of the sample. From this request, two additional faculty members agreed to an interview.

The total number of faculty members interviewed at EMC was 14. This constituted a response rate of 24 percent (14 of 59). Ten faculty members were participants and four were non-participants. The semi-structured interviews were conducted on-campus at EMC and lasted between one and two hours. During the interviews the majority of the respondents appeared relaxed and willing to discuss the questions in-depth. Many had retained a copy of the questions and some had written responses to the questions. The observation was that the faculty had prepared for the interviews. At no point in the interviews did any faculty refuse to answer a question. However, two faculty members appeared rushed and noncooperative during the interviews. The perception was that external circumstances were a factor in the conversation rather than the content of the questions.

The majority of the respondents at EMC defined faculty development as any activity or opportunity that enhanced or promoted professional growth in research and teaching. One participant, an assistant professor in the Professional Studies, typified the definitions of faculty development as "ways that faculty keep up with their field of study, to keep burnout from happening. This includes ways to enhance productivity in professional endeavors and to

improve instruction." An associate professor in the Natural Sciences and a non-participant suggested, "Faculty development is keeping up-to-date, vitalized, and enthused about the subject matter. One can lose enthusiasm very easily because the cutting edge is going very fast."

The definitions of faculty development were consistent across subject-matter areas and academic rank. There were few exceptions among the respondents, either participants or non-participants. Differences occurred with the place of emphasis for teaching and research. A full professor in the Humanities/Fine Arts and a participant stated that "Development should focus more on the field than on teaching." An associate professor in the Professional Studies, a participant, suggested that the emphasis should be on teaching: "It is a way to improve instruction and to keep alive for your students."

For the majority of the respondents, activities associated with the definition of faculty development focused primarily on those areas that promoted teaching and research. Reading journal articles and attending workshops or seminars were most helpful in instructional development. One participant, a full professor in the Social Sciences, indicated that "subscribing to journals and frequently updating textbooks and course materials" assisted with faculty development.

The activities noted for development in research involved travel and contacts off campus. The respondents, in general, identified conferences and workshops as the major source of inspiration for keeping up in the discipline

and for maintaining research interests. A non-participant, associate professor in the Natural Sciences, suggested that the activities involved "leaves, where I can go somewhere else and work with other faculty who have similar interests. I need to go to the labs. I can read the theory, but I can't apply it." In order to conduct research, the majority of respondents needed travel and contact with others in the profession who had similar interests. In most areas, this occurred at conferences, workshops, and during summer study.

According to most of the respondents, their definition of faculty development and the definition at EMC were basically the same. Even though the definitions were similar, there were points of disagreement. One participant, a full professor in the Social Sciences, stated, "Similar definition. However, in terms of current conditions, the Committees (RACE and FDC) are looking more to empirical research. Not all faculty development involves gathering data. Around here, a job well done is when you are doing some research; otherwise, no recognition."

A participant, an associate professor in the Professional Studies, expressed a different point of view. "The definitions are different. I don't consider what RACE and the Faculty Development Committee are doing as faculty development. They don't develop faculty. It is too political." The implications were that the allocations of awards from the committees were made more on personal contact with committee members than the merits of the proposals.

When discussing motivation for participating or not participating in faculty development at EMC, the respondents expressed fear of becoming outdated in the discipline and isolated from the profession. Many stated that they were the only faculty member at EMC and, in some instances, in the Montana University System with expertise in their particular academic area. It was important to maintain professional contact and alleviate morale problems associated with isolation. Participation in faculty development, especially those activities that encouraged travel to conferences and conventions, helped faculty "keep in touch." One participant, a full professor in the Professional Studies, noted, "I need to get away. It helps me to keep going." A similar concern was expressed by a non-participant, an associate professor in the Natural Sciences. "I sense a fear from faculty. We feel inadequate, lack confidence. If we don't leave, we are outdated because our tools are outdated."

Fear of isolation was also a motivating factor for participation in faculty development activities other than those associated with EMC. The respondents suggested that professional contacts were maintained through exposure to other faculty with similar interests, typically other faculty outside the Montana University System. Examples of the activities included attending conventions, workshops, and other opportunities at professional meetings.

The reasons for not participating in faculty development at EMC concerned the competition for time, both professional and personal. The majority

of the respondents expressed frustration with the absence of release time to participate in faculty development. A non-participant, full professor in the Professional Studies, expressed, "I have very little time to hustle them for money. I go off-campus for the needed resources." A participant, associate professor in the Professional Studies, suggested, "It is difficult to keep up. The profession is highly competitive and there is no release time. The Committees have money, but no release time."

In order to prepare proposals, the faculty had to take the time from other responsibilities. The dilemma for the respondents was in deciding what area to sacrifice, personal time or professional duties. The perception of most of the respondents was that teaching loads had increased over the past few years. The time available for professional development had decreased. Since release time was limited, faculty development was accomplished through sacrifice of personal time. A participant, an assistant professor in the Professional Studies, declared,

Time is the factor. Faculty development at Eastern is worthwhile but has been given a low priority. There are other required things. The priority for me is teaching. There is no time for research. I'm tired of the high amount of stress. There is some bitterness, but the strong point of encouragement and support has come from AVP Sexton.

A majority of the participants rated faculty development as effective. On a scale of 1 to 9 (1-3 = not effective, 4-6 = effective, and 7-9 = very effective), the average rating for participants was 4.7. Although rated effective,

faculty development for the same respondents was considered inadequate. The perception was that faculty development was supported at EMC, especially by the AVP and the Office of Graduate Studies and Research, but the resources were limited or not available.

The limited resources created tensions among the faculty. Some considered this to be detrimental to the overall climate on campus. It was difficult to cooperate in an atmosphere of competition. A full professor in the Social Sciences expressed his frustration with the competition: "We are encouraging the young faculty at the expense of the senior faculty. We are not all deadwood."

Another example of limited resources concerned the number of sabbaticals. Since there were an average of three sabbaticals awarded each year and approximately 60 or more faculty who qualified for leave, the chance of receiving a sabbatical was maybe once in a career. A full professor in the Humanities/Fine Arts commented, "Faculty development is inadequate but effective. There aren't enough sabbaticals. After 20 years at Eastern, I deserve one."

The participants voiced concerns over the lack of funding for instructional development. The perception was that the institutional emphasis had shifted from teaching to research, and at a time when teaching loads had increased. An assistant professor in the Social Sciences stated a common perception: "Research has always been funded well. I resent this in ways. We are

oriented to teaching and service, but these two areas don't get funded. Publish or perish at Eastern!" Another associate professor in the Natural Sciences suggested, "The pressure is on to do research. We don't have the resources. If we are to do research, we need the facilities."

For the non-participants, the effectiveness rating of faculty development at EMC was 3.75, slightly above the category of not effective. An associate professor in the Natural Sciences explained his low rating. "I don't think that they have things defined. The focus of the committees (RACE, FDC, and the Foundation) is too narrow. Each committee defines the criteria to meet the needs of the committee members and their friends. It is all political." Yet another full professor in the Professional Studies suggested, "There are some good things about faculty development at Eastern. But there isn't a lot of help in my area. There aren't enough funds. The programs have no impact on me at all."

The criticism of faculty development at EMC, whether from participants or non-participants, focused on the absence of resources. Observations were that the effort to assist faculty with their own development was available, but the resources were inadequate. The remaining funds were distributed to the faculty on a competitive basis. In order to minimize bias in the selection criteria, the faculty development committees established guidelines that were, at times, at odds with the faculty. The dilemma for faculty and committee members concerned the choice of which activities to fund.

Faculty Development at Montana College of
Mineral Science and Technology (TECH)

From 1980 to 1987, student enrollment at TECH grew from a low of 1,247 in 1980 to a high of 2,090 in 1984 (Montana Comprehensive Annual Financial Report, 1987). During the same eight-year period, the number of faculty members grew in a similar manner. The number of faculty members who met the criteria established in Chapter 1 are presented by academic rank and year in Table 6.

Table 6. Montana College of Mineral Science and Technology, academic rank by year.

Year	Full		Associate		Assistant		Total No.
	No.	%	No.	%	No.	%	
1980-81	8	19.0	19	44.0	16	37.0	43
1981-82	11	24.0	19	41.0	16	35.0	46
1982-83	12	24.0	27	54.0	11	22.0	50
1983-84	12	21.0	28	50.0	16	29.0	56
1984-85	20	31.0	32	50.0	12	19.0	64
1985-86	20	35.0	29	51.0	8	14.0	57
1986-87	22	39.0	30	54.0	4	7.0	56
1987-88	26	48.0	23	43.0	5	9.0	54

In 1980, 19 percent of the TECH faculty held the rank of full professor. By 1987, 48 percent were full professors. An inverse pattern occurred in the rank of assistant professor, with 37 percent in 1980 compared to 9 percent in 1987.

Table 7 presents the same faculty by subject-matter affiliation and year. As reflected by the data in this table, the academic emphasis on mineral sciences and related areas remained fairly consistent during this period. Eighty-two percent of the faculty in 1980 and 87 percent in 1987 came from the academic areas of Natural Sciences and Professional Studies.

Table 7. Montana College of Mineral Science and Technology, subject matter by year.

Year	Natural Sciences		Social Sciences		Humanities/ Fine Arts		Professional Studies		Total No.
	No.	%	No.	%	No.	%	No.	%	
1980-81	15	35.0	4	9.0	4	9.0	20	47.0	43
1981-82	17	37.0	5	11.0	4	9.0	20	43.0	46
1982-83	16	32.0	4	8.0	6	12.0	24	48.0	50
1983-84	21	37.5	5	8.9	5	8.9	25	44.7	56
1984-85	24	37.5	5	7.8	5	7.8	30	46.9	64
1985-86	23	40.4	4	7.0	5	8.8	25	43.8	57
1986-87	20	35.7	4	7.2	5	8.9	27	48.2	56
1987-88	20	37.0	2	3.7	5	9.3	27	50.0	54

During the period from 1980 to 1987, there was no designated office or officer, per se, for faculty development at TECH. The majority of resources and activities were coordinated through the office of the Academic Vice President and key faculty committees, especially the Instructional Improvement Committee. The faculty development activities concentrated on three specific areas: (1) travel, (2) leaves of absence, and (3) the Instructional Improvement Committee. These three areas were identified by the office of

the Academic Vice President and selected faculty as those activities that addressed faculty development. They represented the majority of institutional resources committed to faculty development.

Travel. The substantial portion of dollars invested in faculty development at TECH was in travel. Travel for the faculty was divided into two categories: in-state and out-of-state. Approximately \$450 per year was allocated for those faculty members who met the established criteria for travel. Only the faculty who were presenting an original paper, who were involved in a conference, who served as an officer in a professional organization, who chaired a session, or who presented a clear need to improve the instructional quality at TECH were allocated funds for travel.

In the early 1980s travel funds for the faculty were allocated from the budgets of the various departments on campus. The decisions concerning who would travel and how often remained at the departmental level. The department head and the faculty made the choices. However, by the mid-1980s, as the financial resources available to TECH began to decrease, there were fewer dollars for travel. During this time central administration decided that all travel requests would be reviewed and approved through the office of the Academic Vice President.

Leaves of absence. A second component of faculty development at TECH involved sabbaticals and leaves of absence. From 1980 to 1987, approximately 10 sabbaticals were awarded to the faculty. The majority of the

sabbaticals were awarded in the academic areas of Professional Studies and the Natural Sciences, and to professors who held academic ranks of full and associate professor. The award periods varied from one semester to a full academic year and from partial to full funding. The sabbaticals involved faculty pursuits from working in industry to advanced educational leave at another institution of higher learning.

Leaves of absence, typically without pay, also provided faculty with the opportunity for continued study and development by establishing or renewing contacts with industry. Faculty members were allowed and encouraged to work in industry for a semester or a full year in order to be exposed to the latest in research, resources, and industry needs. They were able to bring back to the campus new techniques and new ideas to the benefit of the individual faculty member, the institution, and the students.

One example of the leave of absence for faculty involved international cooperation and study. Officials at TECH established a reciprocal agreement of travel and exchange with institutions in New Zealand, China, and Japan. An agreement with a sister university in Japan (Aketa University) provided opportunities for approximately six percent of the faculty at TECH to travel and study in Japan.

Instructional Improvement Committee. The third component for faculty development at TECH addressed the activities of the Instructional Improvement Committee. Documents available for the Committee dated back to the

1982-1983 academic year. The budget for Committee appropriations varied from \$5,000 to \$10,000 per year. The Committee was charged with instructional improvement at the college. It provided on-campus workshops (approximately two per year) and regional conferences relating to instructional design.

The Instructional Improvement Committee provided educational mini-grants to individual faculty members for course development or course improvement. The Committee also provided travel assistance to faculty in those areas related to instructional development. The travel assistance component of the Committee was in existence until 1984. By 1985, funds available to the Committee were reduced and the Committee discontinued travel allocation. It was the perception of Committee members that this was the least cost efficient of the activities of the Instructional Improvement Committee.

The Instructional Improvement Committee was instrumental in the organization and administration of student evaluation of instruction. The Committee helped win acceptance of a standard instructional evaluation procedure. It continued to monitor this evaluation and distributed the results to the faculty, students, and administration. The Committee served in an advisory capacity to the Academic Vice President for evaluation of instruction.

Perceptions of faculty development at TECH. Investigation into the characteristics of the faculty members who participated and did not participate in

the faculty development activities at TECH from 1980 to 1987 identified 54 faculty who met the criteria established in Chapter 1. Of the 54 faculty, 40 (74 percent) had participated in the activities at least once during the seven-year period from 1980 to 1987. A majority of the participants were multiple users of the activities, some as many as four times in one academic year. There were 14 (26 percent) who had not participated in any of the activities.

The 54 faculty members were contacted via letter requesting interviews. Twenty-one (38.9 percent) faculty members agreed to be interviewed. Thirteen of the respondents were participants in the faculty development activities; eight were non-participants. These faculty were asked to respond to the interview questions about faculty development. (The questions are found in Appendix C.)

The majority of faculty interviewed defined faculty development as all the activities that helped faculty keep up in their field and assist with teaching and research. Participants and non-participants gave similar responses to this question. A full professor in the Natural Sciences and a participant commented, "Faculty development is keeping up-to-date in the field so I can teach and do research." An associate professor in the Social Sciences and a participant defined faculty development as "any activity which emphasizes building skills that broaden teaching and research."

There were a few faculty members who had no definition of faculty development. For others, faculty development should consist of only those

activities that addressed teaching. A full professor in the Natural Sciences and a participant indicated: "Teaching is the only interest. College professors don't do research that is appropriate for industry. Most of what we call research is done for the sake of other faculty, not industry. I'm here to teach, not do phony research." Another full professor in the Natural Sciences and a participant had a similar definition: "Faculty are obligated to the students. I don't give a rip about research. When they pay me to do research, I'll do it. It's teaching."

The majority of responses from participants and non-participants identified professional meetings or conferences as providing the necessary activities for meeting the definition of faculty development. There were similar responses from faculty in different subject-matter areas and academic ranks. In order to remain vital and current in the two areas of teaching and research, it was important to maintain contact with sources in the field. Professional meetings and conferences provided the opportunities. An associate professor in the Professional Studies and a participant suggested: "It is important to attend meetings and to keep current in terms of what is happening in industry."

An assistant professor in the Humanities and Fine Arts and a participant provided similar comments: "It is important to attend workshops and seminars. This is especially important to me since my teaching load does not allow a lot of time for travel."

The teaching seminars and workshops sponsored by the Instructional Improvement Committee provided faculty with information relevant to teaching strategies. One participant from the Natural Sciences and an assistant professor indicated that "the teaching seminars from the Instructional Improvement Committee are helpful. TECH has been good about helping with teaching seminars. I don't do a lot of reading about teaching, so the seminars are helpful to me."

The definition of faculty development used by the majority of the faculty who were interviewed was similar to the institutional definition at TECH. Most faculty concluded, "Basically there is no difference in my definition and what is here at TECH," or "Similar definition." There were a few faculty members who suggested that the two definitions were different. The perception was that since there was no faculty development at TECH, there was no definition.

The response given most often as reasons for participating in faculty development was the need to keep up in the discipline and alleviate some problems associated with professional isolation. This was done by maintaining contacts in industry and at other institutions. Faculty expressed fear of becoming out-dated and out-of-touch in the field.

A full professor in the Professional Studies and a participant expressed, "It is important to keep up in the discipline. If you don't, you are out-dated and it is easy to stagnate. I've seen people stagnate. It scares me." An associate professor in the Social Sciences and a participant had similar

concerns: "I have no one to talk to. There is no one at TECH in my area. There is an element of independence, but this also leads to professional isolation. I'm isolated at TECH. I need to associate with others in my field."

One factor given by respondents for not participating was the teaching load. Teaching responsibilities had increased over the past few years, and research activities had decreased. The perception was that there was not enough time to do both well. An associate professor in the Natural Sciences commented, "I teach all introductory courses. They are all big classes. I don't have the time to travel and to do research. I would like to know what the hell is happening in my field, but I don't have the time to find out." Another associate professor in the Professional Studies suggested, "It's the time factor. Ninety percent of my time at TECH is devoted to teaching. This is not a research institution, although they claim this is the case. I refuse to spread myself too thin."

Other respondents were disenchanted with the faculty development activities. One non-participant suggested, "It's time and money. TECH doesn't have the money and I don't have the time." When resources were available, the faculty had to compete with each other and with other units within the System. The perception was that the institution did not have the necessary resources for faculty development. If faculty wanted to participate in faculty development they had to do it on their own.

A full professor in the Natural Sciences and a participant expressed a common concern:

A lot of faculty develop themselves. The opportunities are outside TECH. The AVP says that you have to improve, but how? We don't have the labs or technicians necessary to do the research. We are caught in a bind. We can only leave if someone else foots the bill. The administration would like to do more, but are somewhat bound by the current financial situation.

All respondents said that they participated in activities that addressed faculty development. The activities that pertained to professional development and keeping up in the field were cited most often. They included a variety of activities from telephone conversations with other faculty at another institution to travel once a month to Montana State University or the University of Montana. Professional contacts at other institutions and in industry were most important. Other activities included short courses, i.e., Chautauqua courses or seminars that were offered in various academic areas.

When asked to respond to the relative effectiveness of the faculty development efforts at TECH, seven of the participants found that the faculty development activities were effective. Six participants found that the activities were not effective. The average rating of effectiveness for participants was 3.77. For the non-participants, six (75 percent) believed that the activities were effective and two (25 percent) stated that the activities were ineffective. The average rating for effectiveness for non-participants was 4.25.

One reason given for the ineffective rating of faculty development related more to the absence of resources than to the efforts by central administration, specifically the AVP. An associate professor in the Natural Sciences and a participant stated, "VP Toppen appears to support honest research, but he has encountered some difficulties with the faculty. In the past, leaves, sabbaticals and travel were mostly political shenanigans, but he straightened that out."

A full professor in the Social Sciences and a participant suggested that faculty development was "effective as far as it goes. There is so much more that could be done. Human resources are so stretched at this point that faculty development in any situation comes down to an either/or balanced against teaching. It [faculty development] is more of a promise than a reality."

The opposing point of view was held by both participants and non-participants. They suggested that central administration was the problem. The rating of ineffectiveness was related to central administration. A full professor in the Professional Studies and a participant indicated that "it was not effective for me." He continued:

You can have all the rules, but if they aren't enforced, there is no real policy. Certain administrators have the power to do as they please. If they say that we can't afford travel or sabbaticals, then faculty development is stopped. Helena can order what it wants. Without the AVP's assistance, it will not work and you are left out.

An associate professor in the Professional Studies and a participant stated, "We have a lot of paper for paper's sake. I'm not sure that this is

worthwhile. Our effort is teaching. But the administration is moving into research and grants."

Other faculty members suggested that faculty development at TECH was not effective because they controlled their own faculty development. One associate professor who was a participant stated, "Not effective for me. At my age I'm vital. The school has said that they require this of me. They don't know how best to do it for me. Someone who has been here 12 years needs a kick in the butt. I've done it myself."

Another participant, a full professor in the Professional Studies, suggested, "You have to be aggressive. Get it on your own. The opportunity is there. All that you need is personal initiative."

The majority of respondents indicated that they would participate in faculty development in the future if the funds were available. The perception was that funding would continue to decline and that individual faculty members would have to provide more of their own development. In almost any form these activities involved contact outside TECH, either in private industry or at other institutions of higher learning.

Some of the respondents indicated that faculty development at TECH was of limited value, either personally or professionally. One assistant professor in the Natural Sciences and a participant said, "No, I do it outside the institution, without their help. They are supportive as long as you don't cost them money. I consider it an erosion of personal time." An associate

professor in the Social Sciences and a participant expressed similar frustration with faculty development activities: "Probably not. The ideal [associated with faculty development] is that if you are good and work hard enough you will be effective with all students. This is unrealistic. I'm beginning to reach the point where vitality leads to burn-out. The standards are too high and there is little success."

Faculty Development at Montana State University (MSU)

Student enrollments at Montana State University (MSU) from 1980 to 1987 followed similar patterns of growth and decline that occurred at EMC and TECH. The Fall enrollment for 1980 at MSU was 9,811 students (Montana Comprehensive Annual Financial Report, 1987). By Fall Quarter 1987, enrollment peaked at 10,789, an increase of nine percent in the five-year period. For the next three years, student enrollments declined from one to four percent per year.

Similar patterns of growth and decline occurred in the ranks of the faculty. The total number of faculty members who met the criteria established in Chapter 1 are presented in Table 8. From Table 8, it can be seen that the number of faculty members grew from 1980 to 1984 and then declined through 1987. During this eight-year period, the number of full professors increased by 13 percent; associate professors by 20 percent; and assistant professors by 24 percent. However, the total percentage for each rank remained fairly consistent over time.

Table 8. Montana State University, academic rank by year.

Year	Full		Associate		Assistant		Total No.
	No.	%	No.	%	No.	%	
1980-81	139	43.0	114	35.0	70	22.0	323
1981-82	147	42.0	124	35.0	81	23.0	352
1982-83	157	42.0	133	35.0	87	23.0	377
1983-84	166	42.0	140	35.0	89	23.0	395
1984-85	174	42.0	141	34.0	96	24.0	411
1985-86	172	42.0	140	34.0	96	24.0	408
1986-87	165	41.0	143	36.0	94	23.0	402
1987-88	159	40.0	143	36.0	92	24.0	394

Table 9 presents the number of faculty members by subject matter and year.

Table 9. Montana State University, subject matter by year.

Year	Natural Sciences		Social Sciences		Humanities/ Fine Arts		Professional Studies		Total No.
	No.	%	No.	%	No.	%	No.	%	
1980-81	116	36.0	51	16.0	35	11.0	121	37.0	323
1981-82	124	35.2	53	15.1	40	11.4	135	38.3	352
1982-83	129	34.2	58	15.4	43	11.4	147	39.0	377
1983-84	131	33.2	58	14.7	48	12.1	158	40.0	395
1984-85	138	33.6	58	14.1	48	11.7	167	40.6	411
1985-86	143	35.0	54	13.0	47	12.0	164	40.0	408
1986-87	142	35.0	53	13.0	48	12.0	159	40.0	402
1987-88	142	36.0	53	13.5	48	12.2	151	38.3	394

During this time, the number of faculty members in the Natural Sciences grew by 18 percent, the Social Sciences by 4 percent, the Humanities/Fine Arts by 27 percent, and the Professional Studies by 20 percent.

From 1980 to 1987, faculty development activities at MSU involved four specific areas: the Research-Creativity Program, the Teaching-Learning Committee, sabbatical leaves, and faculty travel. The majority of institutional efforts for fostering faculty development were included in these four areas. There was no officer responsible for coordinating faculty development. Rather, matters of faculty development were conducted through the Office of the Vice President for Academic Affairs and the Office of the Vice President for Research Administration. Annual allocations for faculty development from 1980 to 1985 surpassed \$300,000.

The majority of institutional funds allocated for faculty development were awarded directly to the general faculty. Individual faculty members competed for grant monies through the writing of proposals in various areas that promoted teaching, research, creativity, and service. Although central coordination for faculty development was monitored in the VPAA's Office, the various activities were administered by faculty committees. From 1980 to 1987 there was no faculty development office or officer responsible for faculty development. The programs were designed to be run by faculty for faculty.

The majority of the faculty development activities were administered by faculty committees such as the Research-Creativity Committee, the

Teaching-Learning Committee, and the Sabbatical Committee. The exception occurred in the category for faculty travel. In general, the decisions regarding faculty travel remained an administrative function. The department heads played key roles in the allocation of these funds. The criteria for each of the four areas of faculty development are outlined below.

Research-Creativity Committee. The Research-Creativity Program was organized in 1979 by the Vice President for Research Administration. The program was administered by the Research-Creativity Committee which consisted of nine faculty members, one from each college on campus. The Committee was responsible for the distribution of funds to the general faculty to develop opportunities for research-creativity activities. Central coordination of the program, which included record-keeping and grant money distribution, was monitored by the Office of the Vice President for Research Administration.

Originally, the Research-Creativity Committee distributed funds in three areas of development: competitive awards to the faculty, visiting speaker awards, and awards to graduate students. Awards to the faculty averaged \$105,000 per year from 1980 to 1985. The awards were intended to assist faculty members in development research-creativity programs. These stipends allowed faculty members the opportunity to pursue research-related endeavors. There were no maximum or minimum amounts established, but the Committee recommended a range of \$500 to \$8,000 per year.

Priority funding was given to proposals that were considered "seed" grants. The intent was to provide funding for projects that had potential for receiving external support. The Committee also considered funding proposals which attempted to develop new programs. The monies that were allocated were available for travel, release-time for grant preparation, and operations expenses which included graduate assistants, equipment purchases, and support staff.

The visiting speaker awards provided funds to selected departments that were trying to bring prominent scholars to MSU for lectures, workshops, or seminars. Approximately \$10,000 per year was available for travel, per diem allocation, and speaker fees. By 1985, the monies available for this program were merged with a component of a National Science Foundation Grant ("Montanans on a New Track for Science," or MONTSS) to continue funding for visiting lecturers and speakers.

The awards to graduate students, administered from the Office of the Dean of Graduate Studies, provided support funds to graduate students for completion of projects leading toward graduate degrees and to provide travel to conferences for presentations of research findings. The annual allocation in this program was approximately \$10,000.

The Research-Creativity Committee, like most other organizations on campus (i.e., the Teaching-Learning Committee and the Sabbatical Committee), experienced growth and rapid decline. From 1980 to 1985, the

Committee allocated approximately \$125,000 per year. However, in 1985-86, when legislative appropriations to the Montana University System and subsequently to MSU were sharply curtailed, the awards to faculty were discontinued due to lack of funds. The Visiting Speakers Program and awards to graduate students were maintained at previously established levels of funding (Jutila, 1985).

Teaching-Learning Committee. The history of the Teaching-Learning Committee (TLC) dates back to 1978 when the Vice President for Academic Affairs organized a group of faculty members from all colleges and programs to coordinate and address instructional development at MSU. The TLC was an interdisciplinary committee of faculty members who administered funds to promote faculty development, specifically instructional development. From its inception, the TLC was designed to be run by faculty for faculty, which meant that no permanent administrator was hired to oversee the operations. The Committee elected its own coordinator and solicited its own members.

From 1979 to the mid-1980s, the budget for the TLC was approximately \$100,000 per year. The Committee solicited proposals from the faculty twice annually and awarded grants in most areas associated with instructional design. During this period, 40 to 60 percent of the TLC's annual allocation was awarded directly to the faculty on a competitive basis. From 10 to 20 grants were funded each year, ranging in amounts from \$40 to \$8,000.

The Teaching-Learning Committee funded proposals in four categories:

(1) Release-Time Grants -- grants that provided academic year release-time for faculty to pursue instructional activities directly, (2) Mini Grants -- grants that provided essential support and technical services for instructional matters, (3) Travel Grants -- grants that provided faculty with the opportunity for travel to workshops or conferences on instructional development, and (4) Summer Quarter Grants -- grants that provided salary compensation during the Summer Quarter to allow faculty the opportunity to pursue instructional development projects.

A portion of the annual funds allocated to the TLC were invested in major workshops on teaching techniques and seminars to support new and innovative ideas in university teaching. The TLC's charge of instructional development at MSU involved the exposure of as many faculty members as possible to the different techniques and resources in instructional design. These activities included the Teaching Fair and summer workshops.

During the latter half of the 1980s, the resources available to the TLC declined or were sharply curtailed as legislative appropriations to the institution were cut. The remaining monies available to the TLC were focused on a new Core Curriculum at MSU. These funds were awarded to faculty members who wanted to modify or create a new course pertinent to the Core. There was a limited number of \$2,000 grants made available to the faculty to assist with the preparation of the new Core.

One example of the TLC's success in promoting faculty development was the Teaching Fair. The Fair was an annual event that provided seminar and lecture sessions which focused on common instructional problems from within a variety of disciplines and fields of study with a variety of solutions. Faculty members with similar interests and professional persuasions could discuss problems and solutions to instructional concerns. The idea was to reach as many faculty members as possible across campus to encourage them to consider change in instructional design. Also, the TLC wanted to capture the attention of those faculty members who might be slightly interested in instructional improvement, but who normally would not write a competitive grant to the Committee.

Another example of project success that had institutional and System impact was the Writing and Thinking Across the Curriculum grant. This was a multi-disciplinary project that involved strategies to stimulate development of student thinking and writing skills in all academic areas across the campus. The success of this project was instrumental in a System-wide project that had similar goals.

Sabbatical leave. The criteria for sabbatical leaves were established in the Faculty Handbook (section 103.03) at Montana State University. Faculty employed in the institution with seven years of service to the State were eligible for consideration. Sabbatical leaves were normally negotiated from one quarter to an academic year. Faculty members who received sabbaticals

agreed to return to MSU for one full year after completion of the assignment or repay the monies taken while on leave.

The application for a sabbatical was processed through the Office of the Vice President for Academic Affairs (VPAA). This application, which required the signature of the respective department head, was screened in the VPAA's Office to determine if eligibility criteria were met. The applications were forwarded to the Sabbatical Review Committee, a five-member subcommittee of the Faculty Affairs Committee. This committee ranked each application and returned them to the VPAA for final approval.

From 1980 to 1987, the majority of the funding for sabbatical leaves came from two sources: the University pool from the VPAA's Office and the respective departments. For leaves that were approved for an academic year, the faculty member received two-thirds of his/her salary; 17 percent was paid by the department and 50 percent came from the University pool. For sabbatical assignments that were approved for less than three quarters, the faculty member received full pay; the University pool provided two-thirds and the department, one-third.

From 1980 to 1987, allocations for sabbatical leaves from the University pool averaged \$115,000 per year. The range of the number of faculty members applying for sabbatical leaves was 14 to 20 per year, with 8 to 10 applications being approved each year. Sabbatical assignments were awarded primarily to full and associate professors (50 and 49 percent,

respectively). Thirty-eight percent of the awards were made to faculty members in the academic area of the Humanities/Fine Arts, 30 percent in the Natural Sciences, 20 percent in the Professional Studies, and 12 percent in the Social Sciences.

Faculty travel. Faculty travel, specifically out-of-state travel, was the anomaly of the four components of faculty development at MSU from 1980 to 1987. The budgets for travel were established at the departmental level. The decisions as to which faculty members would travel, for what reasons, and how often were decided by the department head and/or the faculty members of the respective departments. The criteria used to determine priority for travel consideration involved categories such as attendance at national conferences, professional presentations, and recruitment for replacement of vacant faculty positions within the department.

The travel expenditures by subject-matter affiliation and year are presented in Table 10. From 1980 to 1985, expenditures in faculty travel increased 29 percent. Approximately 43 percent of the travel funds were spent in the Professional Studies, 14 percent in the Humanities/Fine arts, 23 percent in the Social Sciences, and 20 percent in the Natural Sciences.

The data for comparison of travel expenditures by academic rank were not available for this study. The records contained only cumulative totals by academic area. In order to identify individual faculty members who traveled

and for what reasons would have required a hand search of hundreds of thousands of vouchers.

Table 10. MSU travel expenditures, subject matter by year.

Year	Natural Sciences		Social Sciences		Humanities/ Fine Arts		Professional Studies		Total No.
	Amount	%	Amount	%	Amount	%	Amount	%	
1980-81	\$30,772	20.0	\$35,954	23.0	\$22,190	14.0	\$68,553	43.0	\$157,469
1981-82	34,449	21.0	41,857	25.0	31,133	19.0	58,506	35.0	165,945
1982-83	39,818	22.0	44,020	24.0	21,092	12.0	77,603	42.0	182,533
1983-84	35,547	18.0	50,737	25.0	21,377	11.0	92,132	46.0	199,793
1984-85	45,337	21.0	38,248	18.0	33,860	16.0	95,728	45.0	213,173
1985-86	42,968	19.5	42,512	19.5	39,423	18.0	95,452	43.0	220,355
1986-87	36,842	22.0	25,431	15.5	25,703	15.5	79,369	47.0	167,345

Perceptions of faculty development at MSU. A search of the personnel records at MSU revealed that a total of 394 faculty members met the criteria established in Chapter 1 for consideration in this study. The documents available from the Research-Creativity Committee, the Teaching-Learning Committee, and the Sabbatical Committee indicated that approximately 46 percent of the faculty members had participated in these activities at least once from 1980 to 1987. Faculty participation included a range of activities from attendance at workshops to annual recipients of committee grant monies.

A random sample of 79 faculty members was drawn from the total faculty for the purpose of conducting interviews about faculty development at MSU.

The sample was selected on the basis of the variables of academic rank, subject-matter affiliation, and participation. Letters were sent to all 79 faculty members requesting an interview to discuss faculty development. (A copy of the interview questions is found in Appendix C.) Twenty-two faculty members agreed to this initial interview request. Approximately three weeks after the initial request, a second request was sent to the remaining 57 members of the sample. From this request, eight additional faculty agreed to be interviewed. In total, the response rate for the sample was 38 percent (30 of 79). Of the 30 faculty members who agreed to be interviewed, 16 were participants and 14 were non-participants.

The interviews were conducted in the respective offices of the faculty members. The respondents were prepared for the interviews and the perception was that they had reviewed the questions and had considered their responses to the questions in advance. They appeared relaxed and willing to respond. A majority of the respondents were candid in their responses, especially after they were given assurances that the reporting of the contents of the interview would not identify any individual.

The respondents defined faculty development as those activities or opportunities that promoted improvement in two specific areas: teaching and research. The definitions were brief and emphasized both research and teaching. A participant in the Professional Studies and an associate professor

provided a typical definition: "Faculty development is staying current in the areas of teaching and research, as well as maintaining my sanity."

The definitions of faculty development at MSU were consistent across academic rank and subject matter. The responses at MSU were similar to those given at TECH and EMC. However, there were some exceptions among the respondents for participants and non-participants. Differences occurred with the placement of emphasis for teaching or research. An assistant professor in the Natural Sciences stated, "Faculty development includes any one of a series of programs to help faculty become more competitive in the field. This broadens the horizons and involves more research than teaching."

One theme that was consistent in the definitions was the need to continue to grow or mature in the profession. The idea was to keep up-to-date professionally. Faculty perception was that development had a component of "maintaining." Comments included such terms as "staying alive professionally," "staying current," or "keeping up-to-date." The faculty members were concerned with maintaining an up-to-date professional status. There was never an attitude of "getting ahead"; just a need to at least keep up.

The majority of the respondents indicated that the definition of faculty development involved a variety of activities that promoted teaching improvement and research-creativity endeavors. The responses were consistent for

academic rank and subject-matter affiliation. The comments included, "attend meetings," "sabbaticals," and "the opportunity to do work in other areas." The emphasis was on peer interaction at conferences, workshops, and national meetings. The faculty members expressed interest in going off-campus for these faculty development activities. An associate professor, a participant in the Natural Sciences, expressed the rationale for peer interaction: "It is important to maintain contacts in the field. We do research and creative activity that leads to recognition by colleagues in the field. While the interest in teaching comes from within oneself, we need exposure to outside stimulus such as workshops, lectures, reading journals, etc."

Although travel off-campus was important to the respondents, there was support for activities on campus, such as TLC workshops and the Visiting Lecture Series from the Research-Creativity Committee. An associate professor in the Professional Studies and a participant stated, "It is more advantageous to bring people to campus than to send someone off. When one person goes to a conference, he/she benefits. When someone comes to campus, we all benefit. I rarely travel out of here to get help with teaching. I'm involved on campus with the TLC and teaching improvement."

The perception of a majority of the respondents was that they were not permitted sufficient time for faculty development. The constraints of increased teaching loads, and other responsibilities, did not allow the time needed for these activities. Consequently, faculty members had fewer opportunities for

development. Release-time to improve teaching or conduct research had been curtailed. If faculty development occurred, it was accomplished at the expense of personal or "family" time.

When comparing the respondents' definitions of faculty development with what existed at MSU, many faculty members found that the two definitions were "similar" or that there was "no difference." The emphasis on teaching from the TLC and research from the R-C Committee was in accord with what the faculty expected. The exceptions in definition were with the perception of emphasis. One full professor in the Social Sciences and a participant suggested, "The definitions are different because they want to emphasize research to the exclusion of teaching." Another participant, an associate professor in the Humanities/Fine Arts, expressed similar concerns.

The definitions are different. What is bothersome to me is that faculty development is not unified across campus. The expectations vary from one department to another. I have heavy teaching loads each quarter and I'm expected to do research the same as someone who teaches an occasional course. I don't have the same opportunities. There are inequities in the system.

Some respondents expressed frustration with the difference between what was defined as faculty development at MSU and what was practiced. The concern was the arbitrary decisions relating to grant allocation. The perception was that the merits of the proposal were secondary to political contacts with committee members. One participant, an associate professor in the Natural Sciences, stated in reference to proposal consideration, "It's

politics pure and simple -- who you know. It is hard to find out what the hell is going on around here."

The decision to participate in faculty development at MSU for most respondents was governed by "available resources." In order to maintain current professional status, the faculty members were motivated to apply for the grant monies. They were able to retain contacts in the field and to avoid "professional isolation." The monies available through the faculty development activities provided the necessary "seed money." An associate professor in the Natural Sciences concluded, "We need the money to get out and make the contacts. Research-Creativity was good for momentum to get started." Another associate professor in the Professional Studies suggested, "I chose the path of least resistance. In order to get the rewards, you have to do the research. Research is the key term. Those are the rules at MSU. Teaching is not rewarded."

The reasons provided by the respondents for not participating in faculty development were consistent for the variables of academic rank and subject-matter affiliation. The perception by most of the faculty members was that they were "outside the political power" at MSU. They were alienated from the people who made the necessary decisions relating to how faculty development monies were spent. The frustration, expressed by some faculty members, was that faculty development was for the younger faculty members or for those who conducted research. The prevailing attitude was "why

bother?" A full professor in the natural sciences summarized, "I'm not at the research level. There is no option for an old-timer that has failed. Retirement is my designation." Another full professor in the Natural Sciences expressed similar concerns: "What is there for older faculty? In my area you need three or four major publications a year to be successful. I don't have the support staff to do this type of research."

The respondents, both participants and non-participants, stated that they participated in the faculty development activities other than those associated with MSU. The faculty explained the need to maintain contact with peers in the profession, through travel to meetings, workshops, and national conferences. The exposure to professionals in the field helped control "isolation" and "burn-out." An associate professor in the Humanities/Fine Arts concluded, "Yes, I'm isolated. The library does not have the resources necessary for me to do research. Travel is the only solution." Another associate professor in the Natural Sciences suggested, "As a department, we go to meetings to make contacts. Our success with grants indicates that the contacts are working. All that we have, we picked up indirectly. You don't succeed by sitting on your rear in the office. You have to get out and talk."

A majority of the respondents rated faculty development as effective. The overall rating was 4.93 on a scale of 1 to 9, from ineffective to effective. The range in responses was a low of 1 to a high of 9. The average rating for non-participants was 4.5, and 5.2 for participants. The respondents indicated that

the low rating of effectiveness was due more to the absence of resources than to lack of effort by faculty and administration.

The perception was that limited resources and the competition for grant monies created "unnecessary" tensions among the faculty. Not all respondents believed that they or their grant proposals were judged fairly. An assistant professor, a non-participant in the Physical Sciences, suggested that "there are a limited number of resources available for faculty development. The ratio of your grant being funded is low." Another non-participant, a full professor in the Natural Sciences, stated: "It's the good guys giving the other good guys the money and favors which is contrary to the principle. It's politics."

The conclusions were that while faculty development was supported, especially by the VPAA, the resources were very limited or nonexistent. The investment by MSU of less than \$10,000 in many areas of teaching and research was considerably lower than national norms. One associate professor, a participant in the Natural Sciences, stated:

Problems here are that the department and the university wish to push into areas that are competitive nationally. The dimensions of commitment vary considerably. For example, at MSU, \$25,000 would be a large sum, while at similar institutions, \$250,000 is common. We have to spend more time on grant writing than on grant execution. A relative concern is in the area of personnel. We have to attract more graduate students. This is a very slow process with stipends, tuition waivers, etc. We accept everyone on the high side of average.

For many of the respondents, the dilemma occurred with the conflict between teaching and research. As resources began to decline, faculty positions were cut and teaching duties increased. Faculty development was accomplished at the expense of personal time. A participant, a full professor in the Natural Sciences, stated:

We have to do it. It is hard to do research at MSU. The teaching loads are high, the facilities are limited, and there aren't enough graduate students. But we survive. The key is flexibility. Times have changed. You have to go out and find the money. You lose petty competition when you turn outside.

Other faculty members who rated the effectiveness as low expressed frustrations with the feedback that they received from the Committee. Often, the response sent to the grant applicants was a form letter with little or no insight as to why the grant was not funded. Feedback from the Committee was minimal. As one participant, an associate professor in the Social Sciences, stated: "It is discouraging to receive a terse 'no.' There was no constructive criticism. The qualitative effort was not put in by the Committee."

Participants and non-participants were concerned with the number of sabbaticals given each year. With a staff of approximately 500 and an average of only 10 per year, there was doubt of ever receiving a sabbatical. The frustration was that the possibility was so low and the money might not be available when the time for a sabbatical arrived. An associate professor, participant in Natural Sciences, stated: "A lot of our dollars go into people and programs who have crashed and burned! It costs too much money to

pull them out. We need to identify those who are about to burn and bail them out first."

The majority of the respondents indicated that they would participate in faculty development in the future, if the resources were available. However, there was doubt as to the availability of these resources. The dilemma for most of the faculty members was the inevitable result of not participating. In order to compete and to perform in the profession, faculty must have the resources. The skepticism was that the institution will not be able to afford this luxury. The questions remained: Where will the money and time come from? Will it be grant or personal?

Characteristics of the Faculty Who Did and Did Not Participate in Faculty Development

There were 544 faculty members at the three institutions who met the criteria established in Chapter 1. The population included 96 faculty members at EMC, 54 at TECH, and 394 at MSU. A review of the available documents and interviews conducted at the respective institutions classified these individuals as participants or non-participants in faculty development. From the population of 544, a random sample of 192 faculty members was chosen by the characteristics of academic rank, subject-matter affiliation, and whether they were participants or non-participants. Interviews were requested with each member chosen in the sample. Sixty-five faculty members (33.8 percent) agreed to the interviews. For the purpose of analysis and hypothesis

testing, these data are presented in tabular format by the variables of academic rank, subject-matter affiliation, and participation and non-participation in faculty development.

Hypotheses

Null Hypothesis 1: Participation in faculty development activities is independent of academic rank.

Tables 11, 12, and 13 present the results of the Chi-Square Test of Independence for academic rank by participation in faculty development activities. A separate table and discussion are presented for each of the three academic institutions.

Table 11. Eastern Montana College: Chi-Square Test of Independence, academic rank by participation (N=96).

	Full Prof		Associate Prof		Assistant Prof	
	Obs	Exp	Obs	Exp	Obs	Exp
Participants	29	23.9	20	22.0	13	16.1
Non-Participants	8	13.1	14	12.0	12	8.9
Totals	37		34		25	

The calculated Chi-Square is 5.3 with a P-value of 0.69. Based on the analysis of the findings presented in Table 11, Null Hypothesis 1 was retained at the .05 level of significance. Participation in faculty development was independent of academic rank at Eastern Montana College.

Table 12. Montana College of Mineral Science and Technology: Chi-Square Test of Independence, academic rank by participation (N=54).

	Full Prof		Associate Prof		Assistant Prof	
	Obs	Exp	Obs	Exp	Obs	Exp
Participants	17	19.3	18	17.0	5	3.7
Non-Participants	9	6.7	5	6.0	0	1.3
Totals	26		23		5	

The calculated Chi-Square is 2.92 with a P-value of .2240. Based on the analysis of the findings presented in Table 12, Null Hypothesis 1 was retained at the .05 level of significance. Participation in faculty development was independent of academic rank at Montana College of Mineral Science and Technology.

Table 13. Montana State University: Chi-Square Test of Independence, academic rank by participation (N=394).

	Full Prof		Associate Prof		Assistant Prof	
	Obs	Exp	Obs	Exp	Obs	Exp
Participants	75	73.9	86	66.4	22	42.7
Non-Participants	84	85.1	57	76.6	70	49.3
Totals	159		143		92	

The calculated Chi-Square is 29.59 with a P-value of .0000. Based on the analysis of the findings presented in Table 13, Null Hypothesis 1 was rejected. According to these data, the two variables of academic rank and participation are not independent at Montana State University. Sixty percent of the

associate professors participated in the faculty development activities, while 47 percent of the full professors and 22 percent of the assistant professors participated. More associate professors and fewer assistant professors than expected participated in the faculty development activities.

Null Hypothesis 2: Participation in faculty development activities is independent of subject-matter affiliation.

Tables 14, 15, and 16 present the results of the Chi-Square Test of Independence for subject-matter affiliation by participation in faculty development activities. A separate table and discussion are presented for each of the three academic institutions.

Table 14. Eastern Montana College: Chi-Square Test of Independence, subject-matter affiliation by participation (N=96).

	Natural Sciences		Social Sciences		Humanities/ Fine Arts		Professional Studies	
	Obs	Exp	Obs	Exp	Obs	Exp	Obs	Exp
Participants	10	11.0	13	11.0	20	16.1	19	23.9
Non-Particip.	7	6.0	4	6.0	5	8.9	18	13.1
Totals	17		17		25		37	

The calculated Chi-Square is 6.727 with a P-value of .0804. Based on these findings, Null Hypothesis 2 was retained at the .05 level of significance. Participation in faculty development was independent of subject-matter affiliation at Eastern Montana College.

Table 15. Montana College of Mineral Science and Technology: Chi-Square Test of Independence, subject-matter affiliation by participation (N=54).

	Natural Sciences		Social Sciences		Humanities/ Fine Arts		Professional Studies	
	Obs	Exp	Obs	Exp	Obs	Exp	Obs	Exp
Participants	16		2		5		17	
Non-Particip.	4		0		0		10	
Totals	20		2		5		27	

The calculation of Chi-Square requires that at least 80 percent of the cells have expected values of 5 or greater. Since this condition was not met, the analysis was not performed for Null Hypothesis 2 as it related to Montana College of Mineral Science and Technology.

Table 16. Montana State University: Chi-Square Test of Independence, subject-matter affiliation by participation (N=96).

	Natural Sciences		Social Sciences		Humanities/ Fine Arts		Professional Studies	
	Obs	Exp	Obs	Exp	Obs	Exp	Obs	Exp
Participants	81	66.0	16	24.6	32	22.3	54	70.1
Non-Particip.	61	76.0	37	28.4	16	25.7	97	80.9
Totals	142		53		48		151	

The calculated Chi-Square is 26.86 with a P-value of .0000. Based on these findings, Null Hypothesis 2 was rejected. According to these data, the two variables of subject-matter affiliation and participation are not independent

at Montana State University. More faculty members than expected participated from the Natural Sciences and Humanities/Fine Arts. Fewer faculty members than expected participated from the Social Sciences and Professional Studies.

Null Hypothesis 3: Faculty perception of effectiveness of faculty development activities is independent of academic rank.

Table 17 presents the results of the Chi-Square Test of Independence for academic rank by faculty perception of effectiveness of faculty development activities.

Table 17. Chi-Square Test of Independence, academic rank by rating of effectiveness (N=65).

Rating Scale	Full Prof		Associate Prof		Assistant Prof	
	Obs	Exp	Obs	Exp	Obs	Exp
Very Effective (7-9)	3	3.3	4	3.2	1	1.5
Effective (4-6)	15	15.0	13	14.4	8	6.6
Ineffective (1-3)	9	8.7	9	8.4	3	3.9
Totals	27		26		12	

The calculated Chi-Square is 1.047 with a P-value of .9017. Based on the analysis of the findings presented in Table 17, Null Hypothesis 3 was retained at the .05 level of significance. Faculty perception of effectiveness of faculty development was independent of academic rank.

Null Hypothesis 4: *Faculty perception of effectiveness of faculty development activities is independent of subject-matter affiliation.*

Table 18 presents the results of the Chi-Square Test of Independence for subject-matter affiliation by faculty perception of effectiveness of faculty development activities.

Table 18. Chi-Square Test of Independence, subject-matter affiliation by rating of effectiveness (N=65).

Rating Scale	Natural Sciences		Social Sciences		Humanities/ Fine Arts		Professional Studies	
	Obs	Exp	Obs	Exp	Obs	Exp	Obs	Exp
Very Effective (7-9)	1	3.0	2	1.2	0	0.8	6	3.9
Effective (4-6)	13	11.8	4	4.8	4	3.2	14	15.1
Ineffective (1-3)	8	7.1	3	2.9	2	1.9	8	9.0
Totals	22		9		6		28	

The calculation of Chi-Square requires that at least 80 percent of the cells have expected values of 5 or greater. Since this condition was not met, the analysis for Null Hypothesis 4 was not performed.

Null Hypothesis 5: *Faculty perception of effectiveness of faculty development activities is independent of participation.*

Table 19 presents the results of the Chi-Square Test of Independence for faculty participation by rating of effectiveness.

Table 19. Chi-Square Test of Independence, participation by rating of effectiveness (N=65).

Rating Scale	Participants		Non-Participants	
	Obs	Exp	Obs	Exp
Very Effective (7-9)	7	5.4	2	3.6
Effective (4-6)	19	21.0	16	14.0
Ineffective (1-3)	13	12.6	8	8.4
Totals	39		26	

The calculated Chi-Square is 1.693 with a P-value of .4325. Based on these findings, Null Hypothesis 5 was retained at the .05 level of significance. Faculty perception of effectiveness of faculty development activities was independent of participation.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

The three-fold problem of this study was:

- (1) to describe faculty development as it existed in the Montana University System from 1980 to 1987 and in three representative types of institutions within that System;
- (2) to determine if a relationship existed between participation in faculty development activities and the variables of academic rank and subject-matter affiliation; and
- (3) to assess how faculty perceived the effectiveness of faculty development activities.

Institutional documents relevant to faculty development were searched to determine the characteristics of the faculty members who participated and did not participate in the activities from 1980 to 1987. The document search disclosed that there were 544 faculty members at the three institutions who met the criteria for inclusion in the population. From the population a random sample of 192 faculty members was chosen according to the characteristics of academic rank, subject-matter affiliation, and participation and non-

participation. Interviews were requested with all the members of the sample. A total of 65 faculty members agreed to the interviews.

The purpose of this chapter is to present the conclusions of the study and to make recommendations for future research and improved practice in faculty development. The conclusions are based on data taken from the review of the documents of faculty development and the interviews of selected faculty members. These data were gathered in reference to the research questions established in Chapter 1. The conclusions are supported by the descriptive and statistical findings of the study.

Conclusions

- (1) The definition of faculty development included a myriad of activities that enhanced faculty growth in teaching and research. The definitions of faculty development were consistent across academic rank, subject-matter affiliation, and participation. The majority of faculty members who were interviewed suggested that any definition must include a variety of activities that promoted growth in teaching and research. The activities provided assistance to the faculty to conduct research, design instruction, and pursue other areas of personal and professional development. Faculty members preferred a diverse set of activities that would meet individual and group needs.

These findings concur with other research that emphasized the importance of multi-faceted faculty development programs (Bergquist & Phillips, 1975; Francis, 1975; Gaff, 1978; Simerly, 1975; Toombs, 1975). These studies concluded that effective faculty development programs considered the individual differences in faculty members and their relative needs. Since faculty differed in such basic characteristics as academic rank, subject-matter affiliation, gender, and age, these differences must be taken into consideration when addressing faculty development.

- (2) Faculty members participated in faculty development activities both on- and off-campus. Participation in faculty development was not limited to those activities associated with the respective institutions of higher education. The majority of the faculty members who were interviewed suggested that they participated in a variety of faculty development activities both on- and off-campus. On-campus participation consisted primarily of the activities provided by institutional faculty development programs. They ranged from individual grants to cooperative efforts at seminars and workshops. Off-campus activities involved peer interaction at regional and national conferences or meetings.

Faculty stated that they participated in faculty development for a variety of professional and personal reasons. They received both intrinsic and extrinsic rewards for their participation (McGee & Ford, 1987; McKeachie, 1979). Intrinsic rewards included personal satisfaction

for being able to contribute to the profession and a sense of usefulness. Extrinsic rewards involved adequate resources to perform professionally and peer recognition for this performance (Braskamp et al., 1984).

Motivation for participating in faculty development was related to the personal and professional accomplishments. Often, faculty participated simply because the necessary resources and funding were available only through the faculty development programs. Also, many faculty expressed fear of becoming outdated in the profession and isolation as factors that contributed to participation (Seymour, 1988). By maintaining contact with peers in the field, faculty were able to avoid burnout and stagnation (Melendez and deGuzman, 1983). Of particular concern to the respondents was the perceived isolation of the academic profession in the state of Montana. Most faculty members suggested that interaction with peers in the profession was limited or nonexistent due to the distances between the institutions in the System and regional or national institutions. Budget cuts further curtailed the opportunity to travel.

- (3) Institutional and faculty definitions of faculty development were similar. The majority of the faculty stated that their definition of faculty development was basically the same as the definition in existence at the institution. The programs provided opportunities for development in two key areas, teaching and research.

- (4) Participation in faculty development at EMC and TECH was independent of academic rank and subject-matter affiliation. The data from these two institutions reveal that participation occurred across rank and subject matter. There was no evidence to suggest a relationship between the characteristics of academic rank, subject-matter affiliation, and participation in faculty development activities at these two institutions. The majority of the faculty participated in the activities at least once during the period from 1980 to 1987.
- (5) Participation in faculty development at MSU was not independent of academic rank and subject-matter affiliation. According to the data from MSU, the variables of participation in faculty development and academic rank and subject-matter affiliation were not independent. Sixty percent of the associate professors, 47 percent of the full professors, and 22 percent of the assistant professors participated in the faculty development activities at MSU. These findings suggest that participation in faculty development activities occurred more often at the associate professor rank. Perhaps faculty development resources could be allocated by rank, thereby encouraging more equitable participation by full and assistant professors.

When considering subject matter and participation, faculty members in the Natural Sciences and Humanities/Fine Arts participated in the faculty development activities more often than was expected, i.e., 67

percent of the faculty members in the Humanities/Fine Arts and 57 percent in the Natural Sciences. Thirty-eight percent of the faculty members in the Professional Studies and 30 percent in the Social Sciences participated. Consequently, participation in faculty development was related to subject-matter affiliation at MSU.

- (6) On a scale of 1 to 9 (ineffective to very effective), the majority of the faculty who were interviewed rated faculty development as effective. The consensus of opinion of the faculty was that faculty development at the institution was effective. The rating was consistent for academic rank, subject-matter affiliation, and participation. Sixty-eight percent of the faculty rated the programs as effective. The range of scores was from a low of 1 to a high of 9. Many faculty stated that their rating of effectiveness was more attributable to the efforts to promote faculty development than to the availability of resources. While concern for faculty development was evident at the institution, adequate resources were limited or nonexistent.
- (7) The Faculty Vitality Project (FVP), which represented faculty development at the System level, was considered effective by a majority of the faculty members who participated in the project and ineffective by a majority of the faculty members who did not participate.

The FVP provided funding for development to faculty in the six units in the Montana University System. Most of those who participated in the

various activities were satisfied with the project and considered it successful. The perception was that the foundation monies were invested in the individuals in the System.

For a majority of the non-participants, the FVP was not successful primarily because of the organization and administration of the project. The perception was that central coordination from the Commissioner's Office was inconsistent. Respondents had difficulties in communicating with appropriate individuals on the Steering Committee and in the Commissioner's Office.

Participants and non-participants expressed disappointment in two areas related to the FVP. One area concerned the project goal to promote inter-unit cooperation. While there were efforts to encourage cooperation between the six units and the faculties, the perception was that the reverse occurred. Competition for project monies eroded the potential for cooperation. Another disappointment was the inability of the System to continue the FVP after foundation monies were allocated. The perception was that there was no long-term commitment to faculty development at the System level. Any policies or expectations pertinent to development remained the responsibility of the individual campuses in the System.

- (8) Faculty perception was that the resources available through faculty development were not distributed equitably between teaching and

research. While the rating of faculty development was effective, the perception was that the areas of teaching and research were not funded equitably. The faculty believed that institutional rewards were placed more on research than on teaching, and at a time of increased teaching loads. While there were highlights in instructional development, especially the Teaching-Learning Committee at MSU, institutional emphasis for faculty development was for research which would bring in outside funding. With this competition for available funding, instructional development was sacrificed for research related endeavors.

Senior faculty members expressed concern that they were excluded from consideration for awards available through faculty development activities; that development was for the younger faculty members. An example was the perception that available funds for faculty development were being used as seed monies for proposals that provided opportunity for outside funding. Senior faculty were under the impression that they were being pressured to compete for grants at a time when many had little expertise in this area. The limited state funds forced them to go outside the institution for additional financial support. Many questioned this perceived need to compete for research monies and the potential impact on institutional mission. For example, a number of faculty at EMC questioned whether the mission should include a heavy emphasis on funding to conduct research.

- (9) Faculty perception was that there was information discrimination in reference to resources available through faculty development. Not all faculty members or departments received the same messages relevant to the resources available through faculty development. Some faculty expressed concern that they did not have access to those who served on faculty development committees and, subsequently, to the funds that were awarded. This concern became more problematic when faculty considered the likelihood of continued decline in resources available to faculty development. Intra-institutional competition for these resources could have significant impact on the efforts to provide faculty development to those faculty members who needed it the most.
- (10) Most faculty members would participate in faculty development in the future. The faculty suggested that they would participate in faculty development activities in the future. However, the major concern was that adequate funding for faculty development would not be available. Most faculty members recognized the financial constraints that existed in the Montana University System. Adequate funding for education was a major problem for the latter half of the 1980s. Since there would be fewer dollars for faculty development during the next decade, these conditions presented a major dilemma for faculty members trying to resolve the conflict between personal investment of time and resources into professional development.

Recommendations

The following recommendations for future research and practice are made based on the findings of this study.

Recommendations for Future Research

- (1) Institutions of higher learning are confronted with an aging population of faculty members. The median age for faculty members in higher education is expected to advance into the upper 50s in the decade of the 1990s (Hanson, 1985). Many administrators and faculty members recognize the link between faculty development and the well-being of the faculty. Faculty members must be provided with the necessary resources to develop and to improve. If faculty are not allowed adequate opportunities for development, institutional and individual survival are seriously threatened. The investigation of faculty development activities can provide insight into the impact on individual faculty members and institutions of higher education.
- (2) Research is needed on the relationship between participation in faculty development and the career stages of faculty members. It will be necessary to determine when faculty participate, what motivates participation, and what types of faculty development activities provide the appropriate results for the individual faculty member and the institution. Especially during times of financial decline, institutions must prioritize

available resources. Only those programs or activities that are effective can be funded.

- (3) It also will be important to determine the effects of participation in faculty development on performance and productivity. Was the investment of resources and personnel worthwhile for the individual faculty member and the institution?

Recommendations for Practice

- (1) In order to monitor activities and to avoid program duplication, all faculty development should be coordinated through one central office, preferably the Office of the Vice President for Academic Affairs. If the faculty development office is an established location on-campus, continuity in program offerings can be properly maintained. Also, personnel in the office can change with limited interruption to the faculty development activities. The office can maintain accurate records of relevant demographics of the faculty members who participate in the activities, under what circumstances, and the outcomes of participating. An accurate assessment can be made concerning the benefits to the individual faculty member and to the institution.

One example of an effective model for faculty development exists at Eastern Montana College. The office has a part-time director and part-time administrator who is responsible for the central coordination of all faculty development at EMC. Another example of an effective model

for faculty development is the committee structure at Montana State University. The Teaching-Learning Committee, the Research-Creativity Committee, and the Sabbatical Committee utilize peer review to function effectively and distribute resources in their respective areas. Central coordination of these activities is maintained through the Office of the Vice-President for Academic Affairs.

- (2) The faculty development program should allow for a variety of activities that meet the differing needs of the faculty. As faculty members advance in chronological age and career stage, their needs for faculty development change. Effective programs consider such basic differences as academic rank and subject-matter affiliation.
- (3) The equitable distribution of available resources is a prime concern for faculty and administrators. Institutions of higher education must invest in faculty development in the areas that will most benefit the individual faculty member and the institution. Faculty and administrators should consider alternative means of awarding funds to the faculty. The competitive awarding of funds to the faculty may not be the most equitable. It appears that competition erodes most efforts for intra-institutional communication and cooperation. When competitive awarding is the alternative, it is imperative that all faculty members have an equitable chance. Many faculty members require proper training in

writing proposals. Without the proper training, they will not be able to compete for the faculty development funds.

- (4) Faculty members and administrators must recognize the importance of, and provide adequate institutional rewards for, teaching. The perception of the faculty members who were interviewed was that teaching has not been and will not be rewarded on-campus. Institutional emphasis and rewards are in research. Faculty members spend most of their time teaching, yet the institutional rewards are for research.

Faculty perceive that they are forced into conducting research because grant monies are available at regional or national levels. The institutional emphasis on research and grant writing is a result of reduction in state support. The logic is that professional survival for many faculty members requires that they write and receive grants from outside sources. Many senior faculty members suggest that they do not have the necessary skills for this competition, especially since they have focused on teaching for the past 20 years.

- (5) The sabbatical leave as we know it may not be the most appropriate faculty development activity for the 1990s. The sabbatical leave of a full academic year has come under scrutiny by administrators and faculty. They question the wisdom of receiving and then taking a sabbatical for a full academic year. It has become increasingly difficult to maintain families, payments, and lifestyles in two places at the same time. The

related costs have become prohibitive. As institutions and individual faculty members weigh the investment of sabbatical dollars, alternative leaves for shorter periods of time have been explored; for example, monthly or quarterly leaves.

- (6) In order for faculty development to be effective, faculty members must take control of their own development. They must participate in the decisions relating to faculty development as a whole at the institutions. They must recognize the needs of other faculty members and that the sharing of resources is a requirement. It is far too convenient to blame others for the lack of opportunities, or the ineptness of central administration to provide the needed resources. Faculty should be more assertive in taking charge of their own development. All the available resources will produce little results without the support and participation of the faculty.

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APPENDICES

APPENDIX A

**LETTER TO DR. STUART E. KNAPP
REQUESTING PERMISSION TO
CONDUCT RESEARCH AND INTERVIEWS**

Dr. Stuart E. Knapp
Vice President for Academic Affairs
Montana Hall
Montana State University
Bozeman, Montana 59717

Dear Dr. Knapp:

Over the past three decades American higher education has encountered dramatic changes, unparalleled in its history. Declining student enrollments and diminishing resources have affected most institutions of higher learning. A significant impact has been on the faculty. Institutional efforts to assist faculty in confronting these changes have resulted in faculty development activities of various types. However, investigation into the characteristics of faculty members who do and do not participate in these activities and their perceptions of the effectiveness of these activities are limited. It is to this end that I address my research investigation.

The goal of the study is to describe faculty development as it exists in the Montana University System and, at three institutions in the System, to describe those who participated and did not participate in these activities and their perceptions of the activities.

In order to achieve the stated goal, I will need the help of specific institutions within the Montana University System. Montana State University has been identified as one of the necessary components in the system which has provided faculty development activities. It is my intention to review institutional documents relevant to faculty development and to conduct interviews with selected members from the faculty. Attached is a copy of the interview questions. The timeline for the data collection includes the months of March, April, and May.

The request of you is to provide me with a letter of permission to search the appropriate documents and conduct the interviews at Montana State University. I would also request a letter of support from you to be included with the requests for faculty participation in the interviews demonstrating the institution's support for such a project.

Thank you for your consideration and interest.

Cordially,

Larry J. Baker
Research Associate

APPENDIX B

**LETTER FROM DR. STUART E. KNAPP
GRANTING PERMISSION TO
CONDUCT RESEARCH AND INTERVIEWS**

January 4, 1986

TO: Dr. Gerald D. Sullivan
FROM: Dr. Stuart E. Knapp
RE: Faculty Development Research Project

This letter signals Montana State University's formal sanctioning of this research project to study faculty development at this institution and in the Montana University System. I am assured that confidentiality will be maintained in a professional manner and so I encourage you to participate as a faculty respondent.

I am familiar with the purpose and method of the study. The kind of information it is likely to generate is useful for us as we move through these difficult times toward the future. I support this research investigation and I urge you to as well.

Thank you for your attention.

APPENDIX C

**INTERVIEW PROTOCOL FOR
PARTICIPANTS AND NON-PARTICIPANTS**

INTERVIEW PROTOCOL -- PARTICIPANTS

- (1) Tell me about your doctoral study at _____ University. Was it full- or part-time?
- (2) How do you define faculty development?
- (3) What specific activities are involved in this definition?
- (4) In your opinion, is this definition different from the definition used at Montana State University (MSU)? ... by the Montana University System? In what respects?
- (5) What factors influenced your decision to participate in faculty development at MSU (in the System)?
- (6) Describe the nature of your participation in faculty development.
- (7) Do you believe that your experience with faculty development at MSU (System) was effective? In what specific areas? On a scale of 1-9,* rate the effectiveness of faculty development at MSU. _____

On a scale of 1-9,* rate the effectiveness of faculty development at the System level. _____
- (8) Under what conditions would you participate in faculty development in the future?

*Scale of 1-9: 1-3 = Ineffective
 4-6 = Effective
 7-9 = Very Effective

INTERVIEW PROTOCOL -- NON-PARTICIPANTS

- (1) Tell me about your doctoral study at _____ University. Was it full- or part-time?
- (2) How do you define faculty development?
- (3) What specific activities are involved in this definition?
- (4) In your opinion, is this definition different from the definition used at Montana State University (MSU)? ... by the Montana University System? In what respects?
- (5) What factors influenced your decision not to participate in faculty development at MSU (in the System)?
- (6) Do you participate in faculty development activities other than those associated with MSU (System)? Please explain.
- (7) Do you believe that faculty development activities at MSU (System) are/were effective? In what specific areas? On a scale of 1-9,* rate the effectiveness of faculty development at MSU. _____

On a scale of 1-9,* rate the effectiveness of faculty development at the System level. _____

- (8) Under what conditions would you participate in faculty development at MSU (System) in the future?

*Scale of 1-9:

1-3	=	Ineffective
4-6	=	Effective
7-9	=	Very Effective

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