

PROBLEMS OF NEW FACULTY MEMBERS IN
NORTH CENTRAL ASSOCIATION COLLEGES
AND UNIVERSITIES OF LESS THAN
3,000 ENROLLMENT

Thesis for the Degree of Ed. D.
MICHIGAN STATE UNIVERSITY
Harlan Richardson McCall

1961



This is to certify that the

thesis entitled

PROBLEMS OF NEW FACULTY MEMBERS IN NORTH CENTRAL
ASSOCIATION COLLEGES AND UNIVERSITIES
OF LESS THAN 3,000 ENROLLMENT

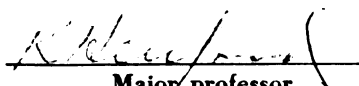
presented by

Harlan Richardson McCall

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Education

Doctor of Education


Major professor

Date February 2, 1961

O-169



ABSTRACT

PROBLEMS OF NEW FACULTY MEMBERS IN NORTH CENTRAL ASSOCIATION COLLEGES AND UNIVERSITIES OF LESS THAN 3,000 ENROLLMENT

by Harlan Richardson McCall

The purpose of this study was to conduct a survey of new faculty members in North Central Association institutions of less than 3,000 enrollment to determine their perception of problems they encountered in these institutions in order that suggestions might be made to college and university administrators concerning orientation and in-service programs.

To study this problem information was gathered from 1145 first- and third-year faculty members in 144 North Central Association institutions by means of a four-page questionnaire. On this questionnaire were listed fifty problems found by preliminary examination to be most likely among the critical problems which new faculty members would identify. Problems were of a personal, institutional, and instructional character. Participants were asked to check each problem for its persistence and degree of difficulty.

A second section of the questionnaire asked participants to evaluate the effectiveness of twenty-five administrative practices which might be used in helping them resolve their problems, and to indicate if they were used in the institutions in which they were serving.

The eight problems causing the greatest degree of difficulty, determined by a weighted scale technique, were found to be the following: Acquiring adequate secretarial help; Finding suitable living quarters; Understanding college policies regarding promotions and salary increases; Lack of teaching aids; Acquiring adequate office space;

Knowing what other departments of the college expect of my department; Using effective discussion techniques in class; Developing effective lectures.

The above eight problems, declared as critical, were further analyzed to discover significant differences in their degree of difficulty as related to the personal characteristics of sex, age, level of preparation, and previous experience of the participants and the institutional factors of size, nature of control, and level of approval by the North Central Association of the institutions in which the respondents were serving. The t test was used for examining differences.

Sex, age, and previous experience of the participants were found to have some bearing on the degree of difficulty which new faculty members experienced with the critical problems they had identified; level of preparation did not.

All institutional factors tested were found to yield significant differences in the degree of difficulty reported by new faculty members for at least one critical problem out of the eight.

The persistence of all fifty problems was studied by examining the differences between persistence of problems for first- and third-year members of the faculty. ~~Institutional~~ ^{INSTRUCTIONAL} problems were found to be persisting at approximately the same level for third-year as for first-year faculty members; personal and institutional problems were found to be persisting at a slightly lower level for the third-year than for the first-year faculty member.

Some of the implications for improvement of orientation and in-service practices based upon findings of this study included:

1. New faculty members should not be assigned immediately to faculty committees.

2. More attention should be paid to the housing of new faculty members, particularly for men and those in publicly controlled institutions.

3. In-service programs for the improvement of instruction should be intensified, especially for the young new faculty member.

4. Those without previous college experience should be given some assistance in developing lectures and improving techniques for promoting class discussions.

5. Administrators and heads of departments in large institutions should help promote a better understanding among new faculty members of what other departments of the college expect of the department in which they are serving.

6. Administrative plans for promotion and salary increases need to be clearly outlined and communicated to new faculty members.

PROBLEMS OF NEW FACULTY MEMBERS IN NORTH CENTRAL
ASSOCIATION COLLEGES AND UNIVERSITIES
OF LESS THAN 3,000 ENROLLMENT

By

Harlan Richardson McCall

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF EDUCATION

College of Education
Department of Administrative and Educational Services

1961

18391
4/22/61

ACKNOWLEDGMENTS

The writer wishes to express his sincere thanks to the many professional and personal associates who have provided inspiration, guidance, and assistance in making this study possible. The author is especially indebted to Dr. Karl Hereford, chairman of the Guidance Committee, for his counsel and guidance and to Dr. John X. Jamrich, a member of the Guidance Committee and the North Central Association Sub-Committee on In-Service Education of Teachers of the Commission on Research and Service. He is appreciative of the assistance given by other members of his doctoral committee, Dr. Fred Vescolani and Dr. John Useem. He is indebted to John Paterson for his suggestions relative to the analysis of the critical problems.

The writer is appreciative of the support given this study by both the North Central Association and the Center for the Study of Higher Education at Michigan State University. Members of the NCA In-Service Education Sub-Committee were particularly helpful in the refinement of the questionnaire.

Finally, the writer wishes to express appreciation to his wife, Marie, for the inspiration, encouragement, and assistance she has given throughout this study.

TABLE OF CONTENTS

CHAPTER	Page
I. INTRODUCTION	1
Three Primary Areas of Investigation	2
Few Previous Studies	3
Investigation of Instructional Problems	7
Investigation of Other Problems	8
Induction and In-Service Studies	10
Use of Antecedents	13
Purposes of the Study	14
Hypotheses	15
Definition of Terms	15
Limitations of Study	16
Overview of Study	17
II. DESIGN OF THE STUDY	19
Classification of Participating Institutions	19
Questionnaires to Institutional Administrators	21
Responses by Four out of Five Administrators	21
Use of Half of Institutions in Sample	22
Construction of Questionnaire for Faculty Members	23
Sixty-six Per Cent Response from Two Mailings	26
Method of Analysis of Data	28
Summary	36
III. PERSONAL AND PROFESSIONAL CHARACTER- ISTICS OF NEW FACULTY MEMBERS IN SELECTED NORTH CENTRAL ASSOCIATION COLLEGES AND UNIVERSITIES	38
Personal Characteristics of Respondents	38
Professional Preparation of Respondents	40
Highest Degrees from Many Institutions	42
Previous Teaching Experience of Respondents	43
Assignments Mostly in Major Fields	43
Varied Reasons for Choosing Institutions	45
Aspirations of New Faculty Members	46
Summary	47

TABLE OF CONTENTS -- Continued

CHAPTER	Page
IV. PROBLEMS PERCEIVED BY NEW FACULTY MEMBERS	49
One Personal Problem Perceived Frequently.	49
Institutional Problems in Top Ten.	53
Instructional Problems in Top Ten	54
Most Critical Problems Perceived	55
Consistency in Late and Total Returns	56
Persistence of Certain Problems	56
Additional Comments by Respondents	63
Summary	63
V. INSTITUTIONAL AND PERSONAL DIFFERENCES IN IDENTIFICATION OF CRITICAL PROBLEMS	65
Introduction	65
Finding Suitable Living Quarters	65
Knowing What Other Departments of the College Expect of My Department.	69
Acquiring Adequate Office Space	70
Acquiring Adequate Secretarial Help	72
Understanding College Policies Regarding Promotions and Salary Increases	74
Lack of Teaching Aids.	76
Developing Effective Lectures.	78
Using Effective Discussion Techniques	80
Summary	82
VI. SUMMARY AND CONCLUSIONS	86
Summary	86
Conclusions	89
Suggestions for Further Study	93
VII. IMPLICATIONS FOR ADMINISTRATIVE PRACTICES	97
BIBLIOGRAPHY.	101

LIST OF TABLES

TABLE	Page
2.1 Classification of North Central Association Colleges and Universities by Size, Control, and Level of Approval by NCA	20
2.2 Number and Per Cent of Administrators in Each Group of NCA Institutions Submitting Information for Study	22
2.3 Number of Institutions Drawn at Random from the Total Eligible NCA Institutions and the Number of Drawings Necessary to Secure	23
2.4 Number and Per Cent of Responses to New Faculty Member Questionnaires Separated by Classification of Institution	27
2.5 Number of Responses Received from New Faculty Members in NCA Institutions Concerning the Prob- lem of Finding Suitable Living Quarters When Distributed by Institutional and Personal Character- istics	30
2.6 Combinations of Personal and Institutional Factors Characterizing the Thirty-seven Groups of Individuals Having Ten or More Respondents	33
3.1 Sex of New Faculty Members in Selected NCA Colleges and Universities	39
3.2 Marital Status of New Faculty Members in Selected NCA Colleges and Universities	40
3.3 Age of New Faculty Members in Selected NCA Colleges and Universities	40
3.4 Highest Degree Held by New Faculty Members in Selected NCA Colleges and Universities	41
3.5 Ten Universities Ranking Highest in Furnishing New Faculty Members to Selected NCA Colleges and Universities	42

LIST OF TABLES -- Continued

TABLE	Page
3.6 Previous Professional Experience of New Faculty in Selected NCA Colleges and Universities	43
3.7 Initial Teaching Assignments of New Faculty Members in Selected NCA Colleges and Universi- ties as Compared to Their Major in Highest Degree	44
3.8 Level at Which New Faculty Members in Selected NCA Colleges and Universities Taught During Their Initial Year in These Institutions	45
3.9 Rank of New Faculty Members in Selected NCA Colleges and Universities	45
3.10 Primary Reasons Why New Faculty Members in Selected NCA Colleges and Universities Came to These Institutions	46
3.11 Aspirations of New Faculty Members in Selected NCA Colleges and Universities	47
4.1 Ranks of Problems Perceived by New Faculty Members in Selected NCA Colleges and Universities According to the Per Cent Indicating Some Difficulty and by Degree of Difficulty	50
4.2 Per Cent of First- and Third-Year Faculty Members Who Have Had Difficulty with Problems and Indicate They Still Persist	58
5.1 Summary of Direction of Significant Differences in Degree of Difficulty for Each of the Eight Critical Problems Identified by New Faculty Members for Each of Seven Variables	66
5.2 Results of Tests of Significance Related to Personal Characteristics of Respondents for <u>Finding Suitable Living Quarters</u>	67
5.3 Results of Tests of Significance Associated with Institutional Factors for <u>Finding Suitable Living Quarters</u>	68

LIST OF TABLES -- Continued

TABLE	Page
5.4 Results of Tests of Significance Related to Personal Characteristics of Respondents for <u>Knowing What Other Departments of the College Expect of My Department</u>	69
5.5 Results of Tests of Significance Associated with Institutional Factors for <u>Knowing What Other Departments of the College Expect of My Department</u> . . .	70
5.6 Results of Tests of Significance Related to Personal Characteristics of Respondents for <u>Acquiring Adequate Office Space</u>	71
5.7 Results of Tests of Significance Associated with Institutional Factors for <u>Acquiring Adequate Office Space</u>	72
5.8 Results of Tests of Significance Related to Personal Characteristics of Respondents for <u>Acquiring Adequate Secretarial Help</u>	73
5.9 Results of Tests of Significance Associated with Institutional Factors for <u>Acquiring Adequate Secretarial Help</u>	74
5.10 Results of Tests of Significance Related to Personal Characteristics of Respondents for <u>Understanding College Policies Regarding Promotion and Salary Increases</u>	75
5.11 Results of Tests of Significance Associated with Institutional Factors for <u>Understanding College Policies Regarding Promotions and Salary Increases</u>	76
5.12 Results of Tests of Significance Related to Personal Characteristics of Respondents for <u>Lack of Teaching Aids</u>	77
5.13 Results of Tests of Significance Associated with Institutional Factors for <u>Lack of Teaching Aids</u> . . .	78
5.14 Results of Tests of Significance Related to Personal Characteristics of Respondents for <u>Developing Effective Lectures</u>	78

LIST OF TABLES -- Continued

TABLE	Page
5.15 Results of Tests of Significance Associated with Institutional Factors for <u>Developing Effective Lectures</u>	79
5.16 Results of Tests of Significance Related to Personal Characteristics of Respondents for <u>Using Effective Discussion Techniques</u>	81
5.17 Results of Tests of Significance Associated with Institutional Factors for <u>Using Effective Discussion Techniques</u>	81
6.1 Comparison of Areas in Which Significant Differences in Degree of Difficulty for Each Critical Problem Were Found in Stages One and Three	94
8.1 Helpfulness and Use of Administrative Procedures to Assist New Faculty Members in Solving Their Problems as Evaluated by New Faculty Members in Selected NCA Colleges and Universities	117
9.1 Stage One Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Housing Problem as Related to Personal Characteristics	121
9.2 Stage Two Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Housing Problem as Related to Personal Characteristics	122
9.3 Stage One Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Housing Problem as Related to Institutional Factors	124
9.4 Stage Two Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Housing Problem as Related to Institutional Factors	125
9.5 Stage One Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Interdepartmental Understanding Problem as Related to Personal Characteristics	127
9.6 Stage Two Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Interdepartmental Understanding Problem as Related to Personal Characteristics	128

LIST OF TABLES -- Continued

TABLE	Page
9.7 Stage One Raw Data; Results of Significance by t Test on Degree of Difficulty of Interdepartmental Understanding Problem as Related to Institutional Factors	130
9.8 Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Interdepartmental Understanding Problem as Related to Institutional Factors	131
9.9 Stage One Raw Data; Results of Significance by t Test on Degree of Difficulty of Office Space Problem as Related to Personal Characteristics	133
9.10 Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Office Space Problem as Related to Personal Characteristics	134
9.11 Stage One Raw Data; Results of Significance by t Test on Degree of Difficulty of Office Space Problem as Related to Institutional Factors	136
9.12 Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Office Space Problem as Related to Institutional Factors	137
9.13 Stage One Raw Data; Results of Significance by t Test on Degree of Difficulty of Secretarial Help Problem as Related to Personal Characteristics	139
9.14 Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Secretarial Help Problem as Related to Personal Characteristics	140
9.15 Stage One Raw Data; Results of Significance by t Test on Degree of Difficulty of Secretarial Help Problem as Related to Institutional Factors	142
9.16 Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Secretarial Help Problem as Related to Institutional Factors	143

LIST OF TABLES -- Continued

TABLE	Page
9.17 Stage One Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Understanding Promotions Problem as Related to Personal Characteristics	145
9.18 Stage Two Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Understanding Promo- tions Problem as Related to Personal Characteris- tics	146
9.19 Stage One Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Understanding Promotions Problem as Related to Institutional Factors	148
9.20 Stage Two Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Understanding Promotions Problem as Related to Institutional Factors	149
9.21 Stage One Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Teaching Aids Prob- lem as Related to Personal Characteristics	151
9.22 Stage Two Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Teaching Aids Problem as Related to Personal Characteristics . . .	152
9.23 Stage One Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Teaching Aids Prob- lem as Related to Institutional Factors	154
9.24 Stage Two Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Teaching Aids Prob- lem as Related to Institutional Factors	155
9.25 Stage One Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Effective Lectures Problem as Related to Personal Characteristics . . .	157
9.26 Stage Two Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Effective Lectures Problem as Related to Personal Characteristics . . .	158

LIST OF TABLES -- Continued

TABLE	Page
9.27 Stage One Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Effective Lectures Problem as Related to Institutional Factors	160
9.28 Stage Two Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Effective Lectures Problem as Related to Institutional Factors	161
9.29 Stage One Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Effective Discussions Problem as Related to Personal Characteristics	163
9.30 Stage Two Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Effective Discussions Problem as Related to Personal Characteristics	164
9.31 Stage One Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Effective Discussions Problem as Related to Institutional Factors	166
9.32 Stage Two Raw Data; Results of Significance by <u>t</u> Test on Degree of Difficulty of Effective Discussions Problem as Related to Institutional Factors	167

LIST OF APPENDICES

	Page
APPENDIX A--Letter to College Presidents	108
APPENDIX B--College President Questionnaire	109
APPENDIX C--Open-Ended Questionnaire to New Faculty .	110
APPENDIX D--New Faculty Member Questionnaire	111
APPENDIX E--Write-In Answers to Questionnaire	115
APPENDIX F--The Adequacy of Administrative Pro- cedures as Perceived by New Faculty Members	116
APPENDICES G THROUGH LL--Stages One and Two Raw Data and Results of Significance at Five Per Cent Level by t Tests on Degree of Difficulty of Each of the Critical Problems as Related to the Seven Variables	121
APPENDIX MM--NCA Colleges and Universities Partici- pating in Study	169

CHAPTER I

INTRODUCTION

College and universities throughout the United States each year are welcoming to their staffs many new faculty members. These newly appointed faculty members may feel keenly the problems they face as they attempt to adjust to their new positions, yet to analyze these problems is not an easy task. There have been few studies in which attempts have been made to do so. Administrators, often assuming that they know what these problems are, have set up various types of in-service education programs which frequently have not proved effective.

How new faculty members react to administrative programs intended to assist them depends upon whether or not these programs as perceived by them are based upon their needs and in keeping with their values. Robert E. Bills states, "People behave in a manner consistent with their beliefs about reality. These beliefs, or perceptions, are influenced by several factors including: needs, values, physiological condition, threat, opportunity, and concepts of self and other people. At the instant of action we are presented with choices. What we do when we behave is dependent upon the basic drive--the need to maintain or to enhance self-organization."¹

¹Robert E. Bills, About People and Teaching (Bulletin No. 2, Bureau of School Services; Lexington, Ky.: University of Kentucky, December 1955), p. 29.

How successful faculty members will be in making self-adjustments as they enter new educational institutions, then, depends upon the treatment in the in-service programs of the problems which they believe to be important and upon the adoption of administrative devices which they believe will be beneficial in helping them resolve their problems.

That in-service programs might be initiated which could materially help the adjustment of new faculty members seems obvious. With this in mind and because of concern at the lack of information available about the new teachers' perception of the problems they face, the North Central Association Subcommittee on In-Service Education of Teachers of the Commission on Research and Service and personnel from the Center for the Study of Higher Education at Michigan State University have cooperated in this study.

Three Primary Areas of Investigation

The present study is limited to three areas:

- (1) The identification of problems of new faculty members in North Central colleges and universities, as perceived by them.
- (2) Discovery of these new faculty members' reactions to the administrative practices designed to assist them in resolving their problems.
- (3) As a result of findings, to formulate suggestions of in-service education for new faculty in North Central Association colleges and universities.

To throw further light on the main problems, the following related sub-problems were investigated in selected NCA² colleges

²Throughout this dissertation the initials NCA are used to refer to the North Central Association of Colleges and Secondary Schools.

and universities:

- (1) The personal and professional characteristics of the new faculty members.
- (2) Problems of a personal nature which new faculty members have identified most frequently, those which have caused the greatest degree of difficulty, and those which have persisted.
- (3) Problems of an instructional nature which new faculty members have identified most frequently, those problems which have caused the greatest degree of difficulty, and those which have persisted.
- (4) Significant differences in perception by new faculty members of critical problems related to personal factors of sex, age, level of preparation, or previous professional experience.
- (5) Significant differences in perception by new faculty members of critical problems related to institutional factors of size, nature of control, and level of instruction for which institutions are accredited by the NCA.
- (6) The effectiveness, as perceived by new faculty members, of practices used extensively by college administrators to help them resolve their problems.
- (7) The estimated effectiveness, as rated by new faculty members, of practices not extensively used by college administrators to help them resolve their problems.

Few Previous Studies

Considerable material has been written by college and university administrators concerning problems of new faculty members, but very few studies have been conducted to find out just what these problems are.

and universities:

- (1) The personal and professional characteristics of the new faculty members.
- (2) Problems of a personal nature which new faculty members have identified most frequently, those which have caused the greatest degree of difficulty, and those which have persisted.
- (3) Problems of an instructional nature which new faculty members have identified most frequently, those problems which have caused the greatest degree of difficulty, and those which have persisted.
- (4) Significant differences in perception by new faculty members of critical problems related to personal factors of sex, age, level of preparation, or previous professional experience.
- (5) Significant differences in perception by new faculty members of critical problems related to institutional factors of size, nature of control, and level of instruction for which institutions are accredited by the NCA.
- (6) The effectiveness, as perceived by new faculty members, of practices used extensively by college administrators to help them resolve their problems.
- (7) The estimated effectiveness, as rated by new faculty members, of practices not extensively used by college administrators to help them resolve their problems.

Few Previous Studies

Considerable material has been written by college and university administrators concerning problems of new faculty members, but very few studies have been conducted to find out just what these problems are.

Likewise, little has been done to investigate how new faculty members evaluate the means used by college administrators to help them resolve their problems.

How neglected these areas of investigation have been may be inferred from the fact that the "In-Service Education" section of the 1960 edition of Encyclopedia of Educational Research³ does not contain one reference to studies concerning the in-service education of faculty members at the college level, nor is there any reference to problems of new college faculty members. However, this same publication cites many references concerning in-service programs for elementary and secondary teachers as well as studies of problems faced by new teachers at these levels.

While not many studies have been conducted to find out from new faculty members in colleges and universities what their problems are, administrators in institutions of higher education have been conscious that there were problems--personal, institutional, and instructional--which their faculty members faced. Some have recognized these problems and done little about them; others have developed programs specifically aimed to help solve some of the problems the administrators identified.

In the next few paragraphs will be found points of view expressed by several educators who have been particularly concerned about the improvement of in-service programs at the higher education level.

A. A. McPheeters pointed out that two of the three most important reasons for poor instruction at the higher education level are "lack of understanding of the general purposes of the liberal arts college and the specific aims of the institution at which one is employed" and "the

³Chester W. Harris and Marie R. Liba, editors, Encyclopedia of Educational Research (Third Edition; The American Educational Research Association; New York: The Macmillan Co., 1960), pp. 702-10.

failure of the university to accept the responsibility for training college teachers."⁴

To improve teaching efficiency at the college level, McPheeters stated that the following must be done:

1. Early selection and counseling of prospects for college teaching.
2. Study of criteria for appointment and promotion of faculty personnel.
3. Development of a program for training of college teachers.
4. Establishing in-service programs and activities.

It is with the last of these four suggestions that this study is particularly concerned. Even though it has been eight years since McPheeters made the above statement, much needs to be done before the in-service programs now in effect in our colleges and universities can be most effective.

✓ Ruth Eckert, in pointing out some of the neglected aspects in the preparation of college teachers, says, "Young instructors must be convinced that the teaching function is valued highly, and the convincing will take more than verbal assurance. They must see that superior teaching does help the individual teacher to advance in the academic hierarchy and in the esteem of his fellows. They must also be afforded opportunities for further learning in the form of faculty study groups, consultative services, workshops, sabbatical leaves, and the like."⁵

Thirty years ago Floyd W. Reeves reported on a study made among forty institutions, including liberal arts colleges, state teacher colleges, and junior colleges, to ascertain the current methods being used in the in-service training of college teachers at that time.

⁴A. A. McPheeters, "Toward Improving College Instruction," Association of American Colleges Bulletin, XXXVIII (December, 1952), pp. 564-73.

⁵Ruth Eckert, "Some Neglected Aspects in the Preparation of College Teachers," Journal of General Education, III (January, 1949), pp. 137-44.

He wrote, "One cannot participate in surveys of institutions of higher learning without realizing that a new emphasis is being given to the improvement of the quality of instruction at the college level. Until recently administrators have generally assumed that scholarship in a given field is adequate qualification for teaching in that field. The error of this assumption has asserted itself most emphatically in recent years, with the result that many institutions are beginning to focus attention upon methods and administrative measures designed to produce better teachers."⁶

Even though many college leaders have recognized the need for producing better college teachers by an improved in-service education program, recent literature indicates that colleges have done little in providing improved programs. Typical of recent reports concerning the progress of in-service programs is one by George R. Taylor in which he said, "Like most colleges Amherst long proceeded on the assumption that the teachers it hired knew how to teach--or at least would soon learn how to do so by a process of trial and error. Our method before 1954 was roughly comparable to teaching a child to swim by throwing him into deep water and letting him manage as best he could. In that year we inaugurated a program designed to afford some direct aid and guidance to the new members of our teaching staff."⁷

⁶Floyd W. Reeves, "Survey of Current Methods in the In-Service Training of College Teachers," The Training of College Teachers, Proceedings of the Institute for Administrative Officers of Higher Institutions, ed. William S. Gray (Chicago: University of Chicago Press, 1930), II, Chapt. XIII, pp. 133-46.

⁷George R. Taylor, "Faculty Orientation at Amherst," Faculty Preparation and Orientation, Proceedings of a Regional Conference Sponsored by the New England Board of Higher Education, ed. John W. Gustad (Winchester, Mass.: New England Board of Higher Education, 1960), p. 93.

F. J. Kelly pointed out some significant conclusions to be drawn from the U. S. Office of Education study of 1948 regarding situations that make college teaching unsatisfactory or satisfactory.⁸ He concluded that non-teaching duties do not seem to enter significantly into feelings of dissatisfaction with jobs. Of the working conditions not satisfactory to faculty personnel, office space ranked first.

E. M. Lewis posed the question: "What can be done to make the beginning college teacher's philosophy more healthy from the first?"⁹ His suggestions included: (1) More optimistic view of profession by experienced faculty. (2) Treatment of newcomers as equals, welcoming them into faculty organizations. (3) Conferences regarding teaching and praise by superiors of young teachers should help them "to swim." (4) Assignment of new teachers to teach in subjects best prepared to teach.

Investigation of Instructional Problems

One of the earliest studies in which an attempt was made to have recently hired faculty members in institutions of higher education identify their problems of an instructional nature was one conducted by Harold M. Byram.¹⁰ College teachers hired within a ten-year period, numbering 485 from thirty-nine states, supplied information regarding this point in reacting to forty listed instructional problems.

⁸F. J. Kelly, "How Do Faculty Members Like Their Jobs?" Higher Education (May 1, 1949), pp. 193-96.

⁹E. M. Lewis, "The Beginning College Teacher," Journal of Higher Education (January, 1947), pp. 41-42.

¹⁰Harold M. Byram, Some Problems in the Provision of Professional Education for College Teachers, Teachers College Contributions to Education No. 576 (New York: Bureau of Publications, Columbia University, 1933), p. 54.

The five problems which ranked highest in percentage of new faculty members indicating that they had some difficulty with the problems were these:

1. Deciding upon method of instruction to use in teaching the subject.
2. Grading or marking students.
3. Selecting the subject matter for courses to be taught.
4. Determining the aims and purposes of the course.
5. Deciding upon methods to be used in testing students on the subject.

All of the above were found to be causing some difficulty for more than 80 per cent of the respondents.

The five problems ranked highest according to difficulty in the Byram study were these:

1. Developing in students the ability to do straight thinking.
2. Adapting instruction to differences found in personnel of the class.
3. Aiding students in establishing efficient study habits.
4. Diagnosing pupils' difficulties in studies.
5. Developing or setting up standards of student scholarship and achievement.

These five problems were marked as being especially difficult by more than 45 per cent of the respondents.

Investigation of Other Problems

Two studies which have particular significance to the problems of investigation in this study were conducted early in the past decade by Rex C. Kidd¹¹ and Robert O. Stripling¹² of the University of Florida.

¹¹Rex C. Kidd, "The Improvement of the Pre-Service Education of Undergraduate College Teachers," (unpublished Doctoral dissertation, University of Florida, 1951), p. 262.

¹²R. O. Stripling, "Problems of New Members of the College Faculty, " Clearing House (February, 1953), pp. 355-61.

Kidd investigated eleven problems or sources of problems causing the most difficulty in the first year of college teaching. Personnel in seven colleges and universities were used in the study, with questionnaires being returned from 586. He found that 50.4 percent considered the greatest source of problems as "Difficulties due to the background of training and experience with which students come to college."¹³

Other problem areas indicated by more than 25 per cent of those in the Kidd study were these: evaluation of student performances; stimulating student thinking; getting students to relate material taught to current problems or situations; and organization and presentation of subjects within the ability range of students.¹⁴

The Stripling study dealt with fifty selected personal, social, and professional problems faced by new faculty members. His study was based on a sample of eighty-six college faculty members who had been employed by seventy-nine institutions of higher education within the preceding three years.

Stripling determined the per cent of the group surveyed who had difficulty with each of these fifty problems and the degree of difficulty they experienced with each. He found the following three problems were not only causing the greatest degree of difficulty but that they were among those problems causing some difficulty to more than 50 per cent of those in the sample:

1. Understanding policies relating to grading standards (69.8 per cent reporting some degree of difficulty).
2. Understanding institutional legislative organization (69.7 per cent reporting some degree of difficulty).

¹³Kidd, p. 136.

¹⁴Kidd made this investigation as part of a broader study concerned with the improvement of the pre-service education of undergraduate college teachers. Since questionnaires were sent by Kidd to all teachers, some of those receiving questionnaires may have been teaching for years. These experienced faculty members' ideas about problems they faced as new faculty members may be considerably different than they might have been had they been asked these same questions during their initial years of experience.

3. Understanding faculty-trustee relationships (59.4 per cent reporting some degree of difficulty).

The problem rated most frequently as giving some degree of difficulty to new faculty members was "Learning administrative routine of college or university." It was rated as giving some degree of difficulty by 74.4 per cent. On forty-eight of the fifty problems at least 25 per cent reported some degree of difficulty.

Stripling also asked these eighty-six faculty members who had been in their present positions for three years or less to list orientation practices which they felt were helpful or would have been helpful to them in adjusting to their new positions. Suggestions included the following: before appointment--a visit to campus and supply of printed material; after acceptance--a personal letter of welcome, further printed material, summer newsletter, local newspaper, campus newspaper, and help with housing; upon reporting for duty--appointment of a sponsor for each new faculty family, introduction to faculty families and to community, assistance in professional adjustments through such techniques as orientation conferences, light teaching load, assigning new faculty member to old, faculty-student reception, and personal conferences.¹⁵

Induction and In-Service Studies

Morris S. Wallace in reporting on the induction procedures for new teachers gives the frequency of techniques used, when used, and when newly appointed teachers think these techniques would be most helpful. More than twenty-five problems were reported by more than 50 per cent of the teachers studied. Conclusions reached were these:

1. There are many facets to the successful induction of a new teacher into the school and community.

¹⁵Robert O. Stripling, "Orientation Practices for New College Faculty Members," AAUP Bulletin, XL (1954-55), pp. 555-62.

2. New teachers experience serious difficulty in learning and understanding the philosophy, objectives, and procedures of the school.
3. Few schools provide adequate administrative and supervisory help.
4. Absence of helpful induction results in low morale.
5. Individual induction methods are more effective than group.¹⁶

John R. Shannon reports a study made among seventy-one faculty members at Indiana State Teachers College, fifty-seven of whom indicated that they thought instruction of college faculty members could be improved. In-service techniques for improving instruction were suggested by fifty-three. Most common suggestions and the number mentioning each were:

1. Individual personal conferences	23
2. Classroom visitations	20
3. Faculty meetings	13
4. Students' ratings	6
5. Demonstration teaching	5
6. Sabbatical leaves with pay	4
7. Faculty projects	3 ¹⁷

At the present time Norbert J. Tracy, S.J., a graduate student at the University of Minnesota and research associate of Marquette University, is conducting a study of orientation of new faculty members in selected liberal arts colleges of the North Central Association.

For the Tracy study the deans of 97 per cent of the 345 accredited liberal arts programs in the NCA completed a questionnaire in the summer of 1959 dealing with the kinds of orientation procedures used at their colleges to assist incoming faculty. From among the 336 institutions participating in the study, a stratified random sample of sixteen colleges was selected and visited by Father Tracy during the early part

¹⁶Morris S. Wallace, "New Teachers' Evaluation of Induction Techniques," North Central Association Quarterly, XXV (April, 1951), pp. 381-82.

¹⁷John R. Shannon, "Supervision of College Teaching," Journal of Higher Education, XIV (October, 1943), pp. 355-58.

of 1960 for follow-up interviews with over 100 faculty members, almost as many senior faculty members, and half as many department heads, to have them evaluate orientation procedures at their institutions and to assess the problems of incoming faculty.

Among thirteen listed orientation practices in the Tracy study those reported by administrators to be most common were as follows:

1. "Open door" policy for private conferences with chief administrators.
2. Assistance in securing housing.
3. Visit to the campus for interviews prior to signing a contract.
4. Social affairs (college-wide or departmental) to assist new faculty members in meeting staff.
5. Tour of campus facilities (before or after signing a contract).

Those administrative procedures least in use were:

1. Light teaching load during first term to allow for adequate orientation.
2. Special meeting(s) for new faculty during the fall term.
3. Each new teacher assigned a faculty member (other than the department chairman) to serve as host and counselor.¹⁸

According to Tracy's interviews the size of the college affects to some degree the kinds of information that newcomers desire. Those in colleges having less than 100 full-time faculty members seem to be much more interested in student personnel services and discipline procedures and in the extent of faculty participation in policy making, while those new to institutions having more than 100 full-time faculty members indicate a greater degree of interest in faculty load and faculty personnel policies and welfare benefits.

In a recent study concerning the orientation of new faculty members being carried out by a subcommittee of the American Association of Colleges for Teacher Education, the most frequently used in-service

¹⁸Norbert J. Tracy, S.J., personal letter including outline of paper, "What Incoming Faculty Members Wish to Learn About Their Institutions," presented at Summer Departmental meeting of the Association for Higher Education, N.E.A., Los Angeles, June 27, 1960.

activity reported by the administrators was the regular departmental or divisional meeting. The second most frequently mentioned activity was a series of seminars on college teaching such as those at Ball State or Southern Oregon College or the annual Faculty Conference on Improving College Teaching at Grambling (La.) State College. Other in-service activities reported by administrators were these:

1. Course committees for multiple-section courses.
2. Staff meetings for planning and evaluation.
3. A "What's New" series of seminars in all departments.
4. Meetings with a "Pre-service" staff to orient new staff, plan studies, clarify problems, etc.
5. Curriculum committee assignment for new staff members in his area.
6. Discussion of grading and marking, promotion policy, etc.
7. Academic Affairs Council workshops.
8. Faculty counseling program.
9. Discussion on graduate school procedures.
10. Work in experimental education laboratory.
11. Meetings with administrative officers to consider policies and problems.¹⁹

Use of Antecedents

Some limited studies concerning the perception of new faculty members of their problems as reviewed above have been undertaken, but no very extensive study has been made recently to discover the nature of these problems. Such a study needed to be made to assist administrators in developing more effective in-service programs.

Results of previous studies were found to be helpful in the development of the instrument of investigation used in this study. Problems found to be most prevalent in previous studies were made a part of the questionnaire. Further, these studies revealed the most common

¹⁹American Association of Colleges for Teacher Education, Orienting New Faculty, AACTE Bulletin, XII, No. 13 (January 29, 1960), p. 5.

administrative practices now used in the in-service programs for new faculty. This information was also used in developing one section of the questionnaire.

Purposes of the Study

The primary purpose of this study was three-fold: (1) to conduct a survey of new faculty members concerning their perception of problems; (2) to determine the helpfulness of administrative practices in resolving their problems; (3) as a result, to suggest orientation and in-service programs which might be developed by administrators.

Information collected in conducting this study also helped to find answers to such questions as the following:

1. What relationship is there between the prevalence of specific critical problems faced by new faculty members and such personal characteristics as sex, age, level of preparation, and previous professional experiences?
2. What relationship is there between the prevalence of specific critical problems faced by new faculty members and such institutional factors as size, type of control, and level of instruction for which the institutions have been accredited by North Central Association?
3. What possible values do these new faculty members see in administrative procedures which are not being used in helping them solve their problems?
4. Which problems of new faculty members, if any, tend to dissipate themselves within a three-year period? Which problems, if any, tend to persist at a higher level among third-year teachers than among first-year teachers?

Hypotheses

The following hypotheses concerning NCA institutions of less than 3,000 enrollment were investigated:

1. There are certain problems which new faculty members perceive as being more critical than other problems.

Sub-Hypothesis:

- A. Some problems of a personal nature, some of an institutional nature, and some of an instructional nature are included in the problems perceived as being most critical.
2. New faculty members who have served three years in NCA institutions view their problems of a personal, institutional, and instructional nature as persisting to a much lesser degree than do those who have served just one year in these same institutions.
3. There are no significant differences in the degree of difficulty on critical problems perceived by new faculty members regardless of such personal factors as sex, age, level of preparation, or previous professional experience.
4. There are no significant differences in the degree of difficulty on critical problems perceived by new faculty members regardless of such institutional factors as size, nature of control, or level of instruction for which institutions are accredited by NCA.

Definition of Terms

Specific operational terms used in this study were defined as follows:

Faculty Members

Faculty members included those employed full-time who spent more than half their time on the teaching staff. If some full-time members of the staff performed administrative functions which took less than half their time and spent more than half-time teaching, they were to be included as faculty members. Not to be included as faculty members were full-time administrative personnel, graduate assistants, visiting instructors, or research personnel.

New Faculty Members

New faculty members were defined as those who were new to the particular institutions under study, including those new to the profession and those with previous teaching experience who were employed to begin teaching in these institutions between September, 1957 and September, 1959.

North Central Colleges and Universities

The institutions generally referred to as North Central Association colleges and universities in this study are those institutions of higher education accredited by the NCA, other than junior colleges, having enrollments of less than 3,000. Colleges and universities on the accredited list in the North Central Association Quarterly of July, 1959 were those used as a basis for extracting the sample for this study.

Limitations of the Study

This study was limited to responses from first- and third-year faculty members in 144 institutions of the NCA having less than 3,000 enrollment, with responses from those in 137 institutions being used for most of the study.

Other limitations of the study were these:

1. Although an opportunity was given for the listing of problems of a personal, institutional, or instructional nature other than those on the questionnaire, in a large measure the questionnaire elicited structured responses. This was indicated by the fact that very few respondents listed any problems that they felt gave them only "slight" difficulty. The problems added were those that were mostly of "great" difficulty; a few problems of "moderate" difficulty were added. Had these problems given "great" difficulty rating been included in the original list, they might have been rated by others as causing "moderate" or "slight" difficulty.
2. Only those faculty members who had been employed within the past three years and remained with these institutions were used in the study. No attempt was made to follow up those who had left these institutions. Had this been done, results might have been somewhat altered.
3. No attempt was made to secure information from college and university administrators regarding the procedures that they used for helping new faculty members adjust to any problems they faced. Certain procedures were, however, evaluated by the new faculty members as they perceived their use in the institutions. It was evident that some new faculty members in the same institution were not aware of all administrative practices being used in their institution to help new faculty members with their problems. Some indicated use of certain practices which others failed to indicate were being used.

Overview of Study

The study had three primary phases: (1) the survey; (2) the interpretation of the survey results; and (3) proposed administrative implications.

For convenience in reporting these three phases of the study, Chapter II contains the source of the data and methodology; Chapter III, the personal and professional characteristics of the new faculty members in the study; Chapter IV, the problems perceived by new faculty members in the NCA colleges and universities; Chapter V, the institutional and personal differences in the identification of critical problems; Chapter VI, summary and conclusions; and Chapter VII, implications for administrative practices; Appendix F, the evaluation of administrative procedure as perceived by new faculty members.

CHAPTER II

DESIGN OF THE STUDY

In order to make a comprehensive study of the problems set forth in Chapter I and to test the hypotheses stated in that chapter, the questionnaire technique seemed to be the best way to secure the necessary information from the many college and university administrators and the many faculty members involved. Such a technique has been used by investigators in previous studies of this nature. Byram, Kidd, Stripling, and Tracy, whose studies were reported in Chapter I, all relied heavily upon the questionnaire for gathering data. Good, Barr, and Scates state, "The questionnaire procedure normally comes into use where one cannot readily see personally all of the people from whom he desires responses."¹

Classification of Participating Institutions

For the purposes of this study North Central colleges and universities as listed in the July, 1959 North Central Association Quarterly² were classified according to enrollment, nature of control, and level of approval by the NCA.

¹Carter V. Good, A. A. Barr, and Douglas E. Scates, The Methodology of Educational Research (New York: D. Appleton-Century Company, 1941), p. 325.

²"List of Accredited Institutions of Higher Education, July 1, 1959," The North Central Association Quarterly, XXXIV (July, 1959), pp. 16-28.

Information regarding the level of approval for each institution was obtained directly from the listings of the colleges and universities in the North Central Association Quarterly. Institutions approved by North Central for graduate programs leading to either the Master's or Doctor's degree are referred to in this study under one classification, as institutions approved for graduate study.

The nature of control and the enrollment figures for determining the classification of institutions were taken from Higher Education, Education Directory of 1959-1960.³ Institutions were classified as to nature of control as being either private or public. Institutions of less than 3,000 enrollment were classified as being small if their enrollments were less than 1,000, and large if 1,000 or more.

In Table 2.1 will be found the number of institutions of the NCA classified according to the above criteria and a letter of identification assigned to each group.

Table 2.1.--Classification of North Central Association Colleges and Universities by Size, Control, and Level of Approval by NCA.

Group Identification Letter	Size	Nature of Control	Level of Approval by NCA	Total North Central Institutions
A	Less than 1,000	Private	Undergraduate	135
B	1,000 to 3,000	Private	Undergraduate	36
C	Less than 1,000	Private	Graduate	11
D	1,000 to 3,000	Private	Graduate	21
E	Less than 1,000	Public	Undergraduate	14
F	1,000 to 3,000	Public	Undergraduate	31
G	Less than 1,000	Public	Graduate	2
H	1,000 to 3,000	Public	Graduate	21
Total of all NCA Institutions Eligible for Study				271

³U. S. Department of Health, Education, and Welfare, Office of Education, Education Directory, 1959-1960, Part 3, Higher Education (Washington: U.S. Government Printing Office, 1959), pp. 55-180.

Questionnaires to Institutional Administrators

On April 15, 1960 a letter approved by the Commission on Research and Service of the NCA was sent to the principal administrator of each of the NCA institutions whose faculty members were eligible to participate in the study. A total of 271 letters was mailed over the signature of Paul W. Harnly, chairman of the Subcommittee on In-Service Education of Teachers of the Commission on Research and Service. For the complete form of the letter and the questionnaire see Appendices A and B, respectively.

Each administrator was asked to furnish the names of faculty members in his institution who, new to the institution since the fall of 1957, were still on the staff. Each was requested to list only those who were full-time members of the staff who spent more than half their time as members of the teaching staff. Additional information requested from each administrator included the total number of faculty members in the fall of 1957, in the fall of 1958, and in the fall of 1959 and the corresponding number of new faculty members for each of these three years.

Responses by Four Out of Five Administrators

By May 23, 1960, 213 of the 271 institutions of the NCA having enrollments of less than 3,000 or 79 per cent, had furnished the information requested concerning the new members of the faculty on their campuses. From these institutional listings questionnaires were mailed to the new faculty members in the sample institutions.

In Table 2.2 will be found the number and per cent of administrators in each group of institutions who responded to the request for information prior to the deadline for mailing out questionnaires to those to be used in the sample.

Table 2.2.--Number and Per Cent of Administrators in Each Group of N.C.A. Institutions Submitting Information for Study.

Group Identification Letter	Total North Central Institutions	Number Submitting Information	Per Cent Submitting Information
A	135	107	79
B	36	29	81
C	11	8	73
D	21	16	76
E	14	11	79
F	31	25	81
G	2	2	100
H	21	15	71
Totals	271	213	79

The number of responses to a single request was considered adequate. Parten states, "A certain proportion of nonrespondents cannot be prevented. . . . the returns from mail questionnaires are usually quite small."⁴ Since the information being gathered from the administrators was not opinion, but factual information concerning the number of their faculty and the names of the new faculty members of the past three years, it is doubted that nonrespondents biased the results of the study materially. Further, it is noted that no group of institutions had less than 71 per cent of respondents.

Use of Half of Institutions in Sample

From each of the eight classes of institutions (see Table 2.2), approximately half of the members in each class were selected randomly

⁴Mildred Parten, Surveys, Polls, and Samples: Practical Procedures (New York: Harper & Brothers, 1950), p. 391.

by use of the table of random numbers in Edwards' Experimental Design in Psychological Research,⁵ for the purposes of testing the hypotheses. The total number of colleges so selected was 137. Table 2.3 indicates the number of institutions selected at random from each group of institutions and the number of drawings from the table of random numbers necessary to secure the number of institutions required in each sample.

Table 2.3.--Number of Institutions Drawn at Random from the Total Eligible N.C.A. Institutions and the Number of Drawings Necessary to Secure.

Group Identification Letter	Total North Central Institutions	Number Selected at Random	Number of Drawings Necessary
A	135	67	4
B	36	18	3
C	11	6*	2
D	21	11	2
E	14	7*	2
F	31	16	3
G	2	1*	1
H	21	11	3
Totals	271	137*	-

*For part of the study, 144 institutions were used--8 from class C, 11 from class E, and 2 from class G. All institutions from these three groups which responded were used since each group contained less than a total of 20 institutions.

Construction of Questionnaire for Faculty Members

The first draft of a questionnaire was constructed after search of the literature concerning problems of new faculty members and the administrative procedures used for helping faculty members solve their problems. Problems found to be most frequent and persistent in the

⁵Allen L. Edwards, Experimental Design in Psychological Research (New York: Rinehart & Company, 1954), pp. 378-82.

Stripling study, reviewed in Chapter I, were included in the check list of problems in the questionnaire.

In constructing the questionnaire, principles of sound questionnaire construction such as those set forth by Good, Barr, and Scates⁶ and Harold H. Bixler⁷ were followed. The following procedures were used to furnish evidence that these principles were generally met by the questionnaire: (1) All answers were in some way used to study the problems or sub-problems of investigation. (2) The clarity of the questionnaire was not only checked after a lapse of time by the writer, but the questionnaire was submitted for testing clarity to new faculty members at Alma college before reaching its final form. Further, no questions were raised by respondents regarding the clarity of the questions. (3) Responses generally could be treated statistically as is evidenced in Chapters III through V. (4) The first page of the questionnaire was purely factual. Since "opinion" was important in this study, two sections of the questionnaire were composed of questions of this nature.⁸ (5) The final four-page questionnaire was a reduction from the original in order to elicit a good response. Approximately two-thirds of those in the sample responded, adding evidence to the meeting of this criteria. (6) To reduce writing, check-lists were used.

In gathering information for the first draft of the questionnaire, it was noted that problems of new faculty members seemed to be primarily of three types: (1) problems of a personal nature; (2) those pertaining

⁶Good, Barr, and Scates, p. 39.

⁷Harold H. Bixler, Check List for Educational Research (New York: Bureau of Publications, Teachers College, Columbia University, 1928), pp. 40-44.

⁸If administrators are to base their orientation and in-service programs on problems of new faculty members, it is essential that these new faculty members express their opinions regarding the types of problems they face, the intensity of these problems, and the persistence of these problems.

to the particular institutions in which new faculty members were employed; (3) those dealing with instructional matters. For this reason the questionnaire was so constructed, listing some specific questions under each of the three general headings and allowing space in which respondents might add other problems.

Information requested in the questionnaires sent to the new faculty members included the following:

1. Personal information.
2. Their professional training and experience.
3. Their reasons for choosing to be employed in their present institutions.
4. Their professional aspirations.
5. Their perception of the persistence and the difficulty of problems they faced as new faculty members of a personal, institutional, or instructional nature.
6. Their perception of the degree of helpfulness of procedures used by administrators in helping new faculty members solve their problems.

The original draft of the questionnaire was submitted, along with a brief outline of the proposed study to the Subcommittee on In-Service Education of Teachers of the Commission on Research and Service of the North Central Association, at a meeting held in Chicago in December, 1959. Several suggestions for revision grew out of this meeting. The questionnaire was revised in the light of these suggestions and results of an open-ended questionnaire sent to a new faculty member in each of six representative institutions of higher education belonging to the NCA in Michigan. These institutions varied in size from large to small; in control from private to public; in level of approval, some being approved for undergraduate programs and some for undergraduate and graduate programs. Representatives from five of these six institutions responded. The exact form of the open-ended questionnaire is reproduced in Appendix C.

After the second major draft, the questionnaire was further refined for content and clarity. Suggestions for alterations came from primarily these sources: three new faculty members of Alma College to whom the questionnaire was submitted; several faculty members at Michigan State University; members of the Subcommittee of In-Service Education of Teachers of NCA; members of the Commission on Research and Service of the NCA, who, following a presentation of the plan at the annual meeting of the association in Chicago on March 30, 1960, gave their approval to the writer to circulate the questionnaires to institutions and faculty members in NCA colleges and universities.

The final revised questionnaire, as it was submitted to those in the sample, is found in Appendix D. It contained ten specific problems of a personal nature; twenty-five of an institutional nature; fifteen of an instructional nature. It gave an opportunity for the listing of additional problems in each of the three areas. Each respondent was asked to evaluate each problem as to its presence, persistence, and degree of difficulty.

The final questionnaire also listed twenty-five procedures mentioned in the literature or suggested by new faculty members as being used by administrators in helping faculty members resolve their problems. Space was provided so that respondents could add at least one other procedure. The respondents were asked to do two things: to check how helpful each of the procedures used by administrators in their institutions had been; to estimate how helpful procedures not used by their administrators might have been in helping them resolve their problems.

Sixty-six Per Cent Response from Two Mailings

Questionnaires were mailed between May 18 and May 23, 1960 to 1771 first- and third-year faculty members employed in 144 institutions as reported by college and university administrators.

The number of usable expected responses was reduced when returned questionnaires revealed that some of those on the original lists of eligible participants should not have been included for one reason or another. The total number of returned questionnaires that could not be used due to ineligibility of the respondents was twenty-nine, reducing to 1742 the total possible usable responses.⁹

To all those who had not responded to the first request, a second questionnaire was mailed on June 18. The total number in this mailing, 947, represented fifteen more than the balance expected since there were no names on fifteen of the first responses.

Usable responses were received from 1145 faculty members, or approximately 66 per cent to whom requests had been mailed. In Table 2.4 is a breakdown of these responses by classification of institutions in which faculty members were serving.

Table 2.4.--Number and Per Cent of Responses to New Faculty Member Questionnaires Separated by Classification of Institution.

Group Identification Letter	Total Questionnaires Sent	Total Usable Returns	Per Cent of Return
A	597	382	64
B	272	176	65
C	74	43	58
D	160	104	65
E	91	61	67
F	298	206	69
G	10	6	60
H	240	167	70
Totals	1742	1145	66

⁹Reasons for throwing out these 29 cases and the number for each reason follow: no college teaching assignment, 9; more than half-time in administrative position, 7; only teaching part time, 5; retiree, just filling in, 3; reported hired previous to Fall of 1957, 2; returning to institution, not initial full-time employment, 2; deceased, 1.

Late responses, those received after the second requests were mailed, were kept separate from early responses so that consistency of results could be determined. Since the responses from these two groups yielded a high coefficient of correlation, a greater percentage of response would likely have had little or no effect upon results of the study. The responses of these two groups are treated in detail in Chapter IV.

Method of Analysis of Data

Returned questionnaires were prepared for recording on International Business Machines (IBM) cards by identifying the responses as coming from first- or third-year faculty members, indicating the classification of the institution from which the response was received as well as the per cent of turn-over of the faculty in that particular institution, and identifying other personal and professional information so that convenient summaries of all information on the questionnaires could be easily ascertained.

The section of the questionnaire listing the problems of a personal, institutional, or instructional nature asked respondents to indicate those which had "never been a problem" since coming to their present institution. Problems which had caused difficulty were to be evaluated as follows: persistence--"has been, not now" or "still persists"; degree of difficulty--"slight, " "moderate, " or "great. "

The section of the questionnaire concerning the usefulness of administrative procedures in helping new faculty members resolve their problems asked the respondents to indicate whether or not these procedures were used in their institutions and to rate their helpfulness as "none, " "slight, " "moderate, " or "great. "

In testing the hypotheses the following methods were used:

1. The most critical problems were determined by referring to the responses on the questionnaires. The total number of responses for each problem indicated as being "great" in difficulty was multiplied by three; those being "moderate" by two; those being "slight" by one; and those "never a problem" by zero. The total weighted response was divided by the total number of individuals responding to each question, the quotients received in hundredths being reported as whole numbers for convenience. The eight problems that ranked at the top in magnitude were then defined as "critical problems."
2. For testing the persistence of problems, the percentage of first-year faculty members indicating problems persisted was determined for each problem. To give an indication of the problems which seemed to dissipate and those that seemed to remain after three years, these percentages for first-year faculty members were compared with the percentages of third-year faculty members who indicated these problems persisted.
3. To test the hypotheses 3 and 4 regarding differences on the degree of difficulty of the critical problems as related to the seven variables of the study, a three-stage method of analysis was employed. Differences were declared significant if, and only if, they were significant at stage three.

Stage one:

- a. The purpose of this stage was to discover if there were general areas of differences in the degree of difficulty related to personal or institutional factors.
- b. Step 1. All responses, including partials, were tabulated for each of the critical problems and distributed according to personal and institutional characteristics of respondents.
Example: The number of housing problem responses was distributed by sex of respondents and size of the institutions in which they were employed as follows:

Size of Institution	Sex of Respondents	
	Male	Female
Small	324	127
Large	487	145

Step 2. For each of the four cells in the above table the following information was determined: sum of the difficulty ratings given the housing problem, ΣX ; the sum of the squares, ΣX^2 ; the mean, \bar{X} ; the sum of the squares of the differences, $\Sigma(X - \bar{X})^2$; and the variance, s_x^2 . The t test was then applied to determine significance.¹⁰

(1) By personal characteristic of sex;

(2) By institutional characteristic of size.

Step 3. Information similar to the above was placed in each of twelve cells of Table 2.5; a table was prepared for each of the critical problems and tests were applied within each cell for personal and institutional factors.

Table 2.5. -- Number of Responses Received from New Faculty Members in N.C.A. Institutions Concerning the Problem of Finding Suitable Living Quarters When Distributed by Institutional and Personal Characteristics.

Institutional Factors	Personal Characteristics							
	Sex		Age		Degree		Experience	
	Male	Female	Young	Old	Non-Doct.	Doct.	No College	College
<u>Size</u>								
Small	324	127	260	181	336	120	264	192
Large	487	145	393	233	470	170	383	257
<u>Control</u>								
Private	503	175	418	250	492	193	402	283
Public	308	97	235	164	314	96	245	166
<u>Level of Approval</u>								
Undergrad.	562	213	469	296	609	176	482	303
Graduate	249	59	184	118	197	118	165	146

¹⁰Wilfred Dixon and Frank Massey, Introduction to Statistical Analysis (New York: McGraw-Hill Book Co., 1957), p. 121.

- c. Results. In the above cited example, results at this stage gave indication that sex and possibly experience might be factors in the level of concern of new faculty members for the problem of housing. However, this conclusion could not be accepted without further examination of the data. Since no attempt had been made to examine the responses when all of the variables were the same except for sex, this first stage was felt to be a rather superficial analysis of differences. One or more personal characteristics or institutional factors might have influenced results in more than that one case. For example, the sex difference might not be a real difference, but a difference that is related to experience or to one of the institutional factors such as control. A more sophisticated analysis was deemed essential, leading to the second stage.

Stage two:

- a. The purpose of this stage was to discover if there were specific areas of difference regarding the degree of difficulty of critical problems related to personal or institutional factors.
- b. Step 1. All responses were matched so that all personal and institutional factors of the respondents were the same.
- Step 2. All IBM cards were classified according to the seven institutional and personal factors by the following code:
 - Nature of control: 0, private; 1, public.
 - Size of institution: 0, small--under 1,000; 1, large--1,000-3,000.
 - Level of approval: 0, undergraduate; 1, graduate.
 - Age: 0, young--31 or under; 1, old--32 or over.
 - Degree: 0, non-doctorate; 1, doctorate.
 - Sex: 0, male; 1, female.
 - Experience: 0, no college; 1, some college.

Step 3. Total number of participants with each combination of characteristics in the possible 128 combinations were found, namely:

<u>Combinations</u>								<u>Number of participants with each combination</u>
0	0	0	0	0	0	0	--	88
0	0	0	0	0	0	1	--	34
0	0	0	0	0	1	0	--	30
.	to	
1	1	1	1	1	1	1	--	4

Step 4. All of those respondents for whom one or more characteristics was missing were thrown out, reducing the number of participants to 1070. Chi-square tests of significance were run between the number of remaining participants and those who were dropped out for the two elements of each of the seven personal and institutional variables. The method used was taken from Edwards.¹¹ Results indicated no significant difference at the five per cent level in the personal or institutional characteristics of those dropped and those remaining in the study; therefore, the dropping of these did not appear to bias the results.

Step 5. In the 128 possible combinations of characteristics there were only thirty-seven which had at least ten respondents--the number considered necessary to determine the degree of difficulty for each critical problem with any degree of confidence. These thirty-seven groups, which were to be used for further analysis, were characterized by the combination of factors as shown in Table 2.6. These thirty-seven groups represented a total of 846 of the 1070 respondents. The other 224 respondents were scattered among fifty-six other combinations of characteristics.

¹¹Allen L. Edwards, p. 86.

Table 2.6.--Combinations of Personal and Institutional Factors Characterizing the Thirty-Seven Groups of Individuals Having Ten or More Respondents.

Assigned Group Number	Factors*							Number of Participants with this Combination of Characteristics
	Control	Size	Level	Age	Degree	Sex	Experience	
1	0	0	0	0	0	0	0	88
2	1	1	0	0	0	0	0	56
3	0	1	0	0	0	0	0	46
4	0	0	0	1	0	1	0	35
5	0	0	0	0	0	0	1	34
6	0	0	0	1	0	0	1	34
7	1	1	0	1	0	0	0	34
8	0	0	0	1	0	0	0	32
9	0	0	0	0	0	1	0	30
10	1	1	1	0	0	0	0	30
11	0	0	0	1	1	0	1	29
12	0	1	1	0	0	0	0	25
13	0	0	0	1	0	1	1	21
14	0	1	0	1	1	0	1	20
15	1	1	0	0	0	0	1	20
16	1	1	0	1	1	0	1	20
17	1	1	1	1	1	0	1	19
18	1	1	1	1	0	0	1	18
19	0	0	0	1	1	0	0	16
20	0	1	0	1	0	0	0	16
21	0	1	1	1	1	0	1	16
22	1	1	0	0	0	1	0	16
23	0	1	0	0	0	1	0	15
24	1	1	1	1	0	0	0	15
25	0	0	0	0	1	0	0	14
26	1	1	0	1	0	1	0	14
27	1	1	1	0	0	1	0	14
28	0	1	1	0	1	0	0	13
29	1	0	0	0	0	0	0	13
30	1	1	0	1	0	0	1	13
31	0	0	1	1	1	0	1	12
32	0	1	0	1	0	0	1	12
33	0	1	0	0	1	0	0	12
34	0	0	0	1	1	1	1	11
35	0	1	0	0	0	0	1	11
36	1	1	1	0	0	0	1	11
37	1	1	1	1	1	0	0	11

* Control: 0, private; 1, public. Size: 0, small; 1, large. Level: 0, undergraduate; 1, graduate. Age: 0, young; 1, old. Degree: 0, non-doctorate; 1, doctorate. Sex: 0, male; 1, female. Experience: 0, no experience; 1, experience.

Step 6. Of the thirty-seven groups having more than ten respondents at least eight groups could be matched with eight other groups in which only one of the seven personal or institutional characteristics was different. There were eight matched-groupings which could be used to study the control variable; eight, the size variable; nine, the level of approval variable; eight, the sex variable; eleven, the experience variable; eleven, the age variable; and nine, the degree variable. Example: The eight matched-groupings for the sex factor and the number of cases responding to the housing question were as follows:

Males	Group Number	1	2	3	8	6	7	10	11	Totals
	Number of Cases	88	56	45	30	34	33	30	29	345
Females	Group Number	9	22	23	4	13	26	27	34	Totals
	Number of Cases	29	15	14	34	21	14	14	10	151

Step 7. To the eight or more matched-groupings by characteristics the t test for significance was applied to determine if there were differences as to the degree of difficulty on each critical problem.

- c. The results obtained from this process of analysis indicated whether or not any two groups which matched as to six of the personal and institutional characteristics but which differed on the seventh personal or institutional characteristic would be significantly different in the degree of difficulty on each of the critical problems.

Example: For four of the eight groups matched except for sex there were found to be significant differences at the five per

cent level of confidence in the responses by men and women as to the degree of difficulty on the critical problem of housing, men always expressing more concern for this problem than did women.

On the basis of these findings the acceptance or rejection of the original hypothesis still was not clearly evident, since, as in the above example, it was found that in four groups there were significant differences and in four there were not. Since the hypothesis deals with the concern of all males and females in the NCA institutions in relation to the housing problem, a third stage of investigation was used in which the matched groups were combined.

Stage three:

- a. The purpose of this stage was to attempt to draw some general conclusions regarding the nature of relationships between each of the critical problems and the seven variables.
- b. Step 1. For each of the critical problems the total mean degree of difficulty was computed for the individuals in each section of the institutional or personal factors by combining the matched-groupings from stage two.

Step 2. The t test was applied for significance between these two groups whenever there was evidence of a significant difference at the five per cent level in stages one or two or when by inspection there was indication of the likelihood of a significant difference at stage three.

- c. Results. The investigator realized that the best test for significance could be accomplished by matching individuals except for one institutional or personal characteristic, and then examining the differences in degree of difficulty of these two groups. Since this could not be done, combining matched-

groupings seemed the next best way of attempting to draw any general conclusions relative to the hypotheses.

Example: Concerning the housing problem the total number of men in the eight matched-groupings listed in the second stage was 345; women, 151. The differences in the expressed concern for this problem by the sexes held up through stage three, men viewing the housing problem as causing them more difficulty than did the women. Consequently, the hypothesis that there are no significant differences in the critical problems of new faculty members regardless of sex was rejected.

4. For indication of the degree of helpfulness of administrative procedures in assisting new faculty members to solve their problems, the number of "great" responses was multiplied by three; the number of "moderate" responses by two; the number of "slight" responses by one; and the number of "none" responses by zero. The total of the above was then divided by the total responding to each procedure, the quotients received in hundredths being reported as whole numbers for convenience. The percentage of use of each of the procedures was also determined. The ranks of the degree of helpfulness of administrative procedures as perceived by the participants were then compared with the ranks of their use.

Summary

The data for this study were drawn from the results of questionnaires sent to 1742 first- and third-year faculty members in 144 North Central Association colleges and universities. Institutions whose faculty members were requested to fill out questionnaires were selected by a stratified random sampling process, based upon size, nature of control,

and level of approval of program by the NCA. The information on these questionnaires was coded for IBM machines.

The methodology used involved the testing of the hypotheses by methods particularly suited to each. Critical problems were discovered by a weighted scale technique. Critical problems were tested for differences in responses for each of four personal factors and three institutional factors when the other six factors were held constant. The relative persistence of problems of new faculty members was determined by noting the differences in percentages of respondents indicating these problems persisted at the end of the first and third years of service.

The data used were taken from a total of 1145 returned questionnaires, 1119 being used for the inspection of much of the data.

CHAPTER III

PERSONAL AND PROFESSIONAL CHARACTERISTICS OF NEW FACULTY MEMBERS IN SELECTED NORTH CENTRAL ASSOCIATION COLLEGES AND UNIVERSITIES

To know how widely applicable the results of this study might be, the personal and professional characteristics of the respondents were investigated. The data obtained were compared with similar data on the national level whenever that information was available.

To make comparisons, answers were sought to the following specific questions relative to those in the study: What were their personal characteristics of sex, marital status, age? How much professional preparation had they had? Where had they obtained this preparation? What professional experience was behind them? How did their initial assignments in these new institutions compare with their most recent formal education? For what reasons did they accept these positions?

Personal Characteristics of Respondents

Personal characteristics revealed by respondents (see Tables 3.1, 3.2, and 3.3) indicate that approximately three-fourths of the new faculty members are men, approximately two-thirds of them are married, and their median age is approximately thirty-one years.

According to the most recent Biennial Survey of Education in the United States,¹ 23 per cent of the faculty in institutions of higher

¹U.S., Department of Health, Education, and Welfare, Office of Education, Biennial Survey of Education in the U.S. 1954-56, Chapter 4, Sec. 1, p. 30.

education in the United States were women as compared to 25 per cent of the respondents in this study (see Table 3.1). Further, newly employed full-time teachers in colleges and universities of the United States in 1954-55 consisted of 24.1 per cent women.² Although no exactly comparable data were available on the national level concerning the proportion of new faculty women to the total new faculty, it seems reasonable to assume that the female-male ratio of new faculty is approximately the same as that ratio for the present staff, since administrators tend to replace women by women and men by men. If we accept this assumption, the respondents have about the same sex ratio as new faculty members throughout higher education institutions in the United States.

The median age of the 1119 respondents at the time of accepting positions in the institutions in which they were serving was found to be 31.4 years. The 27-29-year-old class in the three-year interval frequency distribution (see Table 3.3) contains the highest per cent of new faculty members, 22 per cent. Further examination of this table reveals that more than three-quarters of those in the sample were between 21 and 38 years of age when they accepted these new positions. Only 16 per cent were 42 years old or over.

Table 3.1.--Sex of New Faculty Members in Selected N. C. A. Colleges and Universities.

Sex	Number of New Faculty	Per Cent
Male	822	74
Female	284	25
Not indicated	13	1
Totals	1119	100

²Ray C. Maul, "A Look at the College Teacher Supply and Demand Problem," College and University, XXXI (Spring, 1956), p. 273.

Table 3.2.--Marital Status of New Faculty Members in Selected N.C.A. Colleges and Universities.

Marital Status	Number of New Faculty	Per Cent
Single	355	32
Married	737	66
Not indicated	27	2
Totals	1119	100

Table 3.3.--Age of New Faculty Members in Selected N.C.A. Colleges and Universities.

Age Group	Number	Per Cent	Age Group	Number	Per Cent
21-23	54	5	45-47	48	4
24-26	162	14	48-50	36	3
27-29	247	22	51-53	24	2
30-32	151	14	54-56	10	1
33-35	122	11	57-59	12	1
36-38	97	9	60 and over	13	1
39-41	65	6	No infor.	31	3
42-44	47	4			
Median - 31.4			Totals	1119	100

Professional Preparation of Respondents

New faculty members in NCA institutions of less than 3,000 enrollment may have a slightly higher level of training than do those being inducted into institutions of higher education throughout the United States. Identical data are not available on a national level, but some related data are.

According to a recent research report from the National Education Association,³ 23.8 per cent of new full-time faculty members in 936 of 1076 colleges and universities in the United States in 1958-59 held earned doctor's degrees, as compared to 27 per cent of those being hired to do full-time teaching in NCA colleges and universities (see Table 3.4). The NEA report, however, did not consider as "new" faculty those transferring from one institution to another in consecutive years, although it stated that many of those reported as being "new" may have had previous teaching experience. Approximately one-fifth of those being inducted into service in 1958-59, according to the NEA study, had less than a master's degree, 5.9 per cent being hired as full-time instructors directly after completing their bachelor's degree. Only 10 per cent of those in the North Central Association institutions had less than a master's degree.

Table 3.4. --Highest Degrees Held by New Faculty Members in Selected N.C.A. Colleges and Universities.

Highest Degree	Number	Per Cent
None indicated	1	0
Bachelor's	114	10
Master's	707	63
Doctor's	297	27
Totals	1119	100

³National Education Association, Research Division, Teacher Supply and Demand in Universities, Colleges and Junior Colleges, 1957-58 and 1958-59, Research Report 1959-R10 (Washington, D.C.: National Education Association, June, 1959), pp. 11-18.

Highest Degrees from Many Institutions

Of the 1119 new faculty members in the sample, 1092 reported receiving their highest degrees from institutions in the United States, 24 from institutions in countries outside the United States, with three not indicating the institutions granting them their highest degrees.

The 232 institutions in the United States from which highest degrees were earned were located in forty-three of the fifty states. As might be expected, most of the institutions, 151 in all, were in North Central Association states. Only one of the institutions ranking in the top ten of those furnishing the greatest number of graduates to the sample institutions was outside the NCA area (see Table 3.5). This was Columbia University, which tied for the eighth rank with Ohio State University.

Table 3.5. -- Ten Universities Ranking Highest in Furnishing New Faculty Members to Selected N. C. A. Colleges and Universities.

Rank	Institutions Granting Highest Degrees	Number of Graduates
1	University of Wisconsin	53
2	University of Michigan	47
3	University of Illinois	43
4	State University of Iowa	36
5	University of Minnesota	32
6	University of Chicago	30
7	Indiana University	29
8.5	Columbia University	26
8.5	Ohio State University	26
10	University of Kansas	24

Highest degrees were earned in ten foreign countries and the Philippines by twenty-four of those in the survey. Most frequently listed foreign institutions were in Germany and Italy.

Previous Teaching Experiences of Respondents

In Table 3.6 will be found a summary of the previous professional experiences of the respondents. It will be noted that more of these new faculty members have had experience teaching at the high school level (41 per cent) before coming to their present institutions. Many of those who had previous college experience also reported having either high school, elementary, or other full-time teaching experience.

Table 3.6.--Previous Professional Experience of New Faculty in Selected N.C.A. Colleges and Universities.

Type of Teaching	No Experience		Some Experience						Grand Totals			
			1-3 yrs.		4-10 yrs.		Over 10 years				Total	
	No.	%	No.	%	No.	%	No.	%	No.	%		
College	659	59	229	20	157	14	74	7	460	41	1119	100
High School	642	57	229	20	181	16	67	6	477	43*	1119	100
Elementary	929	83	101	9	58	5	31	3	190	17	1119	100
Other Full-time	1045	93	55	5	14	1	5	0	74	7*	1119	100

* Totals in separate columns not equal to this total number due to rounding by whole numbers.

Examination of random samples of the seven per cent who reported "other full-time teaching" indicated this experience was most often found to be private teaching, special programs for nurses or technologists, or in teaching assignments connected with the armed services.

Assignments Mostly in Major Fields

It will be noted (see Table 3.7) that while initial teaching assignments tend to place most new faculty members in fields in which they have majored in their highest degree work, 12 per cent of those in the study were not so employed. No attempt was made by the matching of

majors in earlier degree work and the subject field assignments to analyze completely the data concerning the 12 per cent. It was noted, however, that many of those not teaching in the major field of their highest degree had majors at lower degree levels in these fields.

Table 3.7. --Initial Teaching Assignments of New Faculty Members in Selected N. C. A. Colleges and Universities as Compared to Their Major in Highest Degree.

Assignment Relationship to Major	Number	Per Cent
Teaching only in major field	775	69
Teaching in major and at least one other field	185	17
Not teaching in major	135	12
No response	24	2
Totals	1119	100

Almost nine of ten new faculty members in the selected institutions were teaching only undergraduate courses (see Table 3.8), with approximately half being employed in the institutions as instructors and one-third of them as assistant professors (see Table 3.9). In the thirty-two "other" rank in Table 3.8, nine indicated no specific rank was used in their institution, and seven came in as assistant instructors or faculty assistants.

Many of these new faculty members, 306 in all, or 27.3 per cent, reported that they had received promotions since coming to the institution. The most common promotion was from instructor to assistant professor, 100 falling in this group. Practically all of these promotions were to third-year faculty members.

Table 3.8.--Level at Which New Faculty Members in Selected N. C. A. Colleges and Universities Taught During Their Initial Year in These Institutions.

Level of Assignment	Number	Per Cent
Undergraduate courses only	986	88
Undergraduate and graduate courses	110	10
Graduate courses only	15	1
No response	8	1
Totals	1119	100

Table 3.9.--Rank of New Faculty Members in Selected N. C. A. Colleges and Universities.

Rank at Initial Employment	Number	Per Cent
Instructor	527	47
Assistant Professor	373	33
Associate Professor	124	11
Professor	51	5
Other	32	3
Not reporting	12	1
Totals	1119	100

Varied Reasons for Choosing Institutions

Even though 36 per cent of the new faculty indicated they chose to accept positions in these institutions because of the type of teaching assignment (see Table 3.10), 159 volunteered other reasons than those provided on the questionnaire. A total of 30 of the volunteered-responses indicated "salary" as the primary reason, 8 of these in combination with teaching assignment. The complete list of additional answers is found in Appendix E.

Table 3.10. --Primary Reasons Why New Faculty Members in Selected N.C.A. Colleges and Universities Came to These Institutions.

Answers to "What do you consider as the primary reason you came to this institution?"	Number	Per Cent (Based on 1119)
Just the type assignment I wanted	408	36
Opportunity afforded for advancement	224	20
Location	177	16
Religious affiliation	155	14
Alma Mater	56	5
Size of institution	41	4
Friendly w/college administrator	30	3
Other reasons (written in)	159	14
No answer	10	1
Totals	1260*	--

* Some individuals, 141 in all, gave two answers instead of one. Both answers were counted; consequently, this total is in excess of 1119.

Aspirations of New Faculty Members

It is evident from the data in Table 3.11 that most of the new faculty members in this study are doing the thing they want to do, while some 8 per cent aspire to be college administrators, and 7 per cent to do mostly research instead of teaching. Among the "other" responses to the question "What do you hope to be doing 15 years from now?" those mentioned most frequently and the number of times listed were: other profession, business, or industry, by 19; teaching and research, 19; different teaching assignments, 16. Other miscellaneous answers to this question are listed in Appendix E.

It is possible that those new faculty members who aspire to positions different from those they are holding today perceive their problems to be somewhat different than those who hope to be holding "similar position to present" 15 years from now. The analysis of the returned questionnaires

Table 3. 11. --Aspirations of New Faculty Members in Selected N. C. A. Colleges and Universities.

Answers to "What do you hope to be doing 15 years from now?"	Number	Per Cent
Similar position to present	669	60
College administration work	85	8
Spending most of time in research	77	7
Be retired	70	6
Spending most of time in writing	41	4
College personnel work	28	3
Other (written in)	125	11
No response	25	2
Totals	1119	100*

* Do not total 100 due to rounding by whole numbers.

to determine this relationship is beyond the scope of this study, but might prove worthy of investigation.

Summary

In summary, the new faculty respondents in this study may be characterized as follows:

1. Their median age is 31 years, with almost a quarter of them falling in the 27-29-year-old bracket.
2. Approximately three-quarters are male.
3. Approximately two-thirds are married.
4. Only 10 per cent have less than a master's degree, with 27 per cent holding doctorates.
5. They earned their highest degrees from institutions in 43 different states and 10 foreign countries.
6. Three out of five have had no previous college teaching experience.

7. Their professional assignments in 86 per cent of the cases are in fields which include their highest degree major.
8. Most of them are employed at below associate professor level and teach only undergraduates.
9. Most plan to stay in college teaching.

Although in most areas no exact comparable figures are available on the national level for new college teachers, the somewhat similar limited data as revealed in this chapter points to the likelihood that these new faculty members are not very different from new faculty members in similar institutions of higher education throughout the country today. Most likely the problems they perceive as being critical are typical of the critical problems faced by new faculty members in these other institutions. The findings in this study might, therefore, have much meaning to college administrators dealing with the adjustment of newly appointed staff members who are outside the NCA area as well as those within.

CHAPTER IV

PROBLEMS PERCEIVED BY NEW FACULTY MEMBERS

What are the problems of a personal, an institutional, or instructional nature with which the greatest per cent of new faculty members in these NCA colleges and universities are having difficulty? What problems do these new faculty members rate as causing the greatest degree of difficulty?

In Table 4.1 will be found the complete listing of the 50 problems to which new faculty members responded, giving the per cent who indicated some degree of difficulty with each problem, the rank of these problems by per cent having difficulty, the average degree of difficulty of these problems, and the rank of each problem by degree of difficulty.

One Personal Problem Perceived Frequently

The one personal problem reported far more frequently and with more intensity than any other personal problem is the one of Finding suitable living quarters, item A-1, Table 4.1. While 46 per cent of respondents admitted to having some difficulty with this problem, ranking it as fourth among the 50 problems in this respect, this problem ranked second in degree of difficulty. No other problem of a personal nature ranked above 29th in per cent having difficulty or above 22.5 in degree of difficulty.

Of the thirty-two additional problems of a personal nature which were listed by the respondents, seven of them were primarily social in character, four dealt with finding satisfactory cultural outlets for

Table 4.1.--Ranks of Problems Perceived by New Faculty Members in Selected N.C.A. Colleges and Universities According to the Per Cent Indicating Some Difficulty and by Degree of Difficulty.

Description of Problems	Indicating Some Difficulty		Degree of Difficulty	
	Per Cent	Rank	Average*	Rank
B-15 Acquiring adequate secretarial help	50	1.5	104	1
C-3 Lack of teaching aids	50	1.5	90	4
B-16 Understanding college policies regarding promotions and salary increases.....	48	3	92	3
A-1 Finding suitable living quarters	46	4	98	2
B-7 Learning curriculum requirements.....	45	6	64	11
C-5 Developing effective lectures....	45	6	67	8
C-10 Increasing my effectiveness in student counseling techniques ...	45	6	66	9
C-6 Using effective discussion techniques in class.....	44	8	69	7
B-10 Knowing what other departments of the college expect of my department.....	42	10	72	6
B-25 Fulfilling expectations regarding total amount of responsibilities..	42	10	58	19.5
C-7 Obtaining and maintaining student interest	42	10	59	17.5
B-4 Understanding faculty committee structure	40	12	64	11
B-9 Knowing what other departments of the college teach	39	14.5	64	11
B-19 Understanding policies regarding probationary status and dropping of students	39	14.5	63	13
C-4 Developing satisfactory tests and examinations	39	14.5	62	14.5
C-14 Gearing instruction to level of those in my classes	39	14.5	59	17.5
B-11 Knowing the institutional procedure to be followed for curriculum revision	38	17	60	16
B-13 Understanding policies regarding grading standards	36	18	62	14.5

* See explanation of method of figuring at end of table.

Continued

Table 4.1 -- Continued

Description of Problems	Indicating Some Difficulty		Degree of Difficulty	
	Per Cent	Rank	Average	Rank
B-14 Acquiring adequate office space..	35	20	76	5
B-23 Understanding institution's legislative organization	35	20	58	19.5
C-1 Learning the availability of instructional material	35	20	53	26
C-2 Learning routine for acquiring new instructional and library materials	33	22.5	47	32.5
C-9 Coordinating instruction in my classes with instruction in other college departments.....	33	22.5	54	22.5
C-11 Required to teach classes for which not prepared	32	24	54	22.5
B-1 Understanding institutional objectives	31	26	53	26
B-17 Understanding policies regarding fringe benefits	31	26	51	28
B-24 Understanding faculty-trustee relationships	31	26	53	26
A-3 Establishing satisfactory social relations with faculty families...	29	29	48	30.5
B-3 Understanding my responsibilities for counseling students	29	29	43	36
C-8 Coordinating instruction in my classes with other classes in my department	29	29	48	30.5
B-22 Fulfilling expectations regarding student counseling	28	31	43	36
A-10 Finding satisfying recreational outlets for self or family	27	33.5	54	22.5
B-5 Keeping and making out official records and reports	27	33.5	38	38
B-20 Understanding policies regarding research	27	33.5	49	29
B-21 Fulfilling expectations regarding research activities	27	33.5	54	22.5
A-4 Establishing satisfactory social relations in the community	26	36.5	47	32.5
C-15 Obtaining help in the improvement of my instruction	26	36.5	43	36

Continued

Table 4.1 -- Continued

Description of Problems	Indicating Some Difficulty		Degree of Difficulty	
	Per Cent	Rank	Average	Rank
B-2 Understanding my responsibilities for registering students	25	38	36	40
C-12 Too many "extra class" responsibilities on faculty committees	24	39	44	34
A-2 Becoming acquainted with other faculty members	22	41	37	39
B-8 Learning details of any student assistantship program	22	41	34	41
C-13 Becoming acquainted with pupils in my classes	22	41	32	42
A-7 Working with college administration	18	43	30	43
A-5 Working with department co-workers	17	45	27	44.5
A-6 Working with personnel from other departments	17	45	26	46.5
B-18 Understanding policies regarding textbook adoptions	17	45	26	46.5
B-12 Having little opportunity to work on college committees	16	47	27	44.5
B-6 Becoming acquainted with college calendar	15	48	21	48.5
A-9 Knowing about health services in the community.....	14	49	21	48.5
A-8 Working with counseling personnel	10	50	16	50

* Average degrees of difficulty were determined by multiplying the total "great" responses by three; "moderate" responses by two; "slight" responses by one; and "never" responses by zero. The total of these was then divided by the number responding to each question, the quotient received being reported in hundredths as whole numbers for convenience.

self and/or family, and three with salary. Problems of a social nature varied from "Finding friends of similar age and interests" to "Too great a demand for conventional socializing when we have our own

interests." In every case these social problems were reported as "persistent"; in every case but one they were indicated as being "great" in magnitude.

Institutional Problems in Top Ten

When the fifty problems were ranked according to the per cent having some degree of difficulty with them, the top ten included the following five problems of an institutional nature (see Table 4.1):

Item B-15, Acquiring adequate secretarial help, which was giving some degree of difficulty to 50 per cent of the respondents, tied for the first rank.

Item B-16, Understanding college policies regarding promotions and salary increases, 48 per cent indicating some degree of difficulty, ranked third.

Item B-7, Learning curriculum requirements, 45 per cent indicating some degree of difficulty, tied for rank six.

Items B-10 and B-25, Knowing what other departments of the college expect of my department and Fulfilling expectations regarding total amount of responsibilities, 42 per cent indicating some degree of difficulty with each of these problems, tied for rank 10.

Three of the above problems, items B-15, B-16, and B-10, are also found among the top ten of the fifty problems causing the greatest degree of difficulty. One other institutional problem, item B-14, Acquiring adequate office space, ranks fifth in degree of difficulty.

Most of the institutional problems listed by the respondents which were not on the original questionnaire were stated as persisting and great in magnitude. Of the twenty-seven different additional problems of an institutional nature listed, twenty-four were rated as "persisting" and twenty-two were rated as causing "great" difficulty. No additional problem was listed as being of "slight" difficulty.

It is interesting to note that only four of the problems of an institutional nature that were added by the 1119 participants were mentioned by more than one person; these were mentioned by two each. They were "Communication between college administrator and faculty, " rated by one as of "moderate" difficulty, another "great"; "Coordination in the department, " rated by both as "persistent" and "great"; "Too heavy a teaching load to do research, " rated by both as "persistent" and "great"; and "Research not encouraged, " rated as "persistent" and "great. "

Instructional Problems in Top Ten

Tying for the first rank in per cent of respondents indicating some degree of difficulty with each of the fifty problems was item C-4, Lack of teaching aids (see Table 4.1). It was troublesome to 50 per cent of the new faculty members. Respondents also perceived this problem as being fourth in degree of difficulty.

Other instructional problems ranking in the top ten of those giving some degree of difficulty were these:

Items C-5 and C-10, Developing effective lectures and Increasing my effectiveness in student counseling techniques, each being rated by 45 per cent of the respondents as giving them some degree of difficulty and tying for sixth rank.

Item C-6, Using effective discussion techniques in class, rated by 44 per cent as giving some difficulty and ranking eighth.

Item C-7, Obtaining and maintaining student interest, rated by 42 per cent as giving some difficulty and tying for tenth rank.

Of the twenty additional instructional problems added to the list by the respondents, four were mentioned by more than one person.

"Too heavy a teaching load, " which had been listed by two respondents under the institutional problems as related to lack of time to do research,

was listed in this section of the questionnaire by thirteen respondents, ten rating it as "great" and "persisting," while the other three merely listed it as a problem and indicated no rating for persistence or degree of difficulty.

Other problems in this section listed by more than one respondent were "Too many extra-class responsibilities other than committees," four rating it as a "persistent" and "great" problem and four rating it as "persistent" and "moderate"; three listed problems relative to the low level of preparation of students, one of these indicating the problem was "persistent" and "great" while the other two merely listed it as a problem with no rating of its persistence or level of difficulty; "Curriculum revision (improvements)," was listed by two, both indicating it as a "persistent" problem, one rating it of "moderate" difficulty and the other of "great" difficulty.

Most Critical Problems Perceived

As explained in Chapter II, critical problems were defined as being those ranking in the top eight of the fifty problems in degree of difficulty as perceived by these new members of the teaching staff. The critical problems thus revealed in this study in order of rank (see Table 4.1) were these:

1. Item B-15, Acquiring adequate secretarial help.
2. Item A-1, Finding suitable living quarters.
3. Item B-16, Understanding college policies regarding promotions and salary increases.
4. Item C-3, Lack of teaching aids.
5. Item B-14, Acquiring adequate office space.
6. Item B-10, Knowing what other departments of the college expect of my department.

7. Item C-6, Using effective discussion techniques in class.

8. Item C-5, Developing effective lectures.

One of the above, item A-1, is found among the personal problems respondents were asked to rate, while four (numbers 1, 3, 5, and 6) were among the institutional problems, and the remaining three were instructional in nature. It is apparent, then, that we can accept the hypothesis that there are certain problems which new faculty members perceive as being more critical than other problems, and that among these most critical problems will be found those of a personal, an institutional, and an instructional nature.

All of the above problems are examined more thoroughly in Chapter V.

Consistency in Late and Total Returns

Responses from the 209 questionnaires which were returned after the second request had been mailed out were compared with the total 1119 returns in order to test the consistency of results. Not only did the top six critical problems rate in the same order in the two groups, but the coefficient of correlation of all fifty problems based upon their ranks according to the degree of difficulty of each problem was a $+ .97$.¹

Such consistency seems to warrant the conclusion that even had more responses been received the results of this study would not have been materially altered.

Persistence of Certain Problems

One personal problem, A-10, Finding satisfactory recreational outlets for self or family, was indicated as persisting by more than 80

¹Spearman rank-difference method of figuring coefficient of correlation was used.

per cent of those who had experienced some difficulty with this problem since coming to their present institutions (see Table 4.2). As indicated earlier (see Table 4.1), this problem seemed to cause difficulty to only 27 per cent of the total respondents, yet those who reported this problem evidently had considerable difficulty in resolving it to their satisfaction.

Six institutional problems were also rated as persisting by more than 80 per cent of those who had experienced difficulty with them. In this group are found two of the top ten problems indicated most frequently as causing difficulty. They are problems B-15, Acquiring adequate secretarial help, and B-16, Understanding college policies regarding promotions and salary increases, reported as persisting by 83 and 82 per cent, respectively. Also in this group are the two top-ranking problems in persistence, B-21, Fulfilling expectations regarding research activities, at 90 per cent, and B-24, Understanding faculty-trustee relationships, at 88 per cent. Other institutional problems persisting at or above the 80 per cent level were these: B-12, Having little opportunity to work on college committees, at 80 per cent; B-20, Understanding policies regarding research, at 85 per cent. Three instructional problems persisting above the 80 per cent level were these: C-3, Lack of teaching aids, 85 per cent; C-9, Coordinating instruction in my classes with instruction in other college departments, 84 per cent; and C-12, Too many "extra class" responsibilities on faculty committees, 82 per cent.

While the per cent of new faculty members finishing their third year in NCA colleges and universities indicating persistence of personal problems is somewhat less than the per cent finishing their first year, the difference is not great (see Table 4.2). Persistence of all personal problems for all participants in the study was 62.5 per cent, with 64.7 per cent of first-year teachers indicating persistence and 58.9 per cent of third-year teachers. Personal problems noticeably different in

Table 4.2.--Per Cent of First- and Third-Year Faculty Members Who Have Had Difficulty with Problems and Indicate They Still Persist.

Problems	Totals		First-Year		Third-Year	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
<u>A. Personal</u>						
1. Finding suitable living quarters	175	35	121	39	50	28
2. Becoming acquainted with other faculty members	143	60	98	67	43	54
3. Establishing satisfactory social relations with faculty families	232	77	153	79	76	72
4. Establishing satisfactory social relations with the community	195	70	122	74	69	64
5. Working with department co-workers	126	68	69	71	56	65
6. Working with personnel from other departments	133	72	69	73	63	69
7. Working with college administration	135	72	70	71	61	72
8. Working with counseling personnel	77	73	39	78	38	69
9. Knowing about health services in the community	58	37	40	37	18	40
10. Finding satisfying recreational outlets for self or family	242	84	173	87	66	80
Total of Personal Problems	1516	62.5	954	64.7	540	58.9
<u>B. Institutional</u>						
1. Understanding institutional objectives	223	66	125	66	95	67
2. Understanding my responsibilities for registering students	92	33	65	36	26	28
3. Understanding my responsibilities for counseling students	176	56	110	59	63	50
4. Understanding faculty committee structure ..	255	59	160	60	90	56
5. Keeping and making out official records and reports	155	53	95	52	57	57

Continued

Table 4.2 -- Continued

Problems	Totals		First-Year		Third-Year	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
6. Becoming acquainted with college calendar.	77	45	49	44	27	47
7. Learning curriculum requirements	230	46	162	52	65	37
8. Learning details of any student assistant- ship program	142	59	92	61	50	53
9. Knowing what other departments of the college teach	320	74	188	74	129	75
10. Knowing what other departments of the college expect of my department	356	78	218	81	134	73
11. Knowing the institutional procedure to be followed for curriculum revision	244	59	167	63	74	51
12. Having little opportunity to work on college committees	140	80	83	83	57	78
13. Understanding policies regarding grading standards	255	65	155	63	96	70
14. Acquiring adequate office space	288	75	167	78	116	71
15. Acquiring adequate secretarial help	450	83	261	85	183	80
16. Understanding college policies regarding promotions and salary increases	419	82	239	81	172	82
17. Understanding policies regarding fringe benefits	216	66	135	65	78	69
18. Understanding policies regarding textbook adoptions	98	52	62	50	35	55
19. Understanding policies regarding probation- ary status and dropping of students	269	63	174	65	92	61
20. Understanding policies regarding research. 21. Fulfilling expectations regarding research activities	249	85	148	85	98	85
22. Fulfilling expectations regarding student counseling	253	90	143	90	106	91
23. Understanding institution's legislative organization	220	73	127	77	89	68
	271	72	180	76	87	66

Continued

Table 4.2 -- Continued

Problems	Totals		First-Year		Third-Year	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
24. Understanding faculty-trustee relationships	289	88	186	91	98	82
25. Fulfilling expectations regarding total amount of responsibilities	284	78	171	80	108	75
Total of Institutional Problems	5971	68.2	3662	69.3	2175	65.8
C. Instructional						
1. Learning the availability of instructional material	195	51	135	55	57	43
2. Learning routine for acquiring new instructional and library materials	140	38	95	39	44	35
3. Lack of teaching aids	461	85	281	86	175	83
4. Developing satisfactory tests and examinations	312	73	186	74	125	72
5. Developing effective lectures	340	70	211	70	127	69
6. Using effective discussion techniques in class	364	75	216	76	144	75
7. Obtaining and maintaining student interest	354	78	208	76	143	81
8. Coordinating instruction in my classes with other classes in my department	247	77	138	78	102	76
9. Coordinating instruction in my classes with instruction in other college departments	293	84	164	87	124	79
10. Increasing my effectiveness in student counseling techniques	374	79	210	81	160	75
11. Required to teach classes for which not prepared	202	57	124	61	73	50
12. Too many "extra class" responsibilities on faculty committees	219	82	90	82	123	83

Continued

Table 4.2 -- Continued

Problems	Totals		First-Year		Third-Year	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
13. Becoming acquainted with pupils in my classes	180	76	98	70	78	84
14. Gearing instruction to level of those in my classes	289	67	177	67	108	68
15. Obtaining help in the improvement of my instruction	229	79	126	76	100	83
Total of Instructional Problems	4199	71.4	2459	71.4	1683	71.2

per cent of persistence from first- to third-year faculty members were A-2, Becoming acquainted with faculty members, decreasing by 13 per cent, and A-4, Establishing satisfactory relationships in the community, decreasing by 10 per cent.

Problems of an institutional character, persisting at a somewhat higher level than personal problems, 68.2 per cent as compared to 62.5 per cent, were also reported as persisting slightly less frequently by third-year faculty members than by first. Two institutional problems noticeably different in per cent of persistence among first- and third-year faculty members were B-7, Learning curriculum requirements, decreasing from 52 to 37 per cent, and B-11, Knowing institutional procedures to follow for curriculum revision, decreasing from 63 to 51 per cent.

Most noteworthy of the findings regarding persistence of problems is the fact that instructional problems as a whole persisted at as high a level among third-year as among first-year faculty members. In other words, third-year teachers who felt that they had had some instructional problems since coming to their present positions did not feel that they had come any nearer solving these problems than those teachers who had only been in these institutions for one year. In fact, one instructional problem, Becoming acquainted with pupils in my classes, was reported as persisting at a 14 per cent higher level by third-year than by first-year faculty members.

In light of the above results of this investigation, the second hypothesis--new faculty members who have served three years in NCA colleges and universities perceive problems of a personal, institutional, and instructional nature as persisting to a much lesser degree than do those who have served just one year in these same institutions--is rejected. Whatever the orientation and in-service programs may be accomplishing, they do not seem to be coming to grips with many major personal,

institutional, and instructional problems of new faculty members. For a majority of the faculty members who have experienced these problems, the problems persist through the first three years.

Additional Comments by Respondents

Many of those responding to the questionnaire made additional comments concerning their particular answers. Some felt that they were so well acquainted with the institutions they were serving before taking the assignment that their problems were minimized, fourteen of these having lived a year or more in the community before taking positions and eleven others returning to their Alma Mater.

One priest wrote that he felt that the personal problems and many of the institutional problems were minimized due to the nature of his assignment in the Roman Catholic institution. Three sisters echoed somewhat the same opinion, some of them failing to answer parts or all of the questionnaire for that reason.

Other general comments included "Little common spirit among faculty since no unified objectives are envisioned or attempted," and "I needed re-education to honor system--students taking more responsibility."

One who did not check any problems or procedures said, "Taught too many classes, but my fault. I'd do it again. Wish there were more hours in the day, fewer committees, but who can change these things?"

Summary

Two of the hypotheses have been examined in this chapter in light of the results of the responses received from the new faculty members in the sample. The information thus reported suggests the acceptance of the hypothesis that there are certain problems of a personal,

institutional, and instructional nature that new faculty members consider as more critical than others. However, it appears that the hypothesis-- faculty members who have served three years in NCA institutions of higher education perceive their problems as persisting much less frequently than do first-year teachers in the same institutions--must be rejected.

CHAPTER V

INSTITUTIONAL AND PERSONAL DIFFERENCES IN IDENTIFICATION OF CRITICAL PROBLEMS

Introduction

The critical problems identified by new faculty members in this study are analyzed more thoroughly in this chapter according to the three-stage plan as explained in the methodology, pages 28 to 36, Chapter II. In Table 5.1 is presented a summary of the findings relative to the institutional and personal differences in identification of the degree of difficulty of these critical problems.

Throughout this chapter will be found the pertinent data relative to the testing of hypotheses 3 and 4 as stated on page 15. Each critical problem is treated separately, with data relative to differences associated with the personal nature of respondents presented first, followed by data relative to differences associated with institutional characteristics. Results of tests applied at the third stage are presented in table form within the context of the chapter; tables for stages one and two are reproduced in the Appendices.

Finding Suitable Living Quarters

Personal Characteristics. In the first stage of the investigation, when personal characteristics of sex, age, degree held, and experience were tested for significance, it was evident that both sex and experience might be factors influencing the judgment of new faculty members concerning the difficulty of the problem of finding suitable living quarters.

Table 5. 1. --Summary of Direction of Significant Differences in Degree of Difficulty for Each of the Eight Critical Problems Identified by New Faculty Members for Each of Seven Variables.

Critical Problems	Personal Characteristic			Institutional Factor		
	Age	Degree	Sex	Experience	Size	Control
Finding suitable living quarters			M>F At .01			Pu>Pr At .01
Knowing what other departments expect of my department					L>S	
Acquiring adequate office space						
Acquiring adequate secretarial help			M>F At .01			
Understanding college policies regarding promotions and salary increases						Pu>Pr U>G
Lack of teaching aids	Y>O					
Developing effective lectures	Y>O			N>C At .01		
Using effective discussion techniques				N>C		

Note: The above summary shows only those differences found to be significant at the third stage of investigation. Unless otherwise indicated differences were at the .05 level. Meanings of the abbreviations used in the above table are as follows: Y, young; O, old; M, male; F, female; N, no previous college teaching experience; C, previous college teaching experience; L, large; S, small; Pu, public; Pr, private; U, accredited by NCA for undergraduate program only; G, accredited by NCA for graduate program.

It was evident that men were generally more concerned with this problem than women. Differences were found to be significant at the five per cent level in small and large, private and public, and undergraduate approved institutions (Appendix G).

Results of stages two (Appendix H) and three of the investigation helped to confirm that there is a sex difference associated with the level of concern for this problem. In four of the eight matched-groupings at stage two the differences were found to be significant at the five per cent level. Totals for all eight groupings, as shown in Table 5.2, yielded a significant difference at the one per cent level.

Table 5.2.--Results of Tests of Significance Related to Personal Characteristics of Respondents for Finding Suitable Living Quarters.

Characteristics	Total Score	Number of Cases	Mean	Variance	Significance
Sex:					
Male	390	345	1.130	1.375	M>F At .01
Female	81	151	.536	.944	
Experience:					
No College	385	374	1.029	1.332	Not significant
College	242	221	1.095	1.505	

The first stage of investigation indicated that the experience factor might be significant, since those with previous college experience generally rated the housing problem as more of a problem than those who had not had college experience. In private and small colleges these differences were found to be significant at the five per cent level (Appendix G). However, this difference did not hold up through stage three of the investigation as shown in Table 5.2.

At no stage of the study was there evidence that the age of or the degree held by new faculty members was a significant factor in the intensity of concern over this problem.

Institutional Factors. There was evidence in the first stage of investigation that there might be significant differences in the difficulty of the housing problem to those in privately and publicly controlled institutions and to those serving in small and large institutions. Those in public and large institutions generally reported a higher level of concern with this problem than those in private and small institutions (Appendix I).

In the first stage of studying the control factor, it was found that there were significant differences in responses on the housing question at the one per cent level in three of the eight groupings by personal characteristics, and at the five per cent level in three. These differences held up through the three stages of the study as evidenced for stage two in Appendix J and for stage three in Table 5.3.

Differences in the degree of difficulty with the housing problem between those in small and large institutions did not hold up through stage three. Those in large institutions did report greater difficulty, but the differences were not significant (Appendix J and Table 5.3).

Table 5.3.--Results of Tests of Significance Associated with Institutional Factors for Finding Suitable Living Quarters.

Factor	Total Score	Number of Cases	Mean	Variance	Significance
Control:					
Private	131	157	.834	1.216	Pu>Pr At .01
Public	224	184	1.212	1.395	
Size:					
Small	238	248	.960	1.310	Not significant
Large	196	189	1.037	1.302	

Knowing What Other Departments of the College
Expect of My Department

Personal Characteristics. Throughout the three stages of investigation concerning possible significant differences in the difficulty of communications between departments as related to personal characteristics of respondents, there was only one indication that such might be the case. This was found at stage two of the investigation. In one of eleven matched-groupings those with some college experience indicated they had significantly more difficulty with this problem (at the five per cent level) than did those who had not had previous college experience (Appendices K and L). As shown in Table 5.4 this difference did not hold up through stage three. The means for the total of the matched-groupings indicated that those without college experience generally reported more difficulty with this problem than those with experience, but the difference did not prove to be significant.

At no stage of the investigation was there an indication that significant differences in this problem could be related to age, degree held, or sex of the respondents.

Table 5.4. --Results of Tests of Significance Related to Personal Characteristics of Respondents for Knowing What Other Departments of the College Expect of My Department.

Characteristics	Total Score	Number of Cases	Mean	Variance	Significance
Experience:					
No College	280	368	.761	.967	Not significant
College	148	208	.712	.992	

Institutional Factors. Size was the only institutional factor for which there was found to be a significant difference concerning the problem of communication between departments. The difference was found to be

significant at the five per cent level (Table 5.5), those in large institutions reporting more difficulty with this problem than those in small institutions. (See Appendices M and N for results of stages one and two.)

Table 5.5.--Results of Tests of Significance Associated with Institutional Factors for Knowing What Other Departments of the College Expect of My Department.

Factor	Total Score	Number of Cases	Mean	Variance	Significance
Size:					
Small	145	242	.599	.806	L>S
Large	149	190	.784	.998	At .05

Although those in privately controlled institutions and those in undergraduate approved institutions reported more difficulty with this problem than those in publicly controlled and graduate approved institutions, respectively, differences were not found to be significant.

Acquiring Adequate Office Space

Personal Characteristics. Although at stage three there was found to be no significant difference in the degree of difficulty with this problem as reported by men and women (Table 5.6), men tended to view the acquiring of adequate office space as somewhat more of a problem than women. This was also evident at stage one, seven of the eight groupings at this stage yielding a higher mean of difficulty for men than for women. At stage one there was evidence of a significant difference at the five per cent level in the concern about this problem between males and females in the undergraduate institutions (Appendix O). At stage two significant differences at the five per cent level were found in two of the eight matched-groupings (Appendix P).

Table 5.6. -- Results of Tests of Significance Related to Personal Characteristics of Respondents for Acquiring Adequate Office Space.

Characteristics	Total Score	Number of Cases	Mean	Variance	Significance
Sex:					
Male	264	341	.774	1.333	Not significant
Female	102	151	.675	1.130	
Degree:					
Non-doctorate	227	257	.883	1.339	Not significant
Doctorate	92	133	.692	1.231	

At stage one it also appeared that non-doctorates in graduate approved institutions experienced less difficulty with this problem than did those with doctorates. The difference was found to be significant at the five per cent level. Even though the mean difficulty for non-doctorates exceeded that for doctorates at stage three, the differences did not prove to be significant (Table 5.6).

No significant differences associated with age or experience were evident at any stage of the investigation of this problem.

Institutional Factors. At the stage one level of investigation it appeared that there might be significant differences in the difficulty with which new faculty members in various types of institutions regarded the office space problem. At this stage, significant differences at the five per cent level were found in at least one case out of the eight tested for the factors of size, control, and level of approval (Appendix Q). At stage two there was only one matched-grouping out of eleven under level of approval yielding a significant difference (Appendix R). No differences related to institutional factors were significant at the third stage (Table 5.6). The means of the difficulty ratings given this problem by those in large and undergraduate institutions were found to exceed those of small

and graduate approved institutions, even though differences were not significant at the five per cent level.

Table 5.7. -- Results of Tests of Significance Associated with Institutional Factors for Acquiring Adequate Office Space.

Factor	Total Score	Number of Cases	Mean	Variance	Significance
Control:					
Private	122	157	.777	1.303	Not significant
Public	145	183	.792	1.407	
Size:					
Small	170	244	.697	1.101	Not significant
Large	158	192	.823	1.424	
Level:					
Undergraduate	209	242	.864	1.521	Not significant
Graduate	101	155	.652	1.086	

Acquiring Adequate Secretarial Help

Personal Characteristics. At the first stage of investigation there was evidence that there was a significant difference in how men and women viewed the difficulty of the problem of acquiring adequate secretarial help. Men in small and large, private and public, undergraduate and graduate institutions indicated a higher level of difficulty with this problem than women. This difference was found to be significant at least at the five per cent level in each case except in the institutions approved for graduate study (Appendix S).

Sex differences in the difficulty of this problem held up through stage two in two of the eight matched-groupings (Appendix T) and stage three of the study (Table 5.8).

Table 5.8. -- Results of Tests of Significance Related to Personal Characteristics of Respondents for Acquiring Adequate Secretarial Help.

Characteristics	Total Score	Number of Cases	Mean	Variance	Significance
Sex:					
Male	345	340	1.015	1.342	M>F
Female	103	146	.706	1.051	At .01
Age:					
Young	329	348	.945	1.343	Not
Old	246	224	1.054	1.284	significant
Degree:					
Non-Doctorate	268	258	1.039	1.438	Not
Doctorate	150	126	1.190	1.307	significant

Even though there was one of the eleven matched-groupings in the second stage of the study relative to secretarial help problem where there was indication of a significant difference at the five per cent level related to sex, the older faculty members rating the difficulty greater than the younger, this difference did not hold up through stage three (Table 5.8). It is evident, therefore, that the level of concern of new faculty members for the acquiring of adequate secretarial help is not significantly tied to the age factor.

At stage one of the investigation there appeared to be evidence that those with doctorates looked at this problem of acquiring adequate secretarial help as a significantly more difficult problem than did those without doctorates. In small and large, private and public, undergraduate and graduate approved institutions the mean degree of difficulty for those with doctorates exceeded that for non-doctorates. In three instances the differences were found to be significant at the five per cent level (Appendix S). These differences did not hold up through stages two (Appendix T) or three of the study.

At no stage was there evidence that previous college experience was a factor in the degree of difficulty of acquiring secretarial help.

Institutional Factors. There was evidence in the first two stages of the study that those in public institutions view the acquiring of adequate secretarial help as a more critical problem than do those in private institutions (Appendices U and V). While these differences were found to be significant in seven of the eight groupings at stage one and at the five per cent level in one of the matched-groupings at stage two, these differences did not hold up through stage three (Table 5.9).

Table 5.9.--Results of Tests of Significance Associated with Institutional Factors for Acquiring Adequate Secretarial Help.

Factor	Total Score	Number of Cases	Mean	Variance	Significance
Control:					
Private	141	155	.910	1.252	Not significant
Public	187	177	1.056	1.395	
Size:					
Small	237	246	.963	1.317	Not significant
Large	193	187	1.032	1.239	

Throughout the three stages of the study those in large institutions indicated more difficulty with this problem than those in small institutions; the differences were not found to be significant (Table 5.9).

Understanding College Policies Regarding Promotion
and Salary Increases

Personal Characteristics. At each stage of the study it was evident that men generally rated the understanding of college policies regarding promotion and salary increases as more of a problem than women.

However, at stage one there was one exception to this--in institutions approved for graduate level study women rated this problem as slightly more difficult than men (Appendix W). In two of the eight matched-groupings at stage two men rated this problem as significantly more difficult at the five per cent level than did women (Appendix X), but these differences did not hold up for totals (Table 5.10).

Table 5.10. --Results of Tests of Significance Related to Personal Characteristics of Respondents for Understanding College Policies Regarding Promotion and Salary Increases.

Characteristics	Total Score	Number of Cases	Mean	Variance	Significance
Sex:					
Male	310	344	.901	1.180	Not significant
Female	110	145	.759	1.073	
Age:					
Young	343	354	.969	1.186	Not significant
Old	183	225	.813	1.126	

There was some evidence that the young new faculty member is more apt to manifest greater concern for understanding promotion and salary policies of the institution than the older new members of the faculty at both stage one and stage two (Appendices W and X). However, the difference was found to be not significant at stage three.

There was no evidence that either degree held or previous college experience entered into the judgment of new faculty members concerning the difficulty of this problem.

Institutional Factors. All institutional variables--nature of control, size, and level of approval by NCA--were tested for significance at the third stage, since there had been some indication at stages one or two (Appendices Y and Z) that each of these might prove to be significant in

the rating of the difficulty of the problem regarding the understanding of college policies of promotion and salaries.

Those in public and undergraduate approved institutions reported more difficulty with this problem than those in private and graduate approved institutions. Both differences were found to be significant at the five per cent level at the third stage (Table 5.11).

Table 5.11. --Results of Tests of Significance Associated with Institutional Factors For Understanding College Policies Regarding Promotions and Salary Increases.

Factor	Total Score	Number of Cases	Mean	Variance	Significance
Control:					
Private	126	156	.808	1.047	Pu>Pr At .05
Public	192	182	1.066	1.358	
Size:					
Small	205	248	.827	1.164	Not significant
Large	183	190	.963	1.152	
Level:					
Undergraduate	247	240	1.029	1.234	U>G At .05
Graduate	119	156	.763	1.111	

While those in large institutions tended to report more difficulty with the problem of understanding policies regarding promotions and salaries than did those in small institutions, the difference was not significant.

Lack of Teaching Aids

Personal Characteristics. Men evidenced a higher level of concern than women over the lack of teaching aids. At stages one and two there was some indication that this difference might be significant (Appendices

AA and BB), but this difference did not hold through stage three and therefore the significance was rejected (Table 5.12).

Table 5.12.--Results of Tests of Significance Related to Personal Characteristics of Respondents for Lack of Teaching Aids.

Characteristics	Total Score	Number of Cases	Mean	Variance	Significance
Sex:					
Male	297	338	.879	1.080	Not significant
Female	109	148	.736	.995	
Age:					
Young	334	346	.965	1.160	Y>O At .05
Old	179	227	.789	.964	

Young new faculty members reported more difficulty with this problem than did the older members, the difference being significant at the five per cent level. This difference was evident at stages two and three (Appendix BB; Table 5.12). At stage one older faculty members in graduate institutions indicated greater difficulty with this problem than did the younger members. Degrees held or previous college experience did not appear to be significant factors in the difficulty ratings assigned by new faculty members to the lack of teaching aids.

Institutional Factors. Only one of the institutional factors--level of approval by NCA--appeared as a possible significant factor in how new faculty members viewed the difficulty of the lack of teaching aids. Those in institutions approved for undergraduate study rated this as more of a problem than those in graduate approved institutions; differences were found to be significant for two of the matched-groupings tested in stage one (Appendix CC). At stage three differences were not significant (Table 5.13).

Table 5.13.--Results of Tests of Significance Associated with Institutional Factors for Lack of Teaching Aids.

Factor	Total Score	Number of Cases	Mean	Variance	Significance
Level:					
Undergraduate	215	237	.907	1.127	Not significant
Graduate	113	156	.724	.909	

Developing Effective Lectures

Personal Characteristics. Two personal factors, experience and age, evidently make considerable differences in how much difficulty new faculty members have with this problem. The younger faculty member and those with no previous college teaching experience report a higher degree of difficulty with this problem than do the older, experienced members. The difference related to the experience factor was found significant at the one per cent level; the age factor, at the five per cent level at stage three (Table 5.14).

Table 5.14.--Results of Tests of Significance Related to Personal Characteristics of Respondents for Developing Effective Lectures.

Characteristics	Total Score	Number of Cases	Mean	Variance	Significance
Age:					
Young	272	351	.775	.701	Y>O At .05
Old	145	226	.642	.693	
Degree:					
Non-Doctorate	194	260	.746	.756	Not significant
Doctorate	88	133	.662	.726	
Experience:					
No College	288	367	.785	.732	NC>C At .01
College	108	215	.502	.606	

Those not having doctorates reported more difficulty with this problem than those with doctorates (Table 5.14). At stage one there was some evidence that the amount of education might be a significant factor, since three of the six groups tested were significant at the five per cent level (Appendix EE). However, at stage three the difference was not found to be significant.

At no stage of this investigation was sex evident as a significant factor regarding the degree of difficulty of the problem of developing effective lectures (Appendices EE and FF).

Institutional Factors. At stage one there was found to be a higher degree of difficulty in developing effective lectures reported by those in private institutions than by those in public institutions. Among males and doctorate faculty members these differences were significant at the five per cent level; among those with no previous college experience, at the one per cent level (Appendix GG). At stage three, this difference was not significant (Table 5.15) even though the mean difficulty rating on this problem remained higher for those in private institutions than for those in public institutions.

Table 5.15.--Results of Tests of Significance Associated with Institutional Factors for Developing Effective Lectures.

Factor	Total Score	Number of Cases	Mean	Variance	Significance
Control:					
Private	110	158	.696	.684	Not significant
Public	121	182	.665	.655	
Level:					
Undergraduate	150	240	.625	.643	Not significant
Graduate	97	155	.626	.721	

Neither size of institution nor level of approval by NCA proved to be significant factors in how faculty members serving in those institutions responded to the degree of difficulty they encountered with developing effective lectures. The level factor was tested at the third stage since one of the nine matched-groupings at stage two indicated the possibility of a significant difference (Appendix HH).

Using Effective Discussion Techniques

Personal Characteristics. At the first stage of investigation it appeared that both age and experience might be factors in the intensity with which new faculty members view the difficulty of using effective discussion techniques. The young faculty members and those with no previous college experience tended to rate the difficulty of this problem higher than those who were older and had had previous college teaching experience. There were significant differences at the one per cent level in the difficulty ratings given by the young and older faculty members in large, publicly controlled, and graduate institutions; at the five per cent level, in small, private, and undergraduate institutions. There was a significant difference at the five per cent level between the degree of difficulty with this instructional problem as reported by those who had had no college experience and those who had had experience in privately controlled institutions; at the one per cent level between these two groups in graduate approved institutions (Appendix II). There was also evidence that those with no college experience viewed this as a more difficult problem than those with experience in one of the eleven matched-groupings tested (Appendix JJ).

As presented in Table 5.16, the age characteristic did not prove to be significant at stage three, but the experience factor did.

Table 5.16.--Results of Tests of Significance Related to Personal Characteristics of Respondents for Using Effective Discussion Techniques.

Characteristics	Total Score	Number of Cases	Mean	Variance	Significance
Age:					
Young	260	345	.754	.779	Not significant
Old	148	225	.658	.771	
Experience:					
No College	273	366	.746	.826	NC>C At .05
College	119	211	.564	.695	

Institutional Factors. Both control and level factors were tested at the third stage since there was some evidence at the first stage of investigation that each of these might be significant variables in the difficulty of using effective discussion techniques as reported by new faculty members. Those in private institutions generally reported more difficulty with this problem than did those in public institutions. At stage one these differences were found to be significant at the one per cent level for those with no previous college experience; at the five per cent level for males and those without doctorates (Appendix KK). Differences did not prove to be significant at the third stage for either the control or level of approval factors (Table 5.17).

Table 5.17.--Results of Tests of Significance Associated with Institutional Factors for Using Effective Discussion Techniques.

Factor	Total Score	Number of Cases	Mean	Variance	Significance
Control:					
Private	116	157	.739	.797	Not significant
Public	118	177	.667	.780	
Level:					
Undergraduate	143	235	.609	.684	Not significant
Graduate	98	154	.636	.769	

Summary

In Chapter I it was hypothesized that there are no significant differences in the critical problems perceived by new faculty members related to (1) personal characteristics such as sex, age, level of preparation, or previous professional experience and (2) institutional factors such as size, nature of control, or level of instruction for which institutions are accredited by NCA. From the information presented here these two hypotheses can not be accepted.

A summary of the findings regarding each of the personal and institutional factors as related to the critical problems follows.

Level of preparation was the only personal characteristic in this study which was not related to the level of concern of new faculty members for the critical problems they identified. For the eight critical problems examined in this study, new faculty with doctorates and those not possessing doctorates viewed these problems with similar intensity.

Age proved to be a significant factor in the intensity of concern by new faculty members for two of the critical problems. The young indicated a greater concern than the older faculty members for two of the three instructional problems, Lack of teaching aids and Developing effective lectures.

Sex was found to be a significant factor in the intensity of concern by new faculty members for the only personal problem identified as being critical, Finding suitable living quarters, and for one of the four institutional problems, Acquiring adequate secretarial help. In both of these, men reported a higher degree of intensity than women. Differences were significant at the one per cent level. In the final analysis there was no evidence of sex differences in the intensity of concern for the three instructional problems.

Experience proved to be a significant factor in the level of concern of new faculty members for two of the three instructional problems, but not for any of the critical personal or institutional problems. Those without previous college experience reported that Developing effective lectures and Using effective discussion techniques gave them more difficulty than was reported by those with college experience.

The institutional factor of size was found to be a significant factor in the level of concern by new faculty members for only one of the four instructional problems, Knowing what other departments expect of my department. Those in large institutions reported this as more of a problem than those in small institutions. Size was not found to be a significant factor in the identification of critical problems of a personal or instructional nature.

Nature of control was found to be a significant factor in the intensity of concern by new faculty members for two of the critical problems, the personal problem of housing and the institutional problem regarding the understanding of college promotion and salary policies. Those in public institutions reported greater difficulty with these problems than did those in private institutions. The difference was significant at the one per cent level on the housing problem. Differences in the intensity of the critical problems of an instructional nature as related to the nature of control of the institutions was not apparent.

Level of approval by NCA was found to be a significant factor in the level of concern by new faculty members for only one of the critical problems. Those serving in undergraduate approved institutions reported a higher level of concern for the problem regarding the understanding of college promotion and salary policies than did those serving in the graduate approved institutions.

A summary of the findings regarding each of the critical problems as related to the personal and institutional variables of the study follows.

Finding suitable living quarters. Men and those serving in public institutions indicated a higher level of concern for this problem than did women and those serving in private institutions. Differences were significant at the one per cent level. No other personal or institutional factors were found to be significant.

Knowing what other departments expect of my department. No personal factor was found to be significant. One institutional factor was found to be significant, those in large institutions viewing this as more of a problem than those in small institutions.

Acquiring adequate office space. No personal or institutional factors were found to be significant.

Acquiring adequate secretarial help. Men reported a considerably higher level of concern for this problem than did women. The difference was significant at the one per cent level. No other personal or institutional factor proved significant.

Understanding college policies regarding promotions and salary increases. Two of the factors tested proved to be significant. Those serving in public and undergraduate approved institutions reported higher levels of difficulty with this problem than did those serving in private and graduate approved institutions.

Lack of teaching aids. Only the age variable proved significant, the young identifying this as a problem of more intensity than the older faculty members.

Developing effective lectures. The young and the faculty members with no previous college teaching experience reported a higher level of concern for this problem than did the older and college experienced faculty members. There was a significant difference at the one per cent level in the degree of difficulty related to the experience factor.

Using effective discussion techniques. The new faculty members with no previous college teaching experience reported a higher degree of difficulty with this problem than did those with college teaching experience.

The three critical problems of an instructional nature have been summarized immediately above. It will be noted that only two of the seven personal and institutional factors tested, age and sex, proved to be significant. Not one of the institutional factors tested was found to be significant.

CHAPTER VI

SUMMARY AND CONCLUSIONS

In this chapter the findings of the study are summarized, general conclusions drawn, and suggestions made for further study.

Summary

The Problem. This study had as its problem the identification and analysis of critical problems as perceived by new faculty members in North Central Association colleges and universities of less than 3,000 enrollment and the identification of faculty-determined helpfulness of administrative procedures in assisting them to resolve their problems.

Method of Collecting Data. A four-page questionnaire was the primary method used in collecting data for the study. In this questionnaire were listed fifty problems found by preliminary examination most likely to be among the critical problems which new faculty members would identify. Participants in the study were asked to check the intensity and persistence of each of these problems and to add others. Problems were listed under three headings: personal, institutional, and instructional.

A second section of the questionnaire asked participants to evaluate the effectiveness of twenty-five administrative practices which might be used in helping them resolve their problems, and to indicate if they were in use in the institutions in which they were serving.

Questionnaires were mailed to 1771 first- and third-year faculty members in 144 stratified randomly selected NCA institutions near the close of the 1959-60 college year. Follow-up questionnaires brought a total response of 66 per cent.

Hypotheses, Methods Used for Testing, and Findings. Following are the hypotheses as set forth in Chapter I, a summary of the methods used to investigate each as outlined in Chapter II, and the findings:

Hypothesis 1. There are certain problems which new faculty members perceive as being more critical than other problems. (Sub-Hypothesis: Some problems of a personal nature, some of an institutional nature, and some of an instructional nature are included in the problems perceived as being most critical.)

Method: A weighted scale technique was used for determining the critical problems. Problems "great" in difficulty were valued at three; "moderate" in difficulty as two; "slight" in difficulty as one; designated as "never a problem" as zero. Problems with the highest mean difficulty rating were declared the critical problems.

Findings: One personal problem, four institutional problems, and three instructional problems were found to be most critical. The personal problem was Finding suitable living quarters, ranking second in difficulty. Institutional problems were: Acquiring adequate secretarial help, ranking first in difficulty; Understanding college policies regarding promotions and salary increases, ranking third; Acquiring adequate office space, ranking fifth; and Knowing what other departments expect of my department, ranking sixth. Instructional problems were: Lack of teaching aids, ranking fourth; Using effective discussion techniques in class, ranking seventh; and Developing effective lectures, ranking eighth.

Findings warrant the acceptance of the hypothesis.

Hypothesis 2. New faculty members who have served three years in NCA institutions view their problems of a personal, institutional, and instructional nature as persisting to a much less degree than do those who have served just one year in these same institutions.

Method: Percentages of persistence of each of the fifty problems were determined for all first- and third-year faculty members who had declared they had experienced some difficulty with these problems since being employed at the present NCA institution. Percentages of persistence were also determined for all personal, institutional, and instructional problems of first- and third-year faculty members. Comparisons were made between these persistence percentages.

Findings: Responses from all participants in the study indicated that one personal problem, six institutional problems, and three instructional problems with which they had experienced some difficulty were still persisting at a high level, 80 per cent or more. Problems of a personal nature were reported as persisting by 64.7 per cent of the first-year faculty members who had experienced some difficulty with them and by 58.9 per cent of the third-year faculty members. Differences in persistence of problems of an institutional nature and of an instructional nature between first- and third-year faculty members was even less than that found for personal problems. Persistence of problems of an institutional nature dropped from 69.3 to 65.8 per cent; the persistence of instructional problems remained at about the same level, 71.4 as compared to 71.2 per cent.

Findings warrant the rejection of this hypothesis.

Hypothesis 3. There are no significant differences in the degree of difficulty of the critical problems perceived by new faculty members regardless of such personal factors as sex, age, level of preparation, or previous professional experience.

Method: Each critical problem was tested for differences in responses related to each of the four personal factors by a three-stage process. The t test for significance was applied in each stage.

Findings: Level of preparation, possession or non-possession of a doctorate, was the only personal characteristic of the four investigated that did not appear to have some bearing on the degree of difficulty new faculty members experienced with the critical problems they faced. Age appeared to be a significant factor in the degree of difficulty of two of the critical problems; sex, two; and experience, one.

Findings warrant the rejection of this hypothesis.

Hypothesis 4. There are no significant differences in the degree of difficulty of the critical problems perceived by new faculty members regardless of such institutional factors as size, nature of control, or level of instruction for which institutions are accredited by NCA.

Method: Each critical problem was tested for differences in responses related to each of the three institutional factors by a three-stage process. The t test for significance was applied in each stage.

Findings: All institutional factors tested appeared to be significant factors in the difficulty experienced by new faculty members in at least one critical problem out of the eight; control appeared to be significant in two.

Findings warrant the rejection of this hypothesis.

Conclusions

Some of the specific conclusions reached as a result of this study have already been stated in the closing parts of chapters in which data were presented and summarized. General conclusions which seem apparent from this study are listed below:

1. Some personal, institutional, and instructional problems which have faced new faculty members in NCA colleges and universities of less than 3,000 enrollment remain as problems to them after three years of service.

2. In the opinion of new faculty members in NCA colleges and universities a higher per cent of their problems of a personal nature and those associated with the institutions in which they are serving are being solved to their satisfaction than are those problems of an instructional nature, although no instructional problem is found among the top three problems identified as most critical.

3. The orientation and in-service programs of NCA colleges and universities are failing to come to grips with instructional problems as perceived by new faculty members.

4. The characteristics of NCA new faculty members used as variables in this study do not seem to be much different than the characteristics of new faculty members being employed in similar institutions throughout the country and therefore the findings here might have implications for more than NCA institutions. Such, however, could not be tested since exact comparable data regarding the characteristics of new faculty members being employed in similar institutions throughout the United States is not available. Further research would be necessary to prove this hypothesis.

5. Not only do the orientation and in-service techniques used by administrators in NCA colleges and universities as evaluated by new faculty members vary in quantity but also in degree of helpfulness in resolving problems of new faculty. This was evident from the wide range of degree of helpfulness ratings given the twenty-five administrative procedures used in the questionnaire (Appendix F).

6. The high response from the questionnaire, requests which have come to the author for copies of the questionnaire and results of the

study by administrators and faculty members give evidence that there is a high degree of interest in the improvement of orientation and in-service programs among NCA institutions through discovery of faculty determined critical problems.

7. The statistical summary of the relationships between the critical problems identified by new faculty members and variables used in this study was given in Chapter V. From the data compiled in this part of the study the author draws the following general conclusions:

a. Each of the personal characteristics, except level of preparation, and all of the institutional factors used as variables has some bearing upon the degree of difficulty of critical problems as identified by new faculty members. Since there is no one of these institutional or personal variables where a significant difference in the degree of difficulty is evident for each of the critical problems, general predictions can not be made concerning the relationship which might be expected between the institutional and personal factors and the degree of difficulty of identified critical problems.

b. Men members of the faculty have a tendency to report a significantly higher degree of difficulty with the problems of housing and acquiring adequate secretarial assistance than do women, but there appears to be no sex difference in the identification of critical problems of an instructional nature.

c. Young members of the faculty have more difficulty with problems of an instructional nature than do the older members who join NCA faculties. In two of the three critical instructional problems in this study--Developing effective lectures and Lack of teaching aids--these differences were found to be significant at the five per cent level.

d. New faculty members who have had no previous college experience have more difficulty with instructional problems identified by all new faculty members as being critical than do those who have had

previous college experience. Differences were found to be significant in two of the three critical problems tested--Developing effective lectures, at the one per cent level, and Using effective discussion techniques, at the five per cent level. Experience does not appear to be a significant factor in the degree of difficulty of other than instructional problems.

e. Those new faculty members serving in colleges and universities with enrollments of 1,000 to 3,000 are more apt to recognize the difficulty they experience in solving their critical personal and institutional problems than are those serving in smaller institutions. However, in this study there was found to be a significant difference at the five per cent level related to size of institution for only one problem, that of Knowing what other departments expect of my department.

f. Those serving in public institutions are more apt to have a greater degree of difficulty than those in private institutions with the problems of housing and understanding college policies regarding promotion and salary increases. Those in private institutions tend to report more difficulty with instructional problems than those in public institutions, but no significant differences were evident.

g. New faculty members serving in institutions approved for graduate study and those serving in institutions approved for only undergraduate programs by NCA apparently do not view critical problems of a personal or instructional nature significantly different in difficulty. However, those in undergraduate institutions evidence a higher degree of difficulty in Understanding college policies regarding promotions and salary increases than do those in graduate approved institutions. The difference was found to be significant at the five per cent level.

8. It became evident as the study progressed from one stage of investigation of the critical problems to the next that conclusions in studies of this kind having the same raw data could differ widely depending upon the method of analysis chosen. If the investigator had stopped

at stage one, the conclusions relative to the relationship between the intensity of the critical problems and the personal and institutional characteristics of the respondents would have been considerably different than they were.

In Table 6.1 will be found a summary of the results of the investigation of the degree of difficulty of the critical problems at the initial and final stages of investigation. It will be noted that there were five areas having differences significant in at least one-half the groups tested at stage one which were not significant at stage three. In three areas significant differences were found at stage three that were not evident at stage one.

Suggestions for Further Study

As this study progressed it became apparent that there were additional studies which might be made to shed further light upon the problems of new faculty members in institutions of higher education in the United States so that in-service and orientation programs might be made more effective. Following are listed some of those suggestions:

1. Data collected for this study might be analyzed further to determine (a) if the degree of difficulty on critical problems identified by new faculty members are significantly related to the turn-over of faculty members in these institutions; (b) if there are certain types of institutions which by faculty evaluation seem to be using better administrative techniques of aiding new faculty members to meet their problems than other types of institutions; (c) if the critical problems perceived by those who aspire to positions other than the ones they are now holding are different from the critical problems perceived by those who do not aspire to other types of positions; (d) if the critical problems identified by either males or females are related to their marital status.

Table 6.1.--Comparison of Areas in Which Significant Differences in Degree of Difficulty for Each Critical Problem Were Found in Stages One and Three.

Critical Problems	Personal Characteristics				Institutional Factors		
	Age	Degree	Sex	Experience	Size	Control	Level
Finding suitable living quarters			X*			X	
Knowing what other departments expect of my department					Z		
Acquiring adequate office space							
Acquiring adequate secretarial help		Y	X			Y	
Understanding college policies regarding promotions and salary increases	Y					X	Z
Lack of teaching aids	Z						
Developing effective lectures	X	Y		X			
Using effective discussion techniques	Y			X			

* Explanation of symbols: X indicates direction of significant difference evident at both stage one and three; Y indicates significant difference evident at stage one in at least half of the groups tested, not at stage three; Z indicates direction of significant difference evident at stage three, not at stage one.

2. Since critical problems of new faculty members were determined by a weighted scale technique and analyzed through use of a central tendency there no doubt are certain problems which new faculty members have an inclination to rate at the extremes of the difficulty scale as "no problem" or "great" in magnitude that are not revealed as critical by this analysis. Such could be undertaken with the data on hand by studying only the extremes in responses instead of using a weighted scale technique.

3. Administrators of the same institutions as used in this study might be surveyed as to their ratings of the effectiveness of administrative procedures they have used in aiding faculty adjustment.

4. A follow-up study of those who have left institutions at their own or the administration's initiative might be conducted to determine the relation between the critical problems identified by these two groups and those who have remained in these institutions for at least three years.

5. Since this study involved only opinions of faculty members from institutions of less than 3,000 enrollment, a study could be made of the opinions of new faculty members in similar NCA institutions of more than 3,000 concerning their problems and their evaluation of administrative procedures used in assisting them to resolve their problems.

6. Since this study involved only faculty members in colleges and universities having at least four-year programs, a similar study might be made of problems of faculty members at the Junior College level.

7. Studies similar to this study might be conducted outside the NCA area to determine if regions of the United States make a difference in problems perceived by new faculty members to be most critical.

8. Since the methodology in this study involved the identification of critical problems of new faculty members by those who would admit to experiencing these problems, a more impersonal approach might be made by asking them to identify the presence and degree of difficulty of problems which other new faculty members experience.

9. Since the conclusions drawn in this study relative to the degree of difficulty of the critical problems as related to the personal and institutional characteristics of the respondents were based upon a system of combining matched-groupings, it is suggested that the same procedure might be used in any comparative study to be done in the future. As evidenced in this chapter, other methods of analysis might yield quite different results.

CHAPTER VII

IMPLICATIONS FOR ADMINISTRATIVE PRACTICES

This study has been particularly concerned with the identification of the critical problems of new faculty members in NCA institutions of less than 3,000 enrollment and the evaluation of techniques used by administrators in assisting staff members to resolve their problems. If the conclusions drawn in the preceding chapter are valid, the results of this study should have implications for all administrators in colleges similar to those used in this study who have anything to do with the planning for or the execution of any orientation or in-service programs for new faculty members.

Even though institutional factors used as variables in this study help to indicate to the administrator the problems of greatest difficulty he might expect new faculty members in his institution to have, each institution has some unique features which can not be accounted for in a study of this nature. Administrators should make an attempt to discover the problems of adjustment that are causing new faculty members in their particular institution the most concern, since there may be critical problems in their institution which are not reflected as such by this or any similar study.

Any administrator must realize that the study of individual problems of faculty members is essential if the best possible in-service program is to be made available to the new faculty members on his staff. Even though this study shows some major problems with which the administrator needs to be concerned, the success or failure of any

orientation and in-service program will be determined by any new faculty member in light of the assistance such program gives him in solving his problems.

Administrators need to be concerned about the problems of providing adequate secretarial help and adequate office space for their new faculty members. These were indicated among the top eight most critical problems by those in this study. They may be there because the new faculty members see the differences between the secretarial assistance and office space allotted to them and that which has been allotted to older members of the faculty; they may see these as status symbols and for this reason view them as problems. Nevertheless, to the new faculty members these are real problems. Administrators need to take a close look at the situation in their institutions to know if they too evaluate these as real problems. If such is the case, administrative plans should be made for more adequate office space and additional secretarial help for their new faculty members.

This study not only has implications for the administrator who is planning the orientation and in-service program of new faculty members but also for anyone who is assisting the prospective college teacher to take a look at the profession as it is and to plan his pre-service education so that the critical problems will be minimized for him.

Implications for improvement of orientation and in-service programs based upon findings of this study include the following:

1. New faculty members should not be assigned immediately to faculty committees. They should be given time to become acquainted with the institution and its policies through other means.

2. Administrators should plan for introduction of new faculty members to other faculty members soon after arrival on campus, followed by regularly scheduled faculty meetings and an open door administrative policy if, in the eyes of new faculty members, they are

to have the most effective means of helping new faculty members resolve their problems.

3. Administrators might pay more attention to the housing of new faculty members. Men, in particular, find this to be a pressing personal problem as they begin their duties in NCA colleges and universities. Institutional housing or a housing service in cooperation with community real estate dealers are possible solutions.

4. The orientation and in-service programs designed to assist the young new faculty members to resolve their instructional problems probably should be more intense than those for older faculty members, since this study reveals a higher level of difficulty with critical problems of instruction as reported by the young faculty members. Since the younger faculty members realize their instructional weaknesses, they should benefit greatly from any assistance given them. Instructional deans might well assume the major responsibility for this assistance in small institutions; division or department heads, in large institutions. Regular opportunity for young new faculty members to meet with those assisting them to improve their teaching methods should be a part of the administrative plan of every institution. In addition to discussing any special problems of instruction or evaluation of instruction which they face, the group might read and discuss such books as Gilbert Highet's The Art of Teaching.

5. Orientation and in-service programs for new faculty members who have had no previous college experience should be geared to assisting them to develop effective lectures and to use effective discussion techniques, since it is in these areas where the inexperienced college teacher indicates a high degree of difficulty. Deans or others in charge of improving instruction should not overlook the possibilities of assistance to these inexperienced college teachers through such techniques as seminars on college teaching and classroom visitations. Although visits to classes was not given a high use or helpfulness rating by those

in this study, the writer believes that such assistance to the inexperienced college teacher by an understanding supervisor would help him gain confidence in meeting his instructional problems.

6. Administrators in large institutions should make a real effort to see that communication between departments is improved. New faculty members in institutions over 1,000 enrollment in this study feel that they do not know what other departments of the college or university expect of the department in which they are serving. This might be accomplished through a sharing of the curriculum plans at faculty meetings; through special faculty bulletins in which each department presents what it believes its curricular responsibilities to be; through department heads giving to new faculty members in their departments at the pre-school conference and throughout the year what they believe other departments of the college or university expect from their department.

7. Since this study reveals a relatively high difficulty level by new faculty members serving in public institutions concerning faculty housing and understanding college policies regarding promotions and salary increases, administrators in these institutions might see what could and should be done locally to assist in resolving these problems.

8. Administrators in public NCA undergraduate approved institutions might find it advisable to strengthen their attempt to promote an understanding of college policies regarding promotions and salary increases since this was not only recognized as a critical problem by all those in this study but was found to be more of a problem to those in public and undergraduate approved institutions than to those in private institutions and those accredited for graduate study. Some of this lack of understanding regarding this policy may stem from a failure on the part of the administration to have a systematized method for assessing the quality of teaching being done, rather than a matter of communication. If this is the case, a more systematized method of evaluation should be developed.

BIBLIOGRAPHY

BOOKS

- Barzun, Jacques. Teacher in America. Boston: Oxford, Brown and Co., 1945.
- Bixler, Harold H. Check List for Educational Research. New York: Bureau of Publications, Teachers College, Columbia University, 1928.
- Blegen, Theodore C., and Cooper, Russel M. (eds.). The Preparation of College Teachers. American Council of Education Studies, Series I, Vol. XIV. Washington, D.C.: American Council on Education, 1950.
- Buxton, Claude E. College Teaching, A Psychologist's View. New York: Harcourt, Brace, and Company, 1956.
- Byram, Harold M. Some Problems in the Provision of Professional Education for College Teachers. Teachers College Contribution to Education No. 576. New York: Bureau of Publications, Columbia University, 1933.
- Cooper, Russell M., and Others. Better Colleges--Better Teachers. New York: The Macmillan Company, 1944.
- Cronkhite, Bernice Brown (ed.). A Handbook for College Teachers. Cambridge, Massachusetts: Harvard University Press, 1950.
- Daniel, R. S., and Louttit, C. M. Professional Problems in Psychology. New York: Prentice Hall, Inc., 1953.
- Diekhoff, John S. Tomorrow's Professors. A Report of the College Faculty Internship Program. New York: The Fund for the Advancement of Education, 1960.
- Eckert, Ruth E. "The Preparation of College Teachers," Current Trends in Higher Education, edited by Ralph W. McDonald. Washington, D.C.: Department of Higher Education, National Education Association, 1948.

Edwards, Allen L. Experimental Design in Psychological Research. New York: Rinehart and Company, 1954.

Edwards, E. "Social Change and the Education of College Teachers," The Preparation and In-service Training of College Teachers, edited by William S. Gray. Vol. X, 1938. Proceedings of the Institute for Administrative Officers of Higher Institutions. Chicago, Illinois: University of Chicago Press, 1938.

Elsbree, Willard S. The American Teacher. New York: The American Book Company, 1939.

Garrison, Lloyd A. "Preparation of College Teachers," Current Trends in Higher Education, edited by Ralph W. McDonald. Washington, D.C.: Department of Higher Education, National Education Association, 1949.

Good, Carter V., Barr, A. S., and Scates, Douglas E. The Methodology of Educational Research. New York: D. Appleton-Century Company, 1941.

Gray, William S. "Professional Education of College Teachers," The Study of College Instruction. Yearbook of the National Society of College Teachers of Education, No. 27. Chicago, Illinois: University of Chicago Press, 1939.

Kelley, William. The Inservice Growth of the College Teacher. Omaha: Creighton University Press, 1950.

Kelly, Fred J. (ed.). Improving College Instruction. Washington: American Council on Education, 1950.

_____. Toward Better College Teaching. Bulletin No. 13, 1950. Washington, D.C.: United States Government Printing Office, 1950.

Klapper, Paul. "Problems in College Teaching," The Preparation of College Teachers, edited by Theodore C. Blegen and Russell M. Cooper. American Council on Education Studies, Series I, Vol. XIV. Washington, D.C.: American Council on Education, 1950.

McKeachie, Wilbert, and Kimble, Gregory. Teaching Tips, A Guide Book for the Beginning College Teacher. Ann Arbor, Michigan: The George Wahr Publishing Company, 1953.

National Conference on Higher Education. Current Trends in Higher Education. Washington: National Education Association of U.S., 1949.

President's Conference on Higher Education. Higher Education for American Democracy. New York: Harper and Brothers, 1947.

Tead, Ordway. College Teaching and College Learning. New Haven, Connecticut: Yale University Press, 1949.

ARTICLES, BULLETINS, AND PERIODICALS

Alexander, W. B., Sheedy, C. E., Pfnister, A. O. "Higher Education as a Field of Study; Inservice Training of College Teachers," Current Issues in Higher Education, 1957, pp. 56-63.

American Association of Colleges for Teacher Education, Orienting New Faculty, Vol. XII, No. 13 Bulletin, January 29, 1960.

Anderson, Harold A. "The Preparation of College Teachers," Journal of the National Education Association, XL (May, 1951), 343.

Bain, Read. "College Teaching," American Association of University Professors Bulletin, XXXI, Issue 1, 48-59.

Bogardus, E. S. "Teaching Problems of Young Sociologists," Sociology and Social Research, XXXVIII (January-February, 1954), 174-82; also "Special Problems of Young Sociologists," (March-April, 1954), 242-52.

Bowman, C. C. "The Administrator and the Professor," American Association of University Professors Bulletin, XXXII (1946), 678-86.

Eckert, Ruth E. "A New Design for the Training of College Teachers," Junior College Journal, XVIII (September, 1947), 25-33.

_____. "Some Neglected Aspects in the Preparation of College Teachers," Journal of General Education, III (January, 1949), 137-44.

Eells, W. C. "Journals Publishing Articles on College Teachers and College Teaching," American Association of University Professors Bulletin, XLIII (September, 1957), 458-60.

Elder, F. K. "Improvement of College Instruction," Educational Administration and Supervision, XXXV (December, 1949), 457-88.

Fleming, E. M. "Good Teaching is Our Most Important Job," North Central Association Quarterly, XXXVIII (April, 1954), 367-69.

- French, C. C. "Significant Problems Involved in the Improvement of Instruction in Colleges," Southern Association Quarterly, XI (May, 1947), 359-62.
- Goodhartz, Abraham S. "Selection and Induction of New Faculty Members," The Journal of Educational Sociology, XXVI (January, 1953), 187-93.
- Hattery, Lowell H. "Joys and Sorrows of College Teaching," School and Society, October 9, 1948, 241-43.
- Hollis, H. V. "Problems in the Preparation of College Teachers," American Association of University Professors Bulletin, XXVII (Spring, 1941), 206-12.
- Horn, T. D. "Good Teachers: Whose responsibility?" Journal of Teacher Education, VIII (December, 1957), 354-55.
- Houston, N. V. and Umstattd, James G. "Teacher Personnel Problems in Junior and Senior Colleges and Universities," Review of Educational Research, XXVIII (June, 1958), 234-41.
- Inlow, H. E. "Problems of the Beginning Teachers," Educational Administration and Supervision, XXVIII (September, 1942), 414-25.
- Kelly, F. J. "How Do Faculty Members Like Their Jobs?" Higher Education, V (May, 1949), 193-96.
- Lewis, E. M. "The Beginning College Teacher," Journal of Higher Education, (January, 1947), 41-42.
- Lindquist, C. B. "Recent Practices Relating to Faculty in Institutions of Higher Education: Preliminary Report," Higher Education, XV (November, 1958), 41-47.
- McKune, L. E. "Teachers and Teaching," North Central Association Quarterly, XXXII (April, 1958), 361-63.
- McPheeters, A. A. "Toward Improving College Instruction," Association of American College Bulletin, XXXVIII (December, 1952), 137-44.
- Michael, Lloyd S. "Orientating New Teachers," Bulletin of the National Association of Secondary School Principals, XXXIV (December, 1950), 72-78.

- Mitchell, Kathryn A. "Orientation of the Newly Appointed Teacher; Prevailing Practices in New Jersey, " Bulletin of National Association of Secondary School Principals, XXXIV (May, 1955), 80-88.
- Morse, H. T. "Conference on College Teaching: Minnesota Centennial Conference on College Teaching, " Journal of Higher Education, XXIX (June, 1958), 293-300.
- National Education Association, "First Year Teachers in 1954-1955, " Research Bulletin, XXXIV, No. 1 (February, 1956).
- Nolan, Aretas W. Techniques Used in Dealing with Certain Problems of College Teaching, (University of Illinois Bulletin), XXVI, No. 40 (June 4, 1929), p. 25.
- North Central Association of Colleges and Secondary Schools, "List of Accredited Institutions of Higher Education, July 1, 1959, " The North Central Association Quarterly, XXXIV (July, 1959), 16-28.
- Pace, C. R. "The Preparation of College Teachers, " Review of Educational Research, XIX (June, 1949), 230-34.
- Reeves, Floyd W. "Survey of Current Methods in the In-Service Training of College Teachers, " The Training of College Teachers. Proceedings of the Institute for Administrative Officers of Higher Institutions, II, 133-46.
- Smith, Henry P. "A Study of the Problems of Beginning Teachers, " Educational Administration and Supervision, XXXVI (May, 1950), 257-64.
- Stripling, R. O. "Orientation Practices for New College Faculty Members, " Bulletin of American Association of University Professors, No. 40 (1954-55), 555-62.
- _____. "Problems of New Members of the College Faculty, " Clearing House, XXVII (February, 1953), 356-62.
- Sullivan, R. H. "Administrative-Faculty Relationships in Colleges and Universities, " Journal of Higher Education, XXVII (June, 1956), 308-26.

- Taylor, George R. "Faculty Orientation at Amherst, " Faculty Preparation and Orientation. Proceedings of a Regional Conference Sponsored by the New England Board of Higher Education, ed. John W. Gustad. Winchester, Mass.: New England Board of Higher Education, 1960, 93-96.
- U. S. Department of Health, Education, and Welfare, Office of Education, Education Directory, 1959-1960, Part 3, Higher Education. Washington: U. S. Government Printing Office, 1959.
- Wallace, Morris S. "New Teachers' Evaluation of Induction Techniques, " North Central Association Quarterly, XXV (April, 1951), 381-82.
- _____. "Problems Experienced by 136 New Teachers During Their Induction into Service, " North Central Association Quarterly, XXV (January, 1951), 291-309.
- _____. "The Induction of New Teachers Into School and Community, " North Central Association Quarterly, XXV (October, 1950), 238-51.
- Williams, Kenneth R., and Jenkins, Adele M. "Improving Instruction in Institutions of Higher Education, " Educational Record, XXIX (April, 1948), 145-61.
- Williamson, A. V. "Effective Teaching at the College Level, " Association of American Colleges Bulletin, XXXIII (Winter, 1947), 645-51.
- Yauch, Wilbur A. "Helping the New Teacher to Success, " Educational Forum, XX (November, 1955), 37-43.

OTHER SOURCES

- Garrett, Cyril D. "A Study of the Inservice Improvement Programs of Eight Liberal Arts Colleges." Unpublished Ed. D. dissertation, Michigan State University, 1957.
- Kidd, Rex C. "The Improvement of the Pre-Service Education of Undergraduate College Teachers." Unpublished doctoral dissertation, University of Florida, Gainesville, Florida, August, 1951, 262.
- Tracy, Norbert J. Personal letter including outline of paper, "What Incoming Faculty Members Wish To Learn about Their Institutions, " presented at Summer Departmental Meeting of the Association for Higher Education, National Education Association, Los Angeles, June 27, 1960.

- Taylor, George R. "Faculty Orientation at Amherst," Faculty Preparation and Orientation. Proceedings of a Regional Conference Sponsored by the New England Board of Higher Education, ed. John W. Gustad. Winchester, Mass.: New England Board of Higher Education, 1960, 93-96.
- U. S. Department of Health, Education, and Welfare, Office of Education, Education Directory, 1959-1960, Part 3, Higher Education. Washington: U. S. Government Printing Office, 1959.
- Wallace, Morris S. "New Teachers' Evaluation of Induction Techniques," North Central Association Quarterly, XXV (April, 1951), 381-82.
- _____. "Problems Experienced by 136 New Teachers During Their Induction into Service," North Central Association Quarterly, XXV (January, 1951), 291-309.
- _____. "The Induction of New Teachers Into School and Community," North Central Association Quarterly, XXV (October, 1950), 238-51.
- Williams, Kenneth R., and Jenkins, Adele M. "Improving Instruction in Institutions of Higher Education," Educational Record, XXIX (April, 1948), 145-61.
- Williamson, A. V. "Effective Teaching at the College Level," Association of American Colleges Bulletin, XXXIII (Winter, 1947), 645-51.
- Yauch, Wilbur A. "Helping the New Teacher to Success," Educational Forum, XX (November, 1955), 37-43.

OTHER SOURCES

- Garrett, Cyril D. "A Study of the Inservice Improvement Programs of Eight Liberal Arts Colleges." Unpublished Ed. D. dissertation, Michigan State University, 1957.
- Kidd, Rex C. "The Improvement of the Pre-Service Education of Undergraduate College Teachers." Unpublished doctoral dissertation, University of Florida, Gainesville, Florida, August, 1951, 262.
- Tracy, Norbert J. Personal letter including outline of paper, "What Incoming Faculty Members Wish To Learn about Their Institutions," presented at Summer Departmental Meeting of the Association for Higher Education, National Education Association, Los Angeles, June 27, 1960.

APPENDICES

APPENDIX A

NORTH CENTRAL ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS

Commission on Research and Service

April 15, 1960

Dear College President:

The Subcommittee on In-Service Education of Teachers of the Commission on Research and Service of the North Central Association has been concerned for some time about the problems of the beginning college teacher. We believe that helping faculty members find satisfactory solutions to these problems is of vital concern to every college administrator, but before this can be done the problems of new faculty members need to be clearly identified. This we believe has not been done. Too often we have taken for granted that we knew what the problems were.

It is with the expectation that these problems can be identified that the North Central Association Subcommittee on In-Service Training of Teachers is working with the Center for the Study of Higher Education at Michigan State University in conducting a study of this problem. Harlan R. McCall of Alma College has been engaged to conduct the study.

The definition of new faculty members is given on the back of Form C which is attached. This includes any teacher new to your particular institution but does not include in this study full-time administrative personnel, graduate assistants, visiting instructors, or research personnel.

Your assistance as president is requested as follows:

1. Please furnish information about numbers of faculty for 1957, 1958, and 1959 as requested on Form C.
2. Then list the names of new faculty members to whom the questionnaire will be sent.
3. Please return Form C with necessary information to the Center for the Study of Higher Education at Michigan State University.

Your cooperation by an early response to this request will be greatly appreciated as questionnaires are to be mailed to new faculty members early in May.

Sincerely yours,

Paul W. Harnly, Chairman
In-Service Education of Teachers

J. Fred Murphy, Chairman
Broad Ripple High School
1115 Broad Ripple Avenue
Indianapolis 20, Indiana

Herbert W. Schooling
Vice Chairman
Superintendent of Schools
Webster Groves, Missouri

Clyde Vroman, Secretary
Director of Admissions
University of Michigan
Ann Arbor, Michigan

FORM C

Kindly fill in the following information and return in the enclosed envelope to the Center for the Study of Higher Education, Michigan State University, at your earliest convenience.

Furnishing Information:_____ **Position:**_____

Faculty Member: Include those who are full-time members of the staff who spend more than half their time as members of the teaching staff. If some full-time members of the staff perform administrative functions which take less than half their time and spend more than half-time teaching, they may be included as faculty members.

New Faculty Members: “New” here is defined as “all those who are new to your particular institution of higher education, including those new to the profession and those with previous teaching experience.”

Total No. of Faculty, Fall 1957? _____ No. of New Faculty Members, Fall 1957? _____

Names of New Faculty members, Fall 1957, who are still on staff:

[illegible]

If additional space is needed, use another sheet.

APPENDIX C

January 5, 1960

To: A First-Year Faculty Member in one of Michigan's North Central Association Colleges

From: Harlan R. McCall, Alma College, Alma, Michigan.

Subject: I am planning on conducting a study of problems of new faculty members for the Sub-Committee on In-Service Training of Teachers of the Commission on Research and Service of the North Central Association. The study will be conducted by use of a questionnaire.

So that the most important problems to new faculty members will be listed in the questionnaire, I am contacting a few such persons in Michigan colleges. Would you be kind enough to list problems which you think are among the most important ones faced by faculty members who are new to the institution in which you are now serving.

Problems can be of any nature, from finding suitable living quarters to becoming acquainted with the college curriculum. Specific instructional problems, such as constructing suitable evaluative instruments, should also be included.

Your prompt reply to this communication will be appreciated. You can list the problems on this sheet and return to me in the enclosed self-addressed, stamped envelope.

Person Submitting

Name of Institution

NCA/MSU PROJECT

NORTH CENTRAL ASS'N. STUDY REGARDING PROBLEMS OF NEW FACULTY MEMBERS

Dear Faculty Member:

The North Central Ass'n. Sub-Committee on In-Service Education of Teachers of the Commission on Research and Service is sponsoring a study of the problems of faculty members who have accepted new positions at their member institutions since the fall of 1957. I have been given your name by an administrator of your institution as one of those eligible to participate in the study.

Will you kindly assist us by taking a few minutes of your time to answer the questions on this form and return the same in the enclosed self-addressed envelope at your earliest convenience?

The information obtained will be held in strictest confidence and will in no way reflect upon the school, the individual teacher, or the administration.

Sincerely yours,



HARLAN R. McCALL
Center for the Study of Higher Education
Michigan State University
East Lansing, Michigan

PERSONAL INFORMATION:

1. Institution where now employed: (Name) _____
(Location) _____ (City) _____ (State) _____
2. Person supplying information: (Name) _____
(Sex) Male () Female ()
(Marital Status) Single () Married ()
3. Age at initial employment in this institution: _____
4. Degrees earned:
(Check) (Name of Institution Granting) (Location) (Major)
(1) Bachelor's _____, _____ (City and State) _____
(2) Master's _____, _____
(3) Doctor's _____, _____
5. Number of years experience in *full-time teaching* at any level prior to coming to present institution:
(Circle No. of years)
(1) College Teaching (a) 0 (b) 1 to 3 (c) 4 to 10 (d) more than 10
(2) High School Teaching (a) 0 (b) 1 to 3 (c) 4 to 10 (d) more than 10
(3) Elementary Teaching (a) 0 (b) 1 to 3 (c) 4 to 10 (d) more than 10
(4) Other full-time teaching experience? Specify as to type of institution in which done and number of years. _____
6. Subject field(s) in which you taught the first year in this institution: _____
7. Level at which you taught first year in this institution: (Check one)
(1) () Undergraduate only.
(2) () Graduate only.
(3) () Both graduate and undergraduate.
8. Faculty rank at time of initial employment by this institution: (Check one)
(1) () Instructor
(2) () Ass't. Professor
(3) () Assoc. Professor
(4) () Professor
(5) () Other (Specify) _____
9. If this rank has changed since initial employment check present rank below:
(1) () Instructor
(2) () Ass't. Professor
(3) () Assoc. Professor
(4) () Professor
(5) () Other (Specify) _____
10. What do you consider as being the primary reason you came to this institution? (Check one)
(1) () Alma Mater (5) () Just the type assignment I wanted
(2) () Location (6) () Size of institution
(3) () Friendship w/college administrator (7) () Religious affiliation
(4) () Opportunity afforded for advancement (8) () Other (Specify) _____
11. What do you hope to be doing 15 years from now? (Check one)
(1) () Similar position to present (5) () Spending most of time in research
(2) () College administration work (6) () Spending most of time in writing
(3) () College personnel work (7) () Other (Specify) _____
(4) () Be retired

GENERAL INSTRUCTIONS for completing questionnaire:

The list of *problems* (Section I) was compiled from problems found to be present to some degree for new faculty members in institutions of higher education. Note that this section calls for *two checks*, one in column B and one in column C, for each of the listed items which has caused you *any degree of difficulty* since coming to the institution you are now serving.

The list of *administrative procedures* (Section II) contains practices used by administrators in helping new faculty members solve problems which they face. Note that this section calls for only one check for each practice — either a check under the appropriate heading in *column A* if practice is used or under the appropriate heading in *column B* if the practice is not used in your institution.

SECTION I — PROBLEMS

Check the extent to which each of the following was a problem *for you since you came to this institution*.

For each item kindly place *one check* in Column A if "Never A Problem", or *two checks* — one in Column B to indicate persistence of problem and one in Column C to indicate difficulty of problem.

	Col. A	Col. B		Col. C		
	Never a Problem	Persistence of Problem		Difficulty of Problem		
		Has Been, Not Now	Still Persists	Slight	Moderate	Great
A. Personal						
1. Finding suitable living quarters.	()	()	()	()	()	()
2. Becoming acquainted with other faculty members.	()	()	()	()	()	()
3. Establishing satisfactory social relations with faculty families.	()	()	()	()	()	()
4. Establishing satisfactory social relations in the community.	()	()	()	()	()	()
5. Working with department co-workers. ...	()	()	()	()	()	()
6. Working with personnel from other departments.	()	()	()	()	()	()
7. Working with college administration.	()	()	()	()	()	()
8. Working with counseling personnel.	()	()	()	()	()	()
9. Knowing about health services in the community.	()	()	()	()	()	()
10. Finding satisfying recreational outlets for self or family.	()	()	()	()	()	()
11. Other (Specify) _____	()	()	()	()	()	()
B. Institutional						
1. Understanding institutional objectives. ...	()	()	()	()	()	()
2. Understanding my responsibilities for registering students.	()	()	()	()	()	()
3. Understanding my responsibilities for counseling students.	()	()	()	()	()	()
4. Understanding faculty committee structure.	()	()	()	()	()	()
5. Keeping and making out official records and reports.	()	()	()	()	()	()
6. Becoming acquainted with college calendar.	()	()	()	()	()	()
7. Learning curriculum requirements.	()	()	()	()	()	()
8. Learning details of any student assistantship program.	()	()	()	()	()	()
9. Knowing what other departments of the college teach.	()	()	()	()	()	()
10. Knowing what other departments of the college expect of my department.	()	()	()	()	()	()
11. Knowing the institutional procedure to be followed for curriculum revision.	()	()	()	()	()	()
12. Having little opportunity to work on college committees.	()	()	()	()	()	()
13. Understanding policies regarding grading standards.	()	()	()	()	()	()
14. Acquiring adequate office space.	()	()	()	()	()	()
15. Acquiring adequate secretarial help.	()	()	()	()	()	()
16. Understanding college policies regarding promotions and salary increases.	()	()	()	()	()	()
17. Understanding policies regarding fringe benefits.	()	()	()	()	()	()

	Col. A	Col. B		Col. C		
	Never a Problem	Persistence of Problem		Difficulty of Problem		
		Has Been, Not Now	Still Persists	Slight	Moderate	Great
B. Institutional cont'd.						
18. Understanding policies regarding textbook adoptions.	()	()	()	()	()	()
19. Understanding policies regarding probationary status and dropping of students. ...	()	()	()	()	()	()
20. Understanding policies regarding research.	()	()	()	()	()	()
21. Fulfilling expectations regarding research activities.	()	()	()	()	()	()
22. Fulfilling expectations regarding student counseling.	()	()	()	()	()	()
23. Understanding institution's legislative organization.	()	()	()	()	()	()
24. Understanding faculty-trustee relationships.	()	()	()	()	()	()
25. Fulfilling expectations regarding total amount of responsibilities.	()	()	()	()	()	()
26. Other (Specify) _____	()	()	()	()	()	()
C. Instructional						
1. Learning the availability of instructional material.	()	()	()	()	()	()
2. Learning routine for acquiring new instructional and library materials.	()	()	()	()	()	()
3. Lack of teaching aids.	()	()	()	()	()	()
4. Developing satisfactory tests and examinations.	()	()	()	()	()	()
5. Developing effective lectures.	()	()	()	()	()	()
6. Using effective discussion techniques in class.	()	()	()	()	()	()
7. Obtaining and maintaining student interest.	()	()	()	()	()	()
8. Coordinating instruction in my classes with other classes in my department.	()	()	()	()	()	()
9. Coordinating instruction in my classes with instruction in other college departments.	()	()	()	()	()	()
10. Increasing my effectiveness in student counseling techniques.	()	()	()	()	()	()
11. Required to teach classes for which not prepared.	()	()	()	()	()	()
12. Too many "extra class" responsibilities on faculty committees.	()	()	()	()	()	()
13. Becoming acquainted with pupils in my classes.	()	()	()	()	()	()
14. Gearing instruction to level of those in my classes.	()	()	()	()	()	()
15. Obtaining help in the improvement of my instruction.	()	()	()	()	()	()
16. Other (Specify) _____	()	()	()	()	()	()
_____	()	()	()	()	()	()

SECTION II — ADMINISTRATIVE PROCEDURES

Following are listed some of the procedures used by college administrators to help new faculty members solve their problems.

For each procedure used by the institution you are now serving put a check in Column A under the appropriate heading. For each procedure not used by your institution place a check in Column B under the appropriate heading.

PROCEDURES:

	Column A				Column B			
	If used, degree of helpfulness to you was				If not used, degree of helpfulness you think this would have been			
	None	Slight	Moderate	Great	None	Slight	Moderate	Great
1. Supplies printed material (catalog, pamphlets) before appointment.	()	()	()	()	()	()	()	()
2. Expects visit to campus before appointment	()	()	()	()	()	()	()	()
3. Sends personal letter of welcome after accepting appointment.	()	()	()	()	()	()	()	()
4. Furnishes further printed material (such as faculty handbook) after appointment...	()	()	()	()	()	()	()	()
5. Sends summer news letter.	()	()	()	()	()	()	()	()
6. Sends copies of college paper.	()	()	()	()	()	()	()	()
7. Sends copies of local paper.	()	()	()	()	()	()	()	()
8. Administration passes on word to other faculty and to the community information concerning families of incoming faculty. . .	()	()	()	()	()	()	()	()
9. Helps in finding housing.	()	()	()	()	()	()	()	()
10. Faculty sponsor for each new faculty member.	()	()	()	()	()	()	()	()
11. Introduced to community soon after arrival.	()	()	()	()	()	()	()	()
12. Introduced to faculty soon after arrival. . .	()	()	()	()	()	()	()	()
13. New faculty expected to report to college two weeks before opening.	()	()	()	()	()	()	()	()
14. Orientation conference.	()	()	()	()	()	()	()	()
15. Light teaching load for new faculty.	()	()	()	()	()	()	()	()
16. Arranged personal conferences with administrators.	()	()	()	()	()	()	()	()
17. Open door policy of administrators.	()	()	()	()	()	()	()	()
18. Faculty-student reception.	()	()	()	()	()	()	()	()
19. Immediate assignment to committee.	()	()	()	()	()	()	()	()
20. Invite new faculty members to visit committee meetings.	()	()	()	()	()	()	()	()
21. Organized faculty study groups.	()	()	()	()	()	()	()	()
22. Scheduled departmental meetings.	()	()	()	()	()	()	()	()
23. Scheduled faculty meetings.	()	()	()	()	()	()	()	()
24. Use of audio-visual aids to understand institution.	()	()	()	()	()	()	()	()
25. Administrator visits classes and helps evaluate instruction.	()	()	()	()	()	()	()	()
26. Other (Specify) _____	()	()	()	()	()	()	()	()

APPENDIX E

WRITE-IN ANSWERS TO QUESTIONNAIRE

Other (written in) reasons in addition to those given on the printed questionnaire and reported in Table 3.9 in answer to , "What do you consider as being the primary reason you came to this institution?" were:

<u>Frequency</u>	<u>Reason</u>
26	Availability of position
22	Salary
13	Start in College teaching (or try-out)
8	Best offer (courses and salary)
7	Husband hired in institution or in city
6	Obedience--assigned as member of religious community
5	Opportunity for service
5	Temporary position--needed job for year or two
4	Institutional philosophy of education
4	Close to type of assignment I wanted
5	Friendship w/department chairman or other faculty member
3	Opportunity for advanced work
3	Assignment (Air Force)
3	Quality of institution/its students
3	Reputation of institution/its faculty
3	Wanted to teach or return to teaching
3	Accidental
25	Miscellaneous reasons for coming to particular institutions, ten being mentioned by two and all others by one each.

Other (written in) aspirations of new faculty in addition to those given on the printed questionnaire and reported in Table 3.10 in answer to, "What do you hope to be doing 15 years from now?" were:

<u>Frequency</u>	<u>Aspiration</u>
19	Teaching and research
19	Other profession, industry, or business
16	Different teaching assignment
13	Full-time housewife (2 already married)
9	Uncertain
7	Department or division head or director
5	Obedience--will be where I am told to be
5	Teaching at graduate level (or more at graduate level)
4	College administrator of personnel work
4	Teaching and writing
12	Miscellaneous aspirations listed, none by more than two

APPENDIX F

THE ADEQUACY OF ADMINISTRATIVE PROCEDURES AS PERCEIVED BY NEW FACULTY MEMBERS

How new faculty members react to the administrative practices being used or feel about practices not being used to help them resolve any problems they face in new positions can not be over-looked by the conscientious administrator who wishes to have an affective in-service education program in his institution.

Presented here are the results of that section of the questionnaire which asked respondents to indicate which of twenty-five listed administrative procedures were being used to help them resolve their problems and to evaluate the degree of helpfulness of these procedures.

Wide Range in Helpfulness Ratings

In Table 8.1 will be found the average degree of helpfulness, based on a scale of 300, of each of the twenty-five administrative procedures and their ranks. It is evident from these data that new faculty members rate certain procedures as somewhat more helpful than others. The range of helpfulness on the 300-point scale is from a low of 94 for Immediate assignment to committee to a high of 221 for Introduced to faculty soon after arrival. It will be noted that seven other procedures have average helpfulness ratings of over 200. These are as follows: Open door policy of administrators, Furnishing further printed material (such as faculty handbook) after appointment, Expects visit to campus before appointment, Helps in finding housing, Scheduled department meetings, Scheduled faculty meetings, and Light teaching load for new faculty.

Table 8.1.--Helpfulness and Use of Administrative Procedures to Assist New Faculty Members in Solving Their Problems as Evaluated by New Faculty Members in Selected N.C.A. Colleges and Universities.

Administrative Procedures	Degree of Helpfulness		Use	
	Aver.*	Rank	Per Cent	Rank
Introduced to faculty soon after arrival	221	1	94	1.5
Open door policy of administrators	218	2	85	3
Furnishes further printed material (such as faculty handbook) after appointment	215	3	80	6
Expects visit to campus before appointment	214	4	83	4
Helps in finding housing	213	5	80	6
Scheduled departmental meetings	208	6.5	72	10
Scheduled faculty meetings	208	6.5	94	1.5
Light teaching load for new faculty	205	8	36	16.5
Supplies printed material (catalog, pamphlets) before appointment	198	9	80	6
Orientation conference	195	10	73	9
Sends personal letter of welcome after accepting appointment ...	187	11	79	8
Arranged personal conferences with administrators	178	12	49	14
Administration passes on word to other faculty and to the community information concerning families of incoming faculty	166	13	64	12
Introduced to community soon after arrival	157	14	47	15
Faculty-student reception	145	15	68	11
Faculty sponsor for each new faculty member	143	16	23	21
Organized faculty study groups	140	17	35	19
Sends summer news letter	127	18	35	19
Sends copies of college paper	126	19	35	19
Invite new faculty members to visit committee meetings	124	20	22	22
New faculty expected to report to college two weeks before opening	115	21	36	16.5
Administrator visits classes and helps evaluate instruction	109	22	17	24
Use of audio-visual aids to understand institution	107	23	19	23
Sends copies of local paper	102	24	16	25
Immediate assignment to committee	94	25	51	13

* The average degree of helpfulness was determined by multiplying the total "great" responses by three, whether in use or not; "moderate" responses by two; "slight" responses by one; and "none" responses by zero. The total of these was then divided by the number responding to each question, the quotient received being reported in hundredths as whole numbers for convenience.

High Helpfulness Ratings For Much Used Procedures

It is evident from the comparable data of helpfulness and use (Table 8.1) that in many respects administrators in the sample NCA colleges and universities are using the administrative procedures which new faculty members feel are most helpful to them in resolving their problems. The coefficient of correlation between the estimated helpfulness and the actual use by administrators of these twenty-five procedures was $+ .87$.¹

While the top five ranking procedures in helpfulness (Table 8.1) also rate within the top six in use, there is a noticeable difference in the two procedures tied for sixth and seventh ranks and the eighth ranking procedure in helpfulness and use.

Scheduled departmental meetings and Scheduled faculty meetings, having an average helpfulness rating of 208 and tying for sixth rank, are used by administrators of 72 and 94 per cent of the respondents, respectively. Respondents feel that Light teaching loads, ranking eighth, would be very helpful in solving problems, but that relatively few institutions make use of this, only 36 per cent, giving it a "use" rank of 16.5. This lack of use of the "light teaching load" for new faculty members is borne out by administrators in the Tracy study reported in Chapter I. In general, the practices reported by new faculty members as being used little or extensively by institutions are the same as those reported by administrators in the Tracy study.

One other particularly noteworthy difference in rating of helpfulness and use of an administrative procedure is in relationship to the Immediate assignment to committee. As noted above, the respondents rated this as the least helpful of the twenty-five procedures, the only

¹Spearman rank-difference method was used for figuring coefficient of correlation.

one to have an average helpfulness rating of less than 100, yet it was reported by 51 per cent of the respondents as being used in institutions.

Conclusions

While in general new faculty members in NCA colleges and universities tend to rate the highest administrative practices in use as the highest in helpfulness and those used least, the lowest in helpfulness, there are some exceptions. One procedure ranking relatively high in use has the lowest helpfulness rating and one procedure having relatively high helpfulness rating is not extensively in use.

Just what meaning should be attached to the fact that there is a high correlation between helpfulness and use of administrative practices as evaluated by new faculty members? This might be interpreted to mean one of the following: (1) That the status quo of orientation and in-service practices in NCA colleges and universities is generally thought to be adequate by new faculty members; therefore, no changes in orientation or in-service programs are warranted. (2) That new faculty members are able to reveal symptoms of need but generally are unable to suggest any more effective administrative procedures for meeting these needs than those presently in use by administrators. (3) That acceptance of orientation and in-service procedures operates independently of relevance of procedures to solve problems of adjustment effectively.

However, close examination of the data reveals that even the procedures thought by faculty to be the most helpful are not in use by all administrators. Each college administrator might well concern himself with the evaluation of each of the administrative procedures listed in the questionnaire in light of procedures used in his institution, giving particular consideration to those procedures reported by new faculty members as being of relatively high helpfulness.

In view of the above data the following hypothesis might be justified: that new faculty members consider certain administrative procedures as having a greater degree of helpfulness to them in solving their problems than other procedures. However, further analysis of this data and additional information would be required to test this hypothesis. No attempt was made in this analysis of data to tie helpfulness ratings with the solution of any particularly type of problem--personal, institutional, or instructional.

APPENDIX G

Table 9.1.--Stage One Raw Data; Results of Significance by t Test on Degree of Difficulty of Housing Problem as Related to Personal Characteristics.

Institutional Factors	Personal Characteristics							
	Sex		Age		Degree		Experience	
	Male	Female	Young	Old	Non-Doct.	Doc-torate	No College	College
Size: Small	325	78	245	159	290	126	207	206
	759	189	563	385	573	294	459	508
	324	127	260	181	336	120	264	192
	M>F						C>NC	
Large	549	102	420	224	475	186	389	270
	1301	256	992	547	1143	434	911	662
	487	145	393	233	470	170	383	257
	M>F							
Control: Private	491	109	395	196	423	182	319	286
	1147	255	923	464	999	416	707	708
	503	175	418	250	491	193	402	283
	M>F						C>NC	
Public	388	71	270	187	339	128	277	190
	928	181	632	467	817	308	663	462
	308	97	235	164	314	96	245	166
	M>F							
Level: Undergrad.	609	125	464	265	552	191	431	312
	1435	297	1084	641	1300	453	987	766
	562	213	469	296	609	176	482	303
	M>F							
Graduate	270	55	201	118	210	119	165	164
	640	139	471	290	516	271	383	404
	249	59	184	118	197	118	165	146

Note: Meaning of numbers in each cell in order from top to bottom: X, the sum of difficulty ratings; ΣX^2 , the sum of squares of difficulty ratings; N, number of respondents. Differences are shown when significant at the five per cent level.

APPENDIX H

Table 9.2. --Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Housing Problem as Related to Personal Characteristics.

Personal Characteristics							
Sex		Age		Degree		Experience	
Male	Female	Young	Old	Non-Doc.	Doc.	No College	College
1-9*		1-8		1-25		1-5	
78	15	78	36	78	9	78	34
174	25	174	88	174	21	174	84
88	29	88	30	88	14	88	34
2-22		2-7		3-33		2-15	
87	26	87	47	35	15	87	21
203	12	203	117	75	34	203	53
56	15	56	33	45	12	56	20
M>F							
3-23		3-20		8-19		3-35	
35	14	35	9	36	18	35	10
75	34	75	21	88	38	75	20
45	14	45	16	30	16	45	11
8-4		9-4		12-28		4-13	
36	10	15	10	27	6	10	20
88	22	25	22	65	12	22	56
30	34	29	34	25	13	34	21
M>F							
6-13		5-6		13-34		8-6	
43	20	34	43	20	3	36	43
107	56	84	107	56	5	88	107
34	21	34	34	21	10	30	34
7-26		10-24		32-14		7-30	
47	5	32	23	10	19	47	18
117	13	72	59	26	43	117	44
33	14	30	15	12	20	33	12
M>F							

*Hyphenated numbers at top center of cell indicate matched-grouping numbers as assigned (Table 2.6). Other cell numbers explained in footnote of Table 9.1.

Table 9.2. --Continued

Personal Characteristics							
Sex		Age		Degree		Experience	
Male	Female	Young	Old	Non-Doc.	Doc.	No College	College
10-27		15-30		30-16		10-36	
32	8	21	18	18	25	32	15
72	18	53	44	44	63	72	37
30	14	20	12	12	18	30	11
11-34		36-18		18-17		19-11	
32	3	15	12	12	27	18	32
78	5	37	28	28	63	38	78
29	10	11	18	18	19	16	29
M>F							
		25-19		24-37		37-17	
		9	18	23	10	10	27
		21	38	59	24	24	63
		14	16	15	11	11	19
		22-26				24-18	
		6	5			23	12
		12	13			59	28
		15	14			15	18
						NC>C	
		35-32				20-32	
		10	10			9	10
		20	26			21	26
		11	12			16	12

APPENDIX I

Table 9.3. --Stage One Raw Data; Results of Significance by t Test on Degree of Difficulty of Housing Problem as Related to Institutional Factors.

Personal Characteristics	Institutional Factors					
	Size		Control		Level	
	Small	Large	Private	Public	Under-graduate	Graduate
Sex:						
Male	342	594	491	400	620	271
	792	1301	1147	946	1452	641
	340	487	504	323	575	252
			Pu>Pr			
Female	79	102	109	72	126	55
	181	256	255	182	298	139
	137	145	179	103	219	63
Age:						
Young	254	420	395	279	472	202
	576	992	923	645	1096	472
	274	393	420	247	479	188
			Pu>Pr			
Old	152	224	196	190	268	118
	289	546	464	472	646	290
	192	233	253	172	304	121
			Pu>Pr			
Degree						
Non-Doctorate	298	475	423	350	562	211
	688	1143	999	832	1314	517
	355	470	495	330	624	201
			L>S			
Doctorate	128	186	182	130	193	119
	298	434	416	312	457	271
	127	170	195	101	180	113
			Pu>Pr			
Experience:						
No College	215	389	319	285	439	165
	471	911	707	675	899	383
	279	383	406	256	493	169
			L>S			
College	211	270	286	195	316	165
	515	662	708	469	772	405
	203	257	284	176	311	149

Note: See explanation of numbers, bottom Table 9.1.

APPENDIX J

Table 9.4. --Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Housing Problem as Related to Institutional Factors.

Institutional Factors					
Size		Control		Level	
Small	Large	Private	Public	Under-Grad.	Grad.
1-3*		3-2		2-10	
78	35	35	87	87	32
174	75	75	203	203	72
88	45	45	56	56	30
		Pu>Pr			
29-2		20-27		3-12	
12	87	9	8	35	27
28	203	21	18	75	65
12	56	16	14	45	25
6-32		12-10		7-24	
43	10	27	32	47	23
107	26	65	72	117	59
34	12	25	30	33	15
8-20		14-16		11-31	
36	9	19	25	32	13
88	21	43	63	78	31
30	16	20	18	29	12
		Pu>Pr			
9-23		35-15		14-21	
15	14	10	21	19	7
25	34	20	53	43	15
29	14	11	20	20	14
11-14		21-17		16-17	
32	19	7	27	28	27
78	43	15	63	63	63
29	20	14	19	18	19
		Pu>Pr			

* Hyphenated numbers at top center of cell indicate matched-grouping numbers as assigned (Table 2.6). Other cell numbers explained in footnote of Table 9.1.

Table 9.4.--Continued

Institutional Factors					
Size		Control		Level	
Small	Large	Private	Public	Under-Grad.	Grad.
31-21		23-22		30-18	
13	7	14	6	18	12
31	15	34	12	44	28
12	14	14	15	12	18
25-33		32-30		22-27	
9	15	10	18	6	8
21	31	26	44	12	18
14	12	12	12	15	14
				33-28	
				15	6
				31	12
				12	13

APPENDIX K

Table 9.5. --Stage One Raw Data; Results of Significance by t Test on Degree of Difficulty of Interdepartmental Understanding Problem as Related to Personal Characteristics.

Institutional Factors	Personal Characteristics							
	Sex		Age		Degree		Experience	
	Male	Female	Young	Old	Non-Doct.	Doctorate	No College	College
Size: Small	216	84	158	137	228	78	169	137
	420	162	300	269	442	154	319	277
	314	119	252	170	323	114	255	182
Large	360	93	293	155	348	110	286	172
	750	169	597	307	712	214	572	354
	476	142	392	220	458	166	377	248
Control: Private	354	111	286	177	355	118	283	190
	710	207	570	341	713	222	555	380
	491	167	409	237	476	188	390	274
Public	222	66	165	115	221	70	172	119
	360	124	327	235	441	146	336	251
	299	94	235	153	305	92	242	156
Level: Undergrad.	410	132	329	210	430	121	336	215
	822	244	651	406	848	237	662	423
	551	205	464	281	596	169	474	291
Graduate	166	45	122	82	146	67	118	94
	348	87	246	170	306	131	228	208
	239	56	180	109	185	111	157	139

Note: See meaning of numbers, bottom Table 9.1.

APPENDIX L

Table 9.6. --Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Interdepartmental Understanding Problem as Related to Personal Characteristics.

Personal Characteristics							
Sex		Age		Degree		Experience	
Male	Female	Young	Old	Non-Doc.	Doc.	No College	College
1-9 *		1-8		1-25		1-5	
49	15	49	27	49	5	49	21
104	25	104	53	104	9	104	39
86	29	86	29	86	14	86	33
2-22		2-7		3-33		2-15	
45	7	45	13	49	8	45	12
95	9	95	25	115	20	95	20
56	16	56	32	46	12	56	20
3-23		3-20		8-19		3-35	
49	12	49	8	27	14	49	12
115	20	115	14	53	26	115	28
46	14	46	16	29	15	46	11
8-4		9-4		12-18		4-13	
27	34	15	34	22	7	34	8
53	62	25	62	50	13	62	12
29	33	29	33	24	13	33	18
6-13		5-6		13-34		8-6	
23	8	21	23	8	7	27	23
52	12	39	52	12	17	53	52
32	18	33	32	18	10	29	32
7-26		10-24		32-14		7-30	
13	10	22	11	7	14	13	17
25	16	48	49	13	26	25	39
32	12	30	14	11	19	32	12
C>NC							

* Hyphenated numbers at top center of cell indicate matched-grouping numbers as assigned (Table 2.6). Other cell numbers explained in footnote of Table 9.1.

Table 9.6.--Continued

Personal Characteristics					
Sex		Age		Degree	
Male	Female	Young	Old	Non-Doc.	Doc.
Experience					
No College	College				
10-27		15-30		30-16	
22	11	12	17	17	10
48	17	20	39	39	16
30	14	20	12	12	16
11-34		36-18		18-17	
15	7	8	11	11	14
49	17	18	25	25	34
28	10	11	15	15	17
		25-19		24-37	
		5	14	11	8
		9	26	17	16
		14	15	14	11
		37-17			
				8	14
				16	34
				11	17
		22-26			
		7	10		
		9	16		
		16	12		
		24-18			
				11	11
				17	25
				14	15
		35-32			
		12	7		
		28	25		
		11	11		
		20-32			
				8	7
				14	13
				16	11

APPENDIX M

Table 9.7. --Stage One Raw Data: Results of Significance by t Test on Degree of Difficulty of Interdepartmental Understanding Problem as Related to Institutional Factors.

Personal Characteristics	Institutional Factors					
	Size		Control		Level	
	Small	Large	Private	Public	Under-graduate	Graduate
Sex:	224	360	355	229	414	170
Male	430	750	711	469	826	354
	330	476	492	314	564	242
Female	95	93	116	72	138	50
	189	169	216	142	262	96
	129	142	171	100	211	60
Age:	170	293	288	175	336	127
Young	326	597	572	351	670	253
	266	392	411	247	474	184
Old	144	155	181	118	213	86
	280	307	349	238	409	178
	181	220	240	161	289	112
Degree:	231	348	359	230	438	151
Non-Doctorate	441	712	721	462	868	315
	342	458	479	321	611	189
Doctorate	84	110	120	74	123	71
	162	214	224	152	239	137
	121	166	190	97	173	114
Experience:	180	286	289	177	341	125
No College	340	572	565	347	673	239
	270	377	394	253	485	162
College	145	172	190	127	220	97
	293	354	380	267	434	213
	193	248	275	166	299	142

Note: See explanation of numbers, bottom Table 9.1.

APPENDIX N

Table 9.8. --Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Interdepartmental Understanding Problem as Related to Institutional Factors.

Institutional Factors					
Size		Control		Level	
Small	Large	Private	Public	Under-Grad.	Grad.
1-3*		3-2		2-10	
49	49	49	45	45	22
104	115	115	95	95	48
86	46	46	56	56	30
29-2		2-27		3-12	
3	45	8	11	49	22
5	95	14	17	115	50
13	56	16	14	46	24
6-32		12-10		7-24	
26	7	22	22	13	11
52	13	50	48	25	17
32	11	24	30	32	14
8-20		14-16		11-31	
27	8	14	10	15	5
53	14	26	16	49	9
29	16	19	16	28	11
9-23		35-15		14-21	
15	12	12	12	14	6
25	20	28	20	26	10
29	14	11	20	19	16
11-14		21-17		16-17	
15	14	6	14	10	14
49	26	10	34	16	34
28	19	16	17	16	17

*Hyphenated numbers at top center of cell indicate matched-grouping numbers as assigned (Table 2.6). Other cell numbers explained in footnote of Table 9.1.

Table 9.8.--Continued

Institutional Factors				
Size		Control		Level
Small	Large	Private	Public	Under-Grad. Grad.
31-21		23-22		30-18
5	6	12	7	17 11
9	10	20	9	39 25
11	16	14	16	12 15
25-33		32-20		22-27
5	8	7	17	7 11
9	12	13	39	9 17
14	12	11	12	16 14
				33-28
				8 7
				12 13
				12 13

APPENDIX O

Table 9.9. --Stage One Raw Data; Results of Significance by t Test on Degree of Difficulty of Office Space Problem as Related to Personal Characteristics.

Institutional Factors	Personal Characteristics							
	Sex		Age		Degree		Experience	
	Male	Female	Young	Old	Non-Doct.	Doc-torate	No College	College
Size:								
Small	232	74	187	110	214	92	178	128
	534	170	435	248	500	204	408	296
	317	127	257	177	329	120	260	189
Large	406	99	315	176	385	142	308	202
	1028	253	793	448	979	346	778	516
	480	143	387	229	461	168	378	252
Control:								
Private	362	106	308	150	340	130	280	190
	862	248	744	340	814	300	654	460
	492	176	412	246	483	192	395	280
Public	276	67	194	136	259	84	206	140
	700	175	484	356	665	210	532	352
	305	94	232	160	307	96	243	161
Level:								
Undergrad.	470	126	372	209	446	155	377	224
	1164	296	920	501	1096	377	923	550
	556	213	466	293	603	176	479	300
	M>F							
Graduate	168	47	130	77	153	59	109	106
	398	127	308	195	383	133	263	262
	241	57	178	113	187	112	159	141
					ND>D			

Note: See meaning of numbers, bottom Table 9.1.

APPENDIX P

Table 9.10. --Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Office Space Problem as Related to Personal Characteristics.

Personal Characteristics							
Sex		Age		Degree		Experience	
Male	Female	Young	Old	Non-Doc.	Doc.	No College	College
1-9*		1-8		1-25		1-5	
59	18	59	27	59	6	59	23
109	42	109	65	109	8	109	55
86	30	86	29	86	14	86	34
2-22		2-7		3-33		2-15	
61	4	61	35	32	10	61	17
165	10	165	93	78	26	165	35
56	15	56	34	46	12	56	19
M>F							
3-23		3-20		8-19		3-35	
32	14	32	13	27	16	32	9
78	36	78	27	65	36	78	27
46	14	46	16	29	15	46	10
8-4		9-4		12-18		4-13	
27	12	18	12	26	5	12	12
65	28	42	28	60	13	28	26
29	34	30	34	23	13	34	20
M>F							
6-13		5-6		13-34		8-6	
23	12	23	23	12	13	27	23
55	26	55	55	26	35	65	55
32	20	34	32	20	11	29	32
7-26		10-24		32-14		7-30	
35	10	16	13	7	16	35	17
93	26	32	35	19	42	93	49
34	13	30	14	12	20	34	12

* Hyphenated numbers at top center of cell indicate matched-grouping numbers as assigned (Table 2.6). Other cell numbers explained in footnote of Table 9.1.

Table 9.10.--Continued

Personal Characteristics							
Sex		Age		Degree		Experience	
Male	Female	Young	Old	Non-Doc.	Doc.	No College	College
10-27		15-30		30-16		10-36	
16	7	17	17	17	15	16	6
32	19	35	49	49	41	32	14
30	14	19	12	12	19	30	11
11-34		36-18		18-17		19-11	
11	13	6	14	14	8	16	19
43	35	14	34	34	20	36	43
28	11	11	15	15	18	15	28
		25-19		24-37		37-17	
		6	16	13	3	3	8
		8	36	35	5	5	20
		14	15	14	11	11	18
		22-26				24-18	
		4	10			13	14
		10	26			35	34
		15	13			14	15
		35-32				20-32	
		9	7			13	7
		27	19			27	19
		10	12			16	12

APPENDIX Q

Table 9.11.--Stage One Raw Data: Results of Significance by t Test on Degree of Difficulty of Office Space Problem as Related to Institutional Factors.

Personal Characteristics	Institutional Factors					
	Size		Control		Level	
	Small	Large	Private	Public	Under-graduate	Graduate
Sex:	243	406	362	287	478	171
Male	563	1028	862	729	1184	407
	333	480	493	320	569	244
			Pu>Pr			
Female	78	99	106	71	130	47
	178	253	248	183	304	127
	137	143	180	100	219	61
Age:	196	315	308	203	378	133
Young	458	793	744	507	934	317
	271	387	414	244	476	182
Old	116	176	150	142	215	77
	262	448	340	370	515	195
	188	229	249	168	301	116
			Pu>Pr			
Degree:	225	385	340	270	457	153
Non-Doctorate	527	979	814	692	1123	383
	348	461	486	323	618	191
	L>S					
Doctorate	96	142	130	88	156	62
	214	346	300	220	378	142
	127	168	194	101	180	115
					Un>Gr	
Experience:	184	308	280	212	383	109
No College	418	778	654	542	933	263
	275	378	399	254	490	163
College	137	202	190	149	230	109
	323	516	460	379	568	271
	200	252	281	171	308	144

Note: See explanation of numbers, bottom Table 9.1.

APPENDIX R

Table 9.12. --Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Office Space Problem as Related to Institutional Factors.

Institutional Factors					
Size		Control		Level	
Small	Large	Private	Public	Under-Grad.	Grad.
1-3*		3-2		2-10	
59	32	32	61	61	16
109	78	78	165	165	32
86	46	46	56	56	30
				Un>Gr	
29-1		20-27		3-12	
11	61	13	7	32	26
23	165	27	19	78	60
13	56	16	14	46	23
6-32		12-10		7-24	
23	7	26	16	35	13
55	19	60	32	93	35
32	12	23	30	34	14
8-20		14-16		11-31	
27	13	16	15	19	7
65	27	42	41	43	11
29	16	20	19	28	12
9-23		35-15		14-21	
18	14	9	17	16	5
42	36	27	35	42	9
30	14	10	19	20	16
11-14		21-17		16-17	
19	16	5	8	15	8
43	42	9	20	41	20
28	20	16	18	19	18

*Hyphenated numbers at top center of cell indicate matched-grouping numbers as assigned (Table 2.6). Other cell numbers explained in footnote of Table 9.1.

Table 9.12.--Continued

Institutional Factors				
Size		Control		Level
Small	Large	Private	Public	Under-Grad. Grad.
31-21		23-22		30-18
7	5	14	4	17 14
11	9	36	10	49 34
12	16	14	15	12 15
25-33		32-30		22-27
6	10	7	17	4 7
8	26	19	49	10 19
14	12	12	12	15 14
				33-28
				10 5
				26 13
				12 13

APPENDIX S

Table 9.13.--Stage One Raw Data; Results of Significance by t Test on Degree of Difficulty of Secretarial Help Problem as Related to Personal Characteristics.

Institutional Factors	Personal Characteristics							
	Sex		Age		Degree		Experience	
	Male	Female	Young	Old	Non-Doct.	Doc-torate	No College	College
Size: Small	345	92	264	159	315	127	251	191
	815	204	632	351	747	285	592	439
	318	124	255	175	328	118	259	187
	M>F							
	534	126	399	249	453	211	405	261
	1274	294	931	603	1075	501	961	619
Large	474	140	386	222	456	164	377	244
	M>F				D>ND			
	485	127	382	211	422	195	365	252
	1115	291	898	457	990	429	851	568
	493	170	409	242	479	190	395	274
	M>F							
Control: Private	394	91	281	197	346	143	291	200
	974	207	665	497	832	357	703	490
	299	94	232	155	305	92	241	157
	M>F				D>ND			
	608	170	487	272	580	207	481	306
	1450	394	1169	624	1378	487	1149	716
Level: Undergrad.	549	207	460	283	595	169	473	291
	M>F				D>ND			
	271	48	176	136	188	131	175	146
	639	104	394	330	444	299	405	342
	243	57	181	114	189	113	163	140
Graduate								

Note: See meaning of numbers, bottom Table 9.1.

APPENDIX T

Table 9.14. --Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Secretarial Help Problem as Related to Personal Characteristics.

Personal Characteristics							
Sex		Age		Degree		Experience	
Male	Female	Young	Old	Non-Doc.	Doc.	No College	College
1-9*		1-8		1-25		1-5	
87	12	87	39	87	12	87	39
219	26	219	89	219	28	219	91
87	29	87	29	87	14	87	33
M>F							
2-22		2-7		3-33		2-15	
69	7	69	42	32	14	69	27
163	19	163	102	72	28	163	67
55	15	55	33	45	12	55	19
3-23		3-20		8-19		3-35	
32	19	32	16	39	16	32	6
72	49	72	36	89	28	72	14
45	14	45	16	29	14	45	11
8-4		9-4		12-28		4-13	
39	17	12	17	25	12	17	15
89	31	26	31	57	28	31	33
29	32	29	32	24	13	32	19
M>F							
6-13		5-6		13-34		8-6	
27	15	39	27	15	15	39	27
55	33	91	55	33	35	89	55
33	19	33	33	19	11	29	33
7-26		10-24		32-14		7-30	
42	9	22	25	11	19	42	12
102	17	48	65	27	43	102	30
33	12	29	15	11	18	33	12
		O>Y					

* Hyphenated numbers at top center of cell indicate matched-grouping numbers as assigned (Table 2.6). Other cell numbers explained in footnote of Table 9.1.

Table 9.14.--Continued

Personal Characteristics							
Sex		Age		Degree		Experience	
Male	Female	Young	Old	Non-Doc.	Doc.	No College	College
10-27		15-30		30-16		10-36	
22	9	27	12	12	19	22	16
48	15	67	30	30	45	48	40
29	14	19	12	12	16	29	11
11-34		36-18		18-17		19-11	
27	15	16	22	22	22	16	27
57	35	40	56	56	56	28	57
29	11	11	17	16	17	14	29
		25-19		24-37		37-17	
		12	16	25	21	21	22
		28	28	65	51	51	56
		14	14	15	11	11	17
		22-26				24-18	
		7	9			25	22
		19	17			65	56
		15	12			15	16
		35-22				20-32	
		6	11			16	11
		14	17			36	27
		11	11			16	11

APPENDIX U

Table 9.15.--Stage One Raw Data: Results of Significance by t Test on Degree of Difficulty of Secretarial Help Problem as Related to Institutional Factors.

Personal Characteristics	Institutional Factors					
	Size		Control		Level	
	Small	Large	Private	Public	Under-graduate	Graduate
Sex:	358	534	488	404	618	274
Male	852	1274	1124	1002	1478	648
	334	474	494	314	562	246
	Pu>Pr					
Female	99	126	127	98	177	48
	219	294	291	222	409	104
	134	140	174	100	213	61
Age:	278	399	385	292	498	179
Young	672	931	907	696	1200	403
	269	386	411	244	470	185
	Pu>Pr					
Old	165	249	211	203	278	136
	363	603	457	509	636	330
	186	222	245	163	291	117
	L>S		Pu>Pr			
Degree:	330	453	422	361	595	188
Non-Doctorate	788	1075	990	873	1419	444
	347	456	482	321	610	193
	Pu>Pr					
Doctorate	132	211	198	145	209	134
	296	501	438	359	489	308
	125	164	192	97	173	116
	Pu>Pr					
Experience:	263	405	368	300	490	178
No College	625	961	860	726	1172	414
	274	377	399	252	483	167
	Pu>Pr					
College	199	261	252	208	314	146
	459	619	568	510	736	342
	198	244	275	167	299	143
	Pu>Pr					

Note: See explanation of numbers, bottom Table 9.1.

APPENDIX V

Table 9.16. --Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Secretarial Help Problem as Related to Institutional Factors.

Institutional Factors					
Size		Control		Level	
Small	Large	Private	Public	Under-Grad.	Grad.
1-3 *		3-2		2-10	
87	32	32	69	69	22
219	72	72	163	163	48
87	45	45	55	55	29
		Pu>Pr			
29-2		20-27		3-12	
21	69	16	9	32	25
53	163	36	15	72	57
13	55	16	14	45	24
6-32		12-10		7-24	
27	11	25	22	42	25
55	27	57	48	102	65
33	11	24	29	33	15
8-20		14-16		11-31	
39	16	19	19	27	12
89	36	43	45	57	24
29	16	18	16	29	12
9-23		35-15		14-21	
12	19	6	27	19	13
26	49	14	67	43	23
29	14	11	19	18	16
L>S					
11-14		21-17		16-17	
27	19	13	22	19	22
57	43	23	56	45	56
29	18	16	17	16	17

* Hyphenated numbers at top center of cell indicate matched-grouping numbers as assigned (Table 2.6). Other cell numbers explained in footnote of Table 9.1.

Table 9.16.--Continued

Institutional Factors				
Size		Control		Level
Small	Large	Private	Public	Under-Grad. Grad.
31-21		23-22		30-18
12	13	19	7	12 22
24	23	49	19	30 56
12	16	14	15	12 16
25-33		32-30		22-27
12	14	11	12	7 9
28	28	27	30	19 15
14	12	11	12	15 14
				33-28
				14 12
				28 28
				12 13

APPENDIX W

Table 9.17. --Stage One Raw Data; Results of Significance by t Test on Degree of Difficulty of Understanding Promotions Problem as Related to Personal Characteristics.

Institutional Factors	Personal Characteristics							
	Sex		Age		Degree		Experience	
	Male	Female	Young	Old	Non-Doct.	Doctorate	No College	College
Size: Small	277	82	241	109	284	103	218	149
	619	178	545	229	646	213	500	319
	319	122	258	173	327	119	257	189
			Y>O					
	488	134	389	215	458	166	368	258
	1104	314	875	497	1038	382	816	608
	482	140	389	226	461	167	376	253
Control: Private	415	117	362	158	397	142	317	222
	919	249	802	338	879	306	701	484
	498	166	414	240	480	191	393	278
			Y>O					
	350	99	268	166	345	107	269	185
	804	243	618	388	805	249	615	443
	303	96	233	159	308	95	240	164
Level: Undergrad.	541	160	465	219	562	150	444	268
	1215	356	1045	481	1268	330	990	608
	558	204	467	285	600	172	474	298
	M>F		Y>O					
	224	56	165	105	198	99	142	139
	508	136	375	245	470	225	326	319
	243	58	180	114	188	114	159	144
Graduate	224	56	165	105	198	99	142	139
	508	136	375	245	470	225	326	319
	243	58	180	114	188	114	159	144

Note: See meaning of numbers, bottom Table 9.1.

APPENDIX X

Table 9. 18. --Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Understanding Promotions Problem as Related to Personal Characteristics.

Personal Characteristics							
Sex		Age		Degree		Experience	
Male	Female	Young	Old	Non-Doc.	Doc.	No College	College
1-9*		1-8		1-25		1-5	
72	31	72	24	72	7	72	37
168	67	168	54	168	11	168	79
87	30	87	31	87	14	87	24
2-22		2-7		3-33		2-15	
76	8	76	31	41	8	76	22
182	13	182	63	85	12	182	52
56	16	56	33	46	12	56	20
M>F							
3-23		3-20		8-19		3-35	
41	14	41	10	24	14	41	15
85	28	85	22	54	32	85	31
46	13	46	16	31	15	46	11
8-4		9-4		12-28		4-13	
24	16	31	16	17	10	16	12
54	34	67	34	43	28	34	30
31	30	30	30	23	13	30	19
6-13		5-6		13-34		8-6	
15	12	37	15	12	2	24	15
29	30	79	29	30	2	54	29
33	19	34	33	19	11	31	33
		Y>O					
7-26		10-24		32-14		7-30	
31	15	21	13	9	14	31	12
63	35	37	29	17	28	63	43
33	12	29	14	12	19	33	17

* Hyphenated numbers at top center of cell indicate matched-grouping numbers as assigned (Table 2.6). Other cell numbers explained in footnote of Table 9. 1.

Table 9.18. --Continued

Personal Characteristics							
Sex		Age		Degree		Experience	
Male	Female	Young	Old	Non-Doc.	Doc.	No College	College
10-27		15-30		30-16		10-36	
21	12	22	17	17	22	21	11
37	28	52	43	43	56	37	25
29	14	20	12	12	17	29	13
11-34		36-18		18-17		19-11	
30	2	13	19	19	18	14	30
66	2	25	43	43	36	32	66
29	11	11	17	17	14	15	29
M>F							
		25-19		24-37		37-17	
		7	14	13	14	14	14
		11	32	29	36	36	36
		14	15	14	11	11	18
		22-26				24-18	
		8	15			13	19
		13	35			29	43
		16	12			14	17
		35-22				20-32	
		15	9			10	9
		31	17			22	17
		11	12			16	12

APPENDIX Y

Table 9.19. --Stage One Raw Data; Results of Significance by t Test on Degree of Difficulty of Understanding Promotions Problem as Related to Institutional Factors.

Personal Characteristics	Institutional Factors					
	Size		Control		Level	
	Small	Large	Private	Public	Under-graduate	Graduate
Sex:	288	488	415	361	552	224
Male	640	1104	919	825	1236	508
	335	482	499	318	571	246
			Pu>Pr			
Female	86	134	117	103	164	56
	186	314	249	251	364	136
	132	140	170	102	210	62
	L>S		Pu>Pr			
Age:	251	389	362	278	475	165
Young	567	875	802	640	1067	375
	272	389	416	245	477	184
			Pu>Pr			
Old	113	215	158	170	223	105
	235	497	338	394	487	245
	184	226	243	167	293	117
	L>S		Pu>Pr			
Degree:	297	458	397	358	575	180
Non-Doctorate	673	1038	879	832	1295	416
	346	461	483	324	615	192
			Pu>Pr			
Doctorate	85	166	142	109	152	99
	175	382	306	251	332	225
	126	167	193	100	176	117
			Pu>Pr			
Experience:	227	368	317	278	451	142
No College	519	816	701	634	1005	326
	272	376	397	251	485	163
College	155	258	222	191	274	139
	329	608	484	453	618	319
	200	253	279	174	306	147
	L>S					

Note: See explanation of numbers, bottom Table 9.1.

APPENDIX Z

Table 9.20. --Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Understanding Promotions Problem as Related to Institutional Factors.

Institutional Factors					
Size		Control		Level	
Small	Large	Private	Public	Under-Grad.	Grad.
1-3*		3-2		2-10	
72	41	41	76	76	21
168	85	85	182	182	37
87	46	46	56	56	29
		Pu>Pr		Un>Gr	
29-2		2-27		3-12	
19	76	10	12	41	17
53	182	22	28	85	43
12	56	16	14	46	23
6-32		12-10		7-24	
15	9	17	21	31	13
29	17	43	37	63	29
33	12	23	29	33	14
8-20		14-16		11-31	
24	10	14	22	30	7
54	22	28	56	66	9
31	16	19	17	29	12
9-23		35-15		14-21	
31	14	15	22	14	6
67	28	31	52	28	10
30	13	11	20	19	16
11-14		21-17		16-17	
30	14	6	14	22	14
66	28	10	36	56	36
29	19	16	18	17	18

* Hyphenated numbers at top center of cell indicate matched-grouping numbers as assigned (Table 2.6). Other cell numbers explained in footnote of Table 9.1.

Table 9.20.--Continued

Institutional Factors				
Size		Control		Level
Small	Large	Private	Public	Under-Grad. Grad.
31-21		23-22		30-18
7	6	14	8	17 19
9	10	28	13	43 43
12	16	13	16	12 17
25-33		32-30		22-27
7	8	9	17	8 12
11	12	17	43	13 28
14	12	12	12	16 14
				33-28
				8 10
				12 28
				12 13

APPENDIX AA

Table 9.21. --Stage One Raw Data; Results of Significance by t Test on Degree of Difficulty of Teaching Aids Problem as Related to Personal Characteristics.

Institutional Factors	Personal Characteristics							
	Sex		Age		Degree		Experience	
	Male	Female	Young	Old	Non-Doct.	Doc-torate	No College	College
Size: Small	304	90	240	147	291	109	215	185
	636	178	498	299	605	223	443	385
	317	122	255	176	324	120	256	188
	M>F							
Large	429	125	329	220	408	153	324	237
	901	279	699	466	880	313	686	507
	478	141	388	226	457	168	377	249
Control: Private	435	131	349	208	413	162	316	259
	911	261	725	424	861	332	656	537
	492	171	411	244	479	191	394	276
Public	298	84	220	159	286	100	223	163
	626	196	472	341	624	204	473	355
	303	92	232	158	302	97	239	161
Level: Undergrad.	529	172	438	255	557	154	416	295
	1115	362	934	521	1189	310	890	609
	553	207	462	289	594	175	473	296
Graduate	204	43	131	112	142	108	123	127
	422	95	263	244	296	226	239	283
	242	56	181	113	187	113	160	141
			O>Y					

Note: See meaning of numbers, bottom Table 9.1.

APPENDIX BB

Table 9.22. --Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Teaching Aids Problem as Related to Personal Characteristics.

Personal Characteristics							
Sex		Age		Degree		Experience	
Male	Female	Young	Old	Non-Doc.	Doc.	No College	College
1-9*		1-8		1-25		1-5	
86	18	86	23	86	8	86	45
192	34	192	39	192	16	192	95
85	29	85	31	85	14	85	34
2-22		2-7		3-33		2-15	
60	14	60	21	35	10	60	26
134	38	134	43	77	18	134	56
56	14	56	33	44	12	56	20
3-23		3-20		8-19		3-35	
35	12	35	11	23	13	35	12
77	26	77	27	39	27	77	26
44	15	44	16	31	16	44	10
8-4		9-4		12-18		4-13	
23	21	18	21	18	8	21	14
39	35	34	35	36	18	35	32
31	33	29	33	25	13	33	19
6-13		5-6		13-34		8-6	
24	14	45	24	14	13	23	24
44	32	95	44	32	27	39	44
31	19	34	31	19	11	31	31
		Y>O					
7-26		10-24		32-14		7-30	
21	14	21	13	12	18	21	13
43	30	39	25	30	36	43	25
33	13	29	14	12	18	33	12

* Hyphenated numbers at top center of cell indicate matched-grouping numbers as assigned (Table 2.6). Other cell numbers explained in footnote of Table 9.1.

Table 9.22--Continued

Personal Characteristics							
Sex		Age		Degree		Experience	
Male	Female	Young	Old	Non-Doc.	Doc.	No College	College
10-27		15-30		30-16		10-36	
21	3	26	13	13	17	21	9
39	3	56	25	25	33	39	23
29	14	20	12	12	19	29	11
M>F							
11-34		36-18		18-17		19-11	
27	13	9	14	14	13	13	27
57	27	23	34	34	23	27	57
29	11	11	16	16	18	16	29
		25-19		24-37		37-17	
		8	13	13	14	14	13
		16	27	25	28	28	23
		14	16	14	11	11	18
		22-26				24-18	
		14	14			13	14
		38	30			25	34
		14	13			14	16
		35-32				20-32	
		12	12			11	12
		26	30			27	30
		10	12			16	12

APPENDIX CC

Table 9.23. --Stage One Raw Data; Results of Significance by t Test on Degree of Difficulty of Teaching Aids Problem as Related to Institutional Factors.

Personal Characteristics	Institutional Factors					
	Size		Control		Level	
	Small	Large	Private	Public	Under-graduate	Graduate
Sex:	323	429	435	317	548	204
Male	683	901	911	673	1162	422
	332	478	493	317	565	245
Female	95	125	132	88	176	44
	189	279	262	206	372	96
	132	141	175	98	213	60
Age:	253	329	349	233	451	131
Young	529	699	725	503	765	209
	269	388	413	244	472	185
Old	155	220	209	166	262	113
	317	466	425	358	538	245
	186	226	247	165	296	116
Degree:	315	408	414	309	580	143
Non-Doctorate	663	880	862	681	1246	297
	343	457	482	318	609	191
Doctorate	109	153	162	100	154	108
	223	313	332	204	310	226
	126	168	193	101	178	116
Experience:	190	324	317	237	430	124
No College	400	686	657	509	926	240
	271	377	398	250	484	164
College	194	237	259	172	304	127
	406	507	537	376	630	283
	198	249	277	170	303	144

Note: See explanation of numbers, bottom Table 9.1.

APPENDIX DD

Table 9.24. --Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Teaching Aids Problem as Related to Institutional Factors.

Institutional Factors					
Size		Control		Level	
Small	Large	Private	Public	Under-Grad.	Grad.
1-3 *		3-2		2-10	
86	35	35	60	60	21
192	77	77	134	134	39
85	44	44	56	56	29
29-2		20-27		3-12	
21	60	11	3	35	18
49	134	27	3	77	36
13	56	16	14	44	25
6-32		12-10		7-24	
24	12	18	21	21	13
44	30	36	39	43	25
31	12	25	29	33	14
8-20		14-16		11-31	
23	11	18	17	27	11
39	27	36	33	57	23
31	16	29	12	18	19
9-23		35-15		14-21	
18	12	12	26	18	12
34	26	26	56	36	22
29	15	10	20	18	15
11-14		21-17		16-17	
27	18	12	13	17	13
57	36	22	23	33	23
29	18	15	18	19	18

* Hyphenated numbers at top center of cell indicate matched-grouping numbers as assigned (Table 2.6). Other cell numbers explained in footnote of Table 9.1.

Table 9.24.--Continued

Institutional Factors					
Size		Control		Level	
Small	Large	Private	Public	Under-Grad.	Grad.
31-21		23-22		30-18	
11	12	12	14	13	14
23	22	26	38	25	34
12	15	15	14	12	16
25-33		32-20		22-27	
8	10	12	13	14	3
16	18	30	25	38	3
14	12	12	12	14	14
				33-28	
				10	8
				18	18
				12	13

APPENDIX EE

Table 9.25. --Stage One Raw Data; Results of Significance by t Test on Degree of Difficulty of Effective Lectures Problem as Related to Personal Characteristics.

Institutional Factors	Personal Characteristics							
	Sex		Age		Degree		Experience	
	Male	Female	Young	Old	Non-Doct.	Doc-torate	No College	College
Size:	213	91	190	112	231	76	223	84
	363	155	326	188	393	130	387	136
	324	121	258	177	328	121	261	188
Large							NC>C	
	311	98	285	168	321	92	282	132
	541	158	491	250	541	166	472	236
	479	143	389	228	459	170	377	253
					ND>D		NC>C	
Control: Private	348	128	321	154	355	127	342	140
	606	214	559	258	607	223	590	240
	501	172	416	247	485	195	400	280
Public			Y>O				NC>C	
	176	61	154	80	197	41	163	76
	298	99	258	134	327	73	269	132
	302	92	231	158	302	96	238	161
					ND>D		NC>C	
Level: Undergrad.	371	156	348	180	432	101	383	180
	631	260	594	298	734	167	647	344
	561	208	467	292	600	178	479	309
Graduate			Y>O		ND>D		NC>C	
	153	33	127	54	120	67	122	66
	273	53	223	94	200	129	212	118
	242	56	180	113	187	113	159	142
			Y>O				NC>C	

Note: See meaning of numbers, bottom Table 9.1.

APPENDIX FF

Table 9.26. --Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Effective Lectures Problem as Related to Personal Characteristics.

Personal Characteristics						
Sex		Age		Degree		Experience
Male	Female	Young	Old	Non-Doc.	Doc.	No College College
1-9 *		1-8		1-25		1-5
79	26	79	26	79	10	79 11
145	42	145	46	145	14	145 11
88	30	88	31	88	14	88 34
						NC>C
2-22		2-7		3-33		2-15
38	14	38	14	40	10	38 14
60	22	60	24	68	16	60 24
55	16	55	33	44	12	55 20
3-23		3-20		8-19		3-35
40	11	40	9	26	19	40 11
68	15	68	13	46	33	68 23
44	15	44	16	31	16	44 11
8-4		9-4		12-28		4-13
26	28	26	28	20	11	28 11
46	50	42	50	34	23	50 15
31	32	30	32	25	13	32 20
6-13		5-6		13-14		8-6
14	11	11	14	11	8	26 14
24	15	11	24	15	16	46 24
33	20	34	33	20	10	31 33
						NC>C
7-26		10-24		32-14		7-30
14	10	21	9	4	12	14 8
24	18	31	17	6	20	24 14
33	13	28	13	11	20	33 12

* Hyphenated numbers at top center of cell indicate matched-grouping numbers as assigned (Table 2.6). Other cell numbers explained in footnote of Table 9.1.

Table 9.26. --Continued

Personal Characteristics						
Sex		Age		Degree		Experience
Male	Female	Young	Old	Non-Doc.	Doc.	No College College
10-27		15-30		30-16		10-16
21	13	14	8	8	2	21 8
31	23	24	14	2	31	31 16
28	14	20	12	12	19	28 11
11-34		26-18		18-17		19-11
12	8	8	4	4	11	19 12
22	16	16	6	6	23	33 22
29	10	11	16	16	18	16 29
						NC>C
		25-19		24-37		37-17
		10	19	9	5	5 11
		14	33	17	7	7 23
		14	16	13	11	11 18
		22-26				24-18
		14	10			9 4
		22	18			17 6
		16	13			13 16
		35-32				20-32
		11	4			9 4
		23	6			13 6
		11	11			16 11

APPENDIX GG

Table 9.27. --Stage One Raw Data; Results of Significance by t Test on degree of Difficulty of Effective Lectures Problem as Related to Institutional Factors.

Personal Characteristics	Institutional Factors					
	Size		Control		Level	
	Small	Large	Private	Public	Under-graduate	Graduate
Sex:	222	311	350	183	376	157
Male	376	541	610	307	636	281
	340	479	502	316	574	245
			Pr>Pu			
Female	97	98	131	64	159	36
	165	158	219	104	265	58
	130	143	175	98	214	59
Age:	200	285	323	162	354	131
Young	342	491	563	270	602	231
	271	389	417	243	477	183
Old	117	168	157	82	182	57
	195	250	263	136	300	99
	188	228	250	166	300	116
Degree:	240	321	358	203	438	123
Non-Doctorate	406	541	612	335	742	205
	347	459	488	318	615	191
Doctorate	82	92	129	45	103	71
	140	166	227	79	169	137
	127	170	196	101	182	115
			Pr>Pu			
Experience:	234	282	347	169	389	127
No College	234	472	599	277	655	221
	275	377	403	249	490	162
			Pr>Pu			
College	88	132	140	80	152	68
	142	236	240	138	256	122
	199	253	281	171	307	145

Note: See explanation of numbers, bottom Table 9.1.

APPENDIX HH

Table 9.28.--Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Effective Lectures Problem as Related to Institutional Factors.

Institutional Factors					
Size		Control		Level	
Small	Large	Private	Public	Under-Grad.	Grad.
1-3 *		3-2		2-10	
79	40	40	38	38	21
145	68	68	60	60	31
88	44	44	55	55	28
29-2		20-27		3-12	
13	38	9	13	40	20
23	60	13	23	68	34
13	55	16	14	44	25
6-32		12-10		7-24	
14	4	20	21	14	9
24	6	34	31	24	17
33	11	25	28	33	13
8-20		14-16		11-31	
26	9	12	2	12	5
46	13	20	2	22	7
31	16	20	19	29	12
		Pr>Pu			
9-23		35-15		14-21	
26	11	11	14	12	3
42	15	23	24	20	5
30	15	11	20	20	16
11-14		21-17		16-17	
12	12	3	11	2	11
22	20	5	23	2	23
29	20	16	18	19	18
				Gr>Un	

* Hyphenated numbers at top center of cell indicate matched-grouping numbers as assigned (Table 2.6). Other cell numbers explained in footnote of Table 9.1.

Table 9.28.--Continued

Institutional Factors					
Size		Control		Level	
Small	Large	Private	Public	Under-Grad.	Grad.
31-21		23-22		30-18	
5	3	11	14	8	4
7	5	15	22	14	6
12	16	15	16	12	16
25-33		32-30		22-27	
10	10	4	8	14	13
14	16	6	14	22	23
14	12	11	12	16	14
				33-28	
				10	11
				16	23
				12	13

APPENDIX II

Table 9.29. --Stage One Raw Data; Results of Significance by t Test on Degree of Difficulty of Effective Discussions Problem as Related to Personal Characteristics.

Institutional Factors	Personal Characteristics							
	Sex		Age		Degree		Experience	
	Male	Female	Young	Old	Non-Doct.	Doc-torate	No College	College
Size:	Small		198	108	223	89	200	110
			342	200	389	167	350	202
			252	179	327	118	259	186
			Y>O					
	Large		294	120	315	107	273	149
			548	208	573	197	497	273
			386	225	456	167	373	251
			Y>O					
	Control: Private		330	155	355	138	331	166
			594	279	637	254	601	298
			411	246	481	192	399	276
Control:			Y>O				NC>C	
	Public		162	73	168	58	148	93
			296	129	280	110	258	177
			227	158	302	93	235	161
			Y>O					
	Level: Undergrad.		343	178	406	121	345	182
			609	328	736	215	607	344
			460	289	594	173	474	293
			Y>O					
	Graduate		149	50	132	75	130	77
			281	80	226	149	244	131
			178	115	189	112	158	144
			Y>O				NC>C	

Note: See meaning of numbers, bottom Table 9.1.

APPENDIX JJ

Table 9.30.--Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Effective Discussions Problem as Related to Personal Characteristics.

Personal Characteristics							
Sex		Age		Degree		Experience	
Male	Female	Young	Old	Non-Doc.	Doc.	No College	College
1-9*		1-8		1-25		1-5	
72	25	72	20	72	11	72	20
136	43	136	34	136	17	136	30
88	28	88	31	88	14	88	33
2-22		2-7		3-33		2-15	
29	9	47	15	35	9	29	16
47	13	47	29	61	13	47	32
54	15	54	33	44	12	54	20
3-23		3-20		8-19		3-35	
35	8	35	16	20	16	35	12
61	12	61	36	34	28	61	20
44	15	44	16	31	16	44	11
8-4		9-4		12-28		4-13	
20	29	25	29	21	8	29	6
34	53	43	53	35	20	53	10
31	33	28	33	25	13	33	19
						NC>C	
6-13		5-6		13-14		8-6	
17	6	20	17	6	7	20	17
33	10	30	33	10	13	34	33
32	19	33	32	19	10	31	32
7-26		10-24		32-14		7-30	
15	10	25	8	8	12	15	5
29	16	51	12	14	20	29	9
33	13	27	13	11	19	33	11

* Hyphenated numbers at top center of cell indicate matched-grouping numbers as assigned (Table 2.6). Other cell numbers explained in footnote of Table 9.1.

Table 9.30. --Continued

Personal Characteristics							
Sex		Age		Degree		Experience	
Male	Female	Young	Old	Non-Doc.	Doc.	No College	College
10-27		15-30		30-16		10-36	
25	14	16	5	12	35	25	6
51	26	32	9	9	24	51	8
27	14	20	11	11	18	27	11
11-34		36-18		18-17		19-11	
17	7	6	4	4	8	16	17
31	13	8	6	14	31	28	31
29	10	11	16	16	18	16	29
		25-19		24-37		37-17	
		11	16	8	8	8	8
		17	28	12	18	18	14
		14	16	13	11	11	18
		22-26				24-18	
		9	10			8	4
		13	16			12	6
		15	13			13	16
		35-32				20-32	
		12	8			16	8
		20	14			36	14
		11	11			16	11

APPENDIX KK

Table 9.31. --Stage One Raw Data; Results of Significance by t Test on degree of Difficulty of Effective Discussions Problem as Related to Institutional Factors.

Personal Characteristics	Institutional Factors					
	Size		Control		Level	
	Small	Large	Private	Public	Under-graduate	Graduate
Sex:	236	320	368	188	389	167
Male	414	586	666	334	697	303
	336	474	499	311	566	244
			Pr>Pu			
Female	92	103	127	63	144	46
	168	178	229	117	262	84
	131	142	173	100	211	62
Age:	208	294	334	168	347	155
Young	360	548	602	306	615	293
	266	386	413	239	470	182
Old	114	120	156	78	183	63
	208	208	280	136	335	105
	190	225	249	166	297	118
					Un>Gr	
Degree:	230	315	356	189	412	133
Non-Doctorate	398	573	638	333	744	227
	346	456	484	318	609	193
			Pr>Pu			
Doctorate	98	107	142	63	124	81
	184	197	262	119	220	161
	125	167	194	98	177	115
Experience:	212	273	332	153	350	135
No College	370	497	602	265	614	253
	274	373	401	246	485	162
			Pr>Pu			
College	116	149	166	99	186	79
	212	273	298	187	350	135
	197	251	277	171	301	147

Note: See explanation of numbers, bottom Table 9.1.

APPENDIX LL

Table 9.32. --Stage Two Raw Data; Results of Significance by t Test on Degree of Difficulty of Effective Discussions Problem as Related to Institutional Factors.

Institutional Factors					
Size		Control		Level	
Small	Large	Private	Public	Under-Grad.	Grad.
1-3*		3-2		2-10	
72	35	35	29	29	25
136	61	61	47	47	51
88	44	44	54	54	27
29-2		20-27		3-12	
10	29	16	14	35	21
12	47	36	26	61	35
12	54	16	14	44	25
6-32		12-10		7-24	
17	8	21	25	15	8
33	14	35	51	29	12
32	11	25	27	33	13
8-20		14-16		11-31	
20	16	12	12	17	6
34	36	20	24	31	10
28	15	11	20	19	16
9-23		35-15		14-21	
25	8	12	16	12	4
43	12	20	32	20	6
28	15	11	20	19	16
11-14		21-17		16-17	
17	12	4	8	12	8
31	20	6	14	24	14
29	19	16	18	18	18

*Hyphenated numbers at top center of cell indicate matched-grouping numbers as assigned (Table 2.6). Other cell numbers explained in footnote of Table 9.1.

Table 9.32.--Continued

Institutional Factors					
Size		Control		Level	
Small	Large	Private	Public	Under-Grad.	Grad.
31-21		23-22		30-18	
6	4	8	9	5	4
10	6	12	13	9	6
12	16	15	15	11	16
25-33		32-30		22-27	
11	9	8	5	9	14
17	13	14	9	13	26
14	12	11	11	15	14
				33-28	
				9	8
				13	20
				12	13

APPENDIX MM

N. C. A. COLLEGES AND UNIVERSITIES PARTICIPATING IN STUDY

First- and third-year faculty members of the following NCA colleges and universities, listed by states, were used in carrying out this study:

Arkansas

Arkansas Agricultural and Mechanical College, College Heights
Arkansas Polytechnic College, Russellville
Arkansas State Teachers College, Conway
College of the Ozarks, Clarksville
Harding College, Searcy
Hendrix College, Conway
Ouachita Baptist College, Arkadelphia
Southern State College, Magnolia

Colorado

Adams State College, Alamosa
Western State College of Colorado, Dunnison

Illinois

Augustana College, Rock Island
Blackburn College, Carlinville
Concordia Teachers College, River Forest
Elmhurst College, Elmhurst
Illinois Wesleyan University, Bloomington
Knox College, Galesburg
Lake Forest College, Lake Forest
Millikin University, Decatur
Monmouth College, Monmouth
Mundelein College, Chicago 40
National College of Education, Evanston
Northern Baptist Theological Seminary, Chicago 12
Rockford College, Rockford
Rosary College, River Forest
St. Procopius College, Lisle
St. Xavier College, Chicago 43
School of the Art Institute of Chicago, Chicago 3
Wheaton College, Wheaton

Indiana

Anderson College, Anderson
Earlham College, Richmond
Evansville College, Evansville 4
Hanover College, Hanover

Indiana Central College, Indianapolis 27
 Manchester College, North Manchester
 Marian College, Indianapolis 22
 Rose Polytechnic Institute, Terre Haute
 Saint Francis College, Fort Wayne 8
 Taylor University, Upland
 Valparaiso University, Valparaiso

Iowa

Briar Cliff College, Sioux City 3
 Buena Vista College, Storm Lake
 Central College, Pella
 Clarke College, Dubuque
 Cornell College, Mount Vernon
 Grinnell College, Grinnell
 Parsons College, Fairfield
 Upper Iowa University, Fayette
 Wartburg College, Waverly

Kansas

Baker University, Baldwin
 Fort Hays Kansas State College, Hays
 Friends University, Wichita 13
 Kansas State College of Pittsburg, Pittsburg
 Kansas Wesleyan University, Salina
 Marymount College, Salina
 Ottawa University, Ottawa
 St. Benedict's College, Atchison
 Saint Mary College, Xavier
 Southwestern College, Winfield
 Washburn University of Topeka, Topeka

Michigan

Albion College, Albion
 Aquinas College, Grand Rapids 6
 Emmanuel Missionary College, Berrien Springs
 Hope College, Holland
 Marygrove College, Detroit 21
 Mercy College, Detroit 19
 Northern Michigan University, Marquette
 Siena Heights College, Adrian

Minnesota

Augsburg College and Theological Seminary, Minneapolis 4
 Bemidji State College, Bemidji
 Bethel College, St. Paul 1

College of St. Benedict, St. Joseph
 College of St. Catherine, St. Paul 5
 St. John's University, Collegeville
 St. Olaf College, Northfield
 St. Paul Seminary, St. Paul 1
 Winona State College, Winona

Missouri

College of St. Teresa, Kansas City 13
 Culver-Stockton College, Canton
 Drury College, Springfield 2
 Fontbonne College, St. Louis 5
 Lincoln University, Jefferson City
 Maryville College of the Sacred Heart, St. Louis 18
 Missouri Valley College, Marshall
 Northwest Missouri State College, Maryville
 Park College, Parkville
 Tarkio College, Tarkio
 Westminster College, Fulton

Nebraska

College of St. Mary, Omaha
 Concordia Teachers College, Seward
 Nebraska State Teachers College, Chadron
 Nebraska State Teachers College, Peru
 Nebraska State Teachers College at Wayne, Wayne
 Union College, Lincoln 6

New Mexico

New Mexico Institute of Mining and Technology, Socorro
 New Mexico Western College, Silver City

North Dakota

Jamestown College, Jamestown
 State Teachers College, Dickinson
 State Teachers College, Minot
 State Teachers College, Valley City

Ohio

Baldwin-Wallace College, Berea
 Bluffton College, Bluffton
 Central State College, Wilberforce
 Heidelberg College, Tiffin 4
 Kenyon College, Gambier
 Mount Union College, Alliance

Muskingum College, New Concord
 Oberlin College, Oberlin
 Ohio Wesleyan University, Delaware
 Our Lady of Cincinnati College, Cincinnati 6
 Saint John College of Cleveland, Cleveland 14
 Western College for Women, Oxford
 Wilmington College, Wilmington

Oklahoma

Bethany Nazarene College, Bethany
 Langston University, Langston
 Northeastern State College, Tahlequah
 Northwestern State College, Alva
 Oklahoma College for Women, Chickasha
 Panhandle Agricultural and Mechanical College, Goodwell
 Phillips University, Enid

South Dakota

Augustana College, Sioux Falls
 Black Hills Teachers College, Spearfish
 Huron College, Huron
 Sioux Falls College, Sioux Falls
 South Dakota School of Mines and Technology, Rapid City

West Virginia

Alderson-Broadus College, Philippi
 Bluefield State College, Bluefield
 Concord College, Athens
 Davis and Elkins College, Elkins
 Fairmont State College, Fairmont
 Glenville State College, Glenville
 Morris Harvey College, Charleston 4
 West Liberty State College, West Liberty
 West Virginia State College, Institute

Wisconsin

Alverno College, Milwaukee 15
 Carroll College, Waukesha
 Holy Family College, Manitowoc
 Lawrence College, Appleton
 Northland College, Ashland
 Ripon College, Ripon
 St. Norbert College, West De Pere
 Stout State College, Menomonie
 Wisconsin State College at La Crosse, La Crosse
 Wisconsin State College and Institute of Technology, Platteville
 Wisconsin State College, Stevens Point

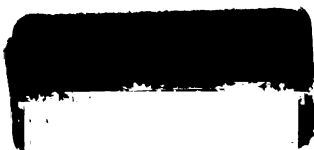
ROOM USE ONLY

~~FEB 14 1968~~ 125
~~FEB 14 1968~~ 116

~~FEB 17 1968~~ 3



This image shows a blank white page. There are dark, irregular borders along the top and bottom edges, which appear to be artifacts from scanning or the edges of the paper. The central area is completely empty and white.



MICHIGAN STATE UNIV. LIBRARIES



31293008080511