



PATRON:

This book has been wrapped to preserve it for your use. Please follow these procedures:

- 1) Remove wrap carefully, or ask Circulation staff to remove it for you.
- 2) Leave this band in place around the book.
- 3) Return book to the Circulation Desk.

CIRC STAFF:

Place unwrapped book with this band on Repair shelf.

**DO NOT PLACE THIS BOOK
IN A BOOK RETURN**

10109

Thank you,
Preservation Department

Branch: THESIS

CE IMPROVEMENT PROGRAMS
AL ARTS COLLEGES

Degree of Ed. D.
TATE UNIVERSITY
D. Garrett
1957

This is to c

thesis

A STUDY OF THE INS
PROGRAMS OF LIGHT I

prese

Cyril D.

has been accepted
of the requ

Ed. D. deq

Date September 11, 195



3 1293 10463 4294

~~0041871~~ 329

SS-127 p15

~~2222-202~~

A STUDY OF THE INSERVICE IMPROVEMENT PROGRAMS
OF EIGHT LIBERAL ARTS COLLEGES

by
Cyril D. Garrett

AN ABSTRACT

Submitted to the School for Advanced Graduate Studies of
Michigan State University of Agriculture and Applied Science
in partial fulfillment of the requirements
for the degree of

DOCTOR OF EDUCATION

Department of Teacher Education

Year 1957

Approved by Walker Hill

This study is concerned with the inservice improvement programs of eight liberal arts colleges in Illinois. It seeks to find out what inservice improvement activities are being used in these colleges and how the practice or lack of practice of these activities seem to relate to certain variables: faculty reactions to working conditions, the use of various teaching methods and techniques, student reactions to the teaching-learning situations, the size of the college, teacher-pupil ratio, teacher load, percentage of doctor's degrees on the faculty, and the average years of service of the faculty.

Check-list questionnaires were used to get information on the performance of inservice improvement activities, working conditions, the use of various teaching methods and techniques, and student reactions to the teaching-learning situations. Information on four variables was secured through personal interviews and information on one variable was obtained from college catalogs.

After the data was gathered, a descriptive report of the inservice activities being used in each college was written. Several statistical summaries employing the Chi-square test were used to determine what relationships, if any, may exist between certain inservice improvement activities and variables, or between areas of inservice improvement and variables.

The following is a brief summary of the major findings of this study:

1. There was much similarity as well as variation in the inservice programs of these eight colleges. There were qualitative and quantitative differences.

2. The eight colleges were facing similar problems in their efforts to have inservice programs.

3. A faculty ranking itself high on the performance of inservice activities was more likely to rank high on the other variables examined in this study.

4. There was a large number of inservice improvement activities which faculties desired to improve or initiate.

5. The administration has a key role to play in the planning and provision of inservice opportunities.

6. This study strongly suggests that a college co-operating with a collegiate organization in cooperative inservice studies is more likely to perform a greater variety of inservice activities and have more continuity to its program.

7. The statistical summaries of the data suggested that there were patterns of relationship between some inservice activities and certain variables, and some patterns of relationships between areas of inservice improvement and the variables. These, however, were not strong enough to make predictions of improvement on the basis of practicing some activity or area of inservice improvement.

8. There did not seem to be any general pattern of financing the inservice improvement programs in these eight colleges.

**A STUDY OF THE INSERVICE IMPROVEMENT PROGRAMS
OF EIGHT LIBERAL ARTS COLLEGES**

by
Cyril D. Garrett

A THESIS

**Submitted to the School for Advanced Graduate Studies of
Michigan State University of Agriculture and Applied Science
in partial fulfillment of the requirements
for the degree of**

DOCTOR OF EDUCATION

Department of Teacher Education

1957

ACKNOWLEDGMENTS

The author wishes to express his sincere thanks to his committee chairman, Dr. Walker Hill. Dr. Hill's guidance in this study, his generous contribution of his time, and his suggestions of procedure have been most helpful to the writer.

The author also is grateful to Dr. Carl Gross for his review of the instruments used in the study and for making suggestions for administering them. Dr. Wilbur Brookover, the author's cognate-area professor, was most helpful in his suggestions of how to summarize the data of the study. Dr. David Potter, representative of the Graduate School, also encouraged the author and made suggestions on the instruments used in the study. The author also received considerable help from Dr. Willard Warrington. He is especially indebted to Dr. Warrington for checking the statistical summaries and making suggestions to improve them.

This study could not have been carried through without the excellent cooperation afforded by the eight colleges. The students, faculty, and administrative officers were more than kind in giving their time and energy so the research could be completed.

Cyril D. Garrett
candidate for the degree of
Doctor of Education

Final examination, June 5, 1957, 2:00 P.M., Berkey Hall

Dissertation: A Study of the Inservice Improvement Programs
of Eight Liberal Arts Colleges

Outline of Studies:

Major Subject: Higher Education

Minor Subjects: Philosophy of Education, Sociology

Biographical Items:

Born, June 7, 1919, La Fayette, Alabama

Undergraduate Studies, John B. Stetson University, DeLand,
Florida, Bachelor of Arts in Secondary Education,
1948.

Graduate Studies, Michigan State University, 1948-49,
Master of Arts in Higher Education, December, 1949;
Michigan State University, Summers, 1950-51;
Northwestern University, Fall, Spring, 1952; Michi-
gan State University, Winter, Spring and Summer,
1955

Experience, Instructor of Army Boat Crews, 1942-1946;
Instructor of Education and Sociology, Wheaton
College, 1950-52; Director of Wheaton Academy,
1953-1955; Chairman, Department of Education and
Psychology, Wheaton College, 1955--

Member of Illinois Education Association, National Society
for Study of Education, National Association of
Secondary Principals, Association for Student
Teaching

TABLE OF CONTENTS

CHAPTER	PAGE
I. THE PROBLEM	1
A. Introduction to the Problem	1
B. The Problem	10
C. Limitations of the Study	15
D. Definition of Terms	15
E. Footnotes	19
II. INSERVICE EDUCATION IN THE LITERATURE ON THE IMPROVEMENT OF TEACHING	21
A. Introduction	21
B. Review of the Literature on Inservice Improvement of College Teaching	22
C. Summary	52
D. Footnotes	53
III. THE SURVEY INSTRUMENTS AND THE METHODS OF SUMMARIZING THE DATA FROM THE SURVEYS	58
A. The Survey Instruments	58
1. The Teacher Questionnaire	58
2. The Student Questionnaire	64
3. Interview with Administrative Officer	66
B. Methods of Summarizing the Data from the Surveys	66
1. The Teacher Questionnaire	66
2. Student Questionnaire	69
3. Interview with the Administrative Officer	69
4. Interviews with Faculty Personnel	70
5. Other Information	70
6. Statistical Procedures	71
C. Footnotes	72

TABLE OF CONTENTS (continued)

CHAPTER	PAGE
IV. THE COLLEGES IN THE STUDY AND THE METHODS EMPLOYED	
IN THE SURVEYS	73
A. Introduction	73
B. The Methods of Selecting Colleges	73
C. The Colleges in the Study and the Methods Used.	76
1. Augustana College	77
2. Greenville College	79
3. Illinois Wesleyan University	81
4. Knox College	83
5. Monmouth College	85
6. North Central College	87
7. Olivet Nazarene College	88
8. Wheaton College	90
D. Summary	91
E. Footnotes	92
V. INSERVICE IMPROVEMENT EFFORTS IN THE INDIVIDUAL	
LIBERAL ARTS COLLEGES	93
A. Introduction	93
B. Summary of the Colleges	94
1. College A	94
2. College B	106
3. College C	114
4. College D	124
5. College E	135
6. College F	149
7. College G	161
8. College H	170
C. Summary of the Chapter	180

TABLE OF CONTENTS (continued)

CHAPTER	PAGE
VI. SUMMARY AND CONCLUSIONS	182
A. Introduction	182
B. General Summaries and Findings from the Data .	183
C. Statistical Summaries and Findings from the Data	206
D. Conclusions	238
E. Suggestions for Further Study	243
BIBLIOGRAPHY	245
APPENDICES	261
Appendix A	262
Appendix B	265
Appendix C	267

LIST OF TABLES

TABLE	PAGE
I. Colleges performing the activities of the teacher questionnaire, pleased with working conditions, and desiring to improve or initiate inservice improvement activities	185
II. Scores of the eight colleges on the thirteen variables of the study	207
III. Rank orders of the eight colleges on the thirteen variables	210
IV. Results of Chi-square tests run on the items and the variables	214
V. Results of Chi-square tests run on the areas and the variables	227

1

CHAPTER I

THE PROBLEM

A. Introduction to the Problem

In 1947, the President's Commission on Higher Education issued its report¹ on conditions and its recommendations for meeting problems of American higher education. One of the topics with which the report was concerned was inservice education for college faculties. The Commission states: "The process of strengthening the effectiveness of the faculty cannot be left to chance."² In its recommendations the Commission urged: "That, to this end, (strengthening of college faculties) definite programs of inservice education be developed or expanded on every college or university campus."³

This study is concerned with the inservice improvement programs of eight selected liberal arts colleges. The writer was interested to know what inservice improvement practices were in use in the colleges and what inservice improvement efforts are being planned for the future. Also of interest to the writer was seeking to determine what relationships certain variables may have to the inservice improvement program. The following background material to the problem was the source from which the writer's interest in this study developed.

One phase of the Commission's report (Chapter II, "Education for All") dealt with the phenomenal growth of the educational enterprise in America since the turn of the century. The report pointed out⁴ that only eleven percent of American youth were in high school in 1900, as compared with 73 percent in 1940. This was an increase in number of about 6,300,000. In 1900, four percent, or less than 250,000 students, were attending college; whereas, in 1940, the figure had risen to 1,500,000, or a little less than sixteen percent.

In projecting the growth pattern of higher education on the basis of birth records, the Commission recommended⁵ that a minimum of 4,600,000 students should be enrolled in "non-profit institutions of education" in 1960. They equated the Army General Classification Test with the American Council on Education Psychological Examination (1942 College Edition) to arrive at that figure. The Commission stated that by accepting the twenty-first percentile, "only those who would have scored on the ACE test as high as the upper 79 percent of the group admitted to college in 1942, have been counted as having a 'reasonable expectation' of completing college."⁶

By accepting the upper 93 percent of those admitted to college in 1942 as being capable of completing fourteen years of schooling, the Commission offered the following estimate of talent that could benefit from higher education.

1. At least 49 percent of our population has the mental ability to complete fourteen years of schooling with a curriculum of general and

[

vocational studies that should lead to gainful employment or to further study at a more advanced level.

2. At least 32 percent of our population has the mental ability to complete an advanced, liberal or specialized professional education.⁷

On the basis of this inventory, the Commission indicated that by 1960 the 4,600,000 possible college students might fall in the following categories:⁸

13th and 14th grades	2,500,000
15th and 16th grades	1,500,000
Above 16th grade (based on estimated national needs)	600,000
Total	<hr/> 4,600,000

One is unable to predict all the problems that higher education will face if such an enrollment increase is achieved; however, the Commission was able to foresee some problems that would be raised. One among that number was the problem of "Staffing Higher Education."⁹ Based on a faculty-student ratio of twenty students per faculty member in grades 13 and 14, thirteen students per faculty member in grades 15 and 16, and ten students per faculty member in graduate and professional schools, the Commission indicated that "our present staff (1947) should be doubled by 1952, and another 50,000 added by 1960."¹⁰ This would mean a need of 350,000 persons--50,000 in administrative and special services, 300,000 as teaching faculty--to staff the program in 1960. The Commission offered this summary of the prodigious task:

The task ahead is of unprecedented magnitude. To provide the number of competent and well-qualified faculty personnel required by American colleges and universities is a problem of the greatest importance. It can be solved only by a herculean effort.¹¹

Some may be inclined to believe the Commission was overly optimistic in its prediction of 4,600,000 college students in 1960. The high mortality rate of college students in freshman and sophomore classes leads them to question whether that many students are really capable of doing college work. But whether one accepts the Commission's prediction of this many students' ability to profit from higher education on the basis of scholarship, the increase in enrollment seems to be a part of the future picture for higher education. This was made clear in a research study by the National Education Association.¹² Introducing the problem of "Teacher Supply and Demand," the report stated:

A vast expansion of enrollments in higher education institutions is inevitable for at least two reasons: (a) the total number of 18 thru 21 year olds will increase each year for the next 18 years, as indicated by records now available; (b) the percent of this group who wish to attend college is likely to increase, thus compounding the probability that this enlarged number will require an even greater diversification of offerings as colleges seek to prepare these young people for the increasing complexities of occupational life.¹³

The report pointed out that certain factors such as active employment and national defense will determine how many high school graduates go on to college; however, the American ideal of "education for all" seems to imply that: "The question facing educational leadership, then, is not whether enrollments will increase, but rather, how to prepare for the increase."¹⁴ Thus, a college enrollment increase of sufficient size to be termed a problem is "inevitable," according to this report.

After making its recommendations on enrollments for 1960, the President's Commission offered some suggestions for providing adequate personnel for faculties. Since graduate schools are the main source of preservice training for college teachers, five specific suggestions were made whereby graduate schools could contribute to the solution.¹⁵ The Commission also included suggestions on an internship program for college teachers, standards of competency, vigorous recruitment by national agencies to secure students of high potential for the teaching profession, and suggested "that both the institution and the individual faculty must accept responsibility for constant improvement in teaching, research, counseling and administration."¹⁶

The Commission recognized that change in the graduate school preservice education of college teachers was not the entire answer. They also were aware that the solution could not be left to chance. It was their feeling that inservice education programs should be organized on every college and university campus. They even went so far as to suggest what these programs might include.

These programs should be adapted to meet local needs, but should include induction of new faculty members, opportunity for group participation, intervisitation and exchange, use of outside resources, the development of central services, directed teaching, and participation in professional organizations.¹⁸

The Commission recognized the important position that inservice education must play if those recruited are to be excellent teachers. As a partial answer to the improvement

of the quality of instruction, the inservice improvement program must help the teacher understand that employment after his preservice education simply means a change in the place of his continued improvement. Faculty members coming to higher education from the secondary schools may be offered assistance in adjusting to the new level, and new persons transferring from other colleges or universities may be oriented to the school's philosophy and objectives to improve teaching and learning.

College enrollments had steadily increased to 1,056,000 in 1945-46, but they jumped to the unprecedented figure of 2,354,000 in 1946-47. The effects of this increase have yet to be effectively judged, but certain aspects of it were shown in a study reported in the North Central Association Quarterly in January, 1949.¹⁹ This study "to determine the seriousness of the need for well-trained teachers" was proposed by the Subcommittee on Teacher Personnel and approved by the Executive Committee of the North Central Association.²⁰ This study was made in 114 institutions which were nonpublic colleges and universities and 81 public colleges and universities. It compared the year of 193-40 with 1947-48. The study asked certain questions and found specific answers.

The following summarizes the findings:

1. To what extent has the increase in faculty kept pace with the increase in student enrollments?
Answer: The enrollments of the 195 colleges and universities increased 65 percent. The faculty members holding rank of instructor through professor within the same institutions increased only 42 percent.

2. Has the ratio of teachers to students been extended upwards? Answer: The increase in ratio for all colleges and universities has been from 1:16 to 1:19. The greatest range among any group of institutions was from 1:12 to 1:19 in 1947-48.
3. Has there been marked shift in proportion among different ranks of faculty since 1930? Answer: There seems to be about five percent more teaching fellows, teaching assistants, and lecturers.
4. To what extent have colleges and universities relied upon teaching fellows, teaching assistants, and lecturers? Answer: There were 1,345 more teachers of this group than there were eight years ago.
5. What instructional areas seem to have required the largest percent of increase of teachers? Answer: The number of teachers of mathematics has increased 114 percent, teachers of fine arts only 13 percent.
6. In what field has the highest percent of teachers employed for the first time in 1947-48. Answer: Forty-six percent of teachers of mathematics were new to their position in 1947-48. Only 16 percent of teachers of language had been employed by the institution for the first time.
7. How great has been the mobility of teachers in 1947-48? Answer: Twenty percent of the teachers were new to their institutions.
8. Do enough qualified teachers seem to be available in the critical subject fields? Answer: Eighty colleges and universities were unable to add as many teachers as authorized by their budgets in 1947-48.
9. What may be the demand for teaching staff in 1948-49? Answer: If qualified teachers are available, 126 institutions reported they would replace 916 teachers of their current staffs.
10. Are the number of students now enrolled in graduate programs and listed with placement offices great enough to meet public demand? Answer: Of the 1,603 students enrolled in curricula leading to advanced study beyond the master's degree, 984 not employed on the collegiate level were registered for college teaching positions with 32 different collegiate bureaus of placement as of January, 1948.
11. What changes have been made by these colleges unable to employ qualified teachers? Answer: Lessened qualifications in selection of faculty have been reported most frequently.

12. What may be the policy of colleges and universities toward reducing staffs if enrollments are curtailed twenty percent? Answer: Eighty-six institutions reported that teaching staffs would be reduced. Twenty-nine colleges were uncertain, while fifty institutions would retain the same number.

There does not seem to be reason to believe that colleges and universities are better able to handle increasing enrollments in the 1960's than they were in the late 1940's. In fact, the above picture has caused alarm for the future problem. Arthur Becker said:

The deterioration of the economic and social status of the teaching profession and of the quality of teaching our college youth receive is a commonly known fact, yet many teachers go about their task with an almost universal feeling of helplessness to improve the situation.²¹

William H. Conley expressed similar regard when in a symposium he wrote:

Unless administrators begin, several years in advance of the anticipated enrollment increase, to stockpile faculty, there is a good chance that many of those assigned in the sixties will be lacking even graduate preparation.²²

In meeting this first problem (additions to staffs of persons who are inadequately equipped for college teaching) teachers will find an opportunity to work in cooperation with the administration in developing and carrying on an in-service training program. The necessity of teaching fundamentals to new members will be the occasion for focusing the attention of all staff members on the improvement of instruction. . . . The in-service training program will, then, extend to a consideration of these situations, (new faculty, heterogeneous student body) to experimentation in meeting them, and to a professional development of all faculty members.²³

In the field of preservice education for college teachers much has been done to improve the situation. Umstattd reported²⁴

in 1954, that 283 colleges and universities in the United States are offering graduate courses in problems of college teaching. Fifty-four listed courses that "probably" dealt with the problems of college teaching. Seventy-eight actually treated the "problems of college teaching" and of the 78, thirty-two were concerned only with "the problems of college teaching," while 46 included additional problems.

The courses listed such aims as:

1. An understanding of the principles basic to effective classroom practice.
2. Broad overview of problems of higher education.
3. Understanding of current issues and trends in higher education.
4. Understanding the principles, practices, and trends in curriculum development.
5. Understanding the nature and needs of students.
6. Development of teaching skills through actual teaching.
7. Awareness of the general problems faced by college teachers.

Such efforts to improve the preservice training of college teachers, though a very important contribution, seems to lag far behind the needs of colleges and universities. This is pointed out in the research by the National Education Association on "Teacher Supply and Demand in Degree-Granting Institutions, 1954-55." This study indicated that as colleges approach 1956, they will be in an "unfavorable position" on at least six counts:

First, the rate at which the call for their services will expand is yet to be determined, but a vast increase in enrollment within a decade is foreseen. Second, the preparation of the corps of full-time teachers employed now in service does not indicate a full readiness to serve the present student body.



Third, new full-time teachers employed during the past two years tend to pull down rather than to up-grade the average level of preparation of the whole staff. Fourth, many of the institutions have no established method of encouraging further preparation by staff members not yet adequately prepared. Fifth, the full-time staff now in service is, on the average, mature; the median age is 43.1 years; as many as 25 percent are beyond 52.5 years of age. Replacement, as well as additions, is therefore on a substantial scale. Sixth, and surely not the least, is the unfavorable position of almost all higher education institutions in their ability to compete in the open market for the services of the qualified persons most desired for classroom teaching.²⁵

These data certainly point out the fact that within a decade colleges and universities will be facing serious problems resulting from the increased number of college students and the decreasing number of faculty.

B. The Problem

According to figures released by Ray Maul,²⁶ in 1964 the reservoir of youth 18 to 20 years old will be 3,000,000 larger than 1955, and by 1970 will have grown to a full 6,000,000 college-age adults. The National Education Association conducted a survey among all types of degree-granting institutions in 1953-54 to find out (among other things) the types of degrees held by college teachers. As a result of this study, it was reported that more and more faculty members will have to be hired below the desired levels of preparation. The report suggested that teachers who proved satisfactory must be encouraged to further study.

It has been estimated²⁷ that one out of every four Americans is attending school. The Office of Education reports²⁸ an increase of 1,657,000 students in 1955 over 1954. Elementary students increased from 27,738,000 to 29,038,000; high school students increased from 7,422,000 to 7,680,000; while students in college and professional schools increased from 2,740 to 2,839,000.

The current literature does not indicate that any miracles are forthcoming to increase the number of qualified teachers to meet these ever-growing college enrollments. While Alvin C. Eurich,²⁹ Vice President of the Ford Fund for the Advancement of Education, predicts that colleges will have 5,500,000 students in 1970, educators attending the National Convention of State Universities in New York, predicted that "intellectual cripples will teach in colleges of the future unless planning is done now."³⁰ They predicted that college staffs, ten or fifteen years from now will be loaded with "faculty wives, widows, graduate students in need of money, and men who have failed to make good in business." Added to this pessimistic outlook is the fact that many colleges are operating with deficits and are unable to compete on an open market for good teachers.

The rapid expansion of teaching staffs to keep up with enrollments will probably mean that less-qualified persons will be employed. It seems necessary, in the face of this problem, that colleges and universities accept the

recommendations of the President's Commission on Higher Education and initiate or expand their programs of inservice education for faculties.

The President's Commission on Higher Education did not recommend a general pattern of inservice education. Rather, it suggested that each program be designed to meet specific needs current in an institution. Techniques or methods that work in one situation may not be applicable in another.

The writer was interested to find out what methods and techniques of inservice improvement are being used in selected liberal arts colleges and how well these methods and techniques work. Also of interest are the plans that these schools are making for future inservice training of teachers. The writer was also interested to know what relationships certain variables may have to an inservice improvement program. Among the variables that may have significant relationships to the inservice improvement program are: the attitude of the faculty toward present working conditions, the frequency of use of certain teaching methods and techniques, the students' attitude toward the teaching-learning situations, the size of the school, the teacher-pupil ratio, the teaching load of the faculty in terms of semester hours, the budgetary allotments for inservice improvement activities, and the number of doctor's degrees and years of service on the faculty.

In order to carry out such a study the writer developed a method of approach, although he realized that each school engaging in the study may require adaptations to specific circumstances. Selected liberal arts colleges with less than 2,000 student populations were queried to determine their interest in cooperating in such a study. On receipt of a "favorable" or "interested " reply, the writer made a personal visit to campus to explain the study more fully. Permission was sought to administer two survey forms: one was a survey on faculty reactions to present inservice improvement practices and working conditions, while the other was a student reaction to the frequency of use of certain teaching methods and techniques and a general attitude toward the teaching-learning situations.

After the survey instruments were administered, the data was summarized to determine what inservice methods seemed to be in use and working well according to these faculty reactions. The data from the student survey gave information on teaching methods and techniques used in the college and the student attitude toward the teaching-learning situations. Each college was visited to facilitate personal interviews with teachers and an administrative official to see if certain points of inservice improvement were strong.

There are several hypotheses related to such a study. One is the belief that inservice improvement programs must be suited to the needs and possibilities of particular

institutions. There seems to be no general pattern that is recommended for all situations. This implies that each program must be evaluated in terms of the objectives it is established to achieve and the limitations under which it operates. Another hypothesis relates to the effect that certain variables may have on an inservice improvement program. Under specific circumstances some variables may operate in an institution to further or hinder the progress of inservice improvement; whereas, in another institution, those variables may have a different relationship to the inservice improvement program.

The writer undertook this study with several assumptions in mind. He believed that an inservice improvement program is a very important part of a college's work. New teachers coming from graduate school or from the high school need to be oriented to their new teaching responsibilities. Under existing circumstances it seems necessary that each college must assume more responsibility for providing improvement opportunities for its faculty. Although there are state, regional, and national agencies that may contribute much help in this regard, in the final analysis, the writer believes, each college is responsible for improving its staff.



C. Limitations of the Problem

This study was limited to selected liberal arts colleges with student populations less than 2,000. The term "liberal arts" was accepted to include any colleges that are listed in the Education Directory³¹ as being primarily liberal arts, even though they offer some vocational education. Since this study required close working relationships with an administrative officer in each college and required several visits to each campus, these factors entered into the selection of the cooperating colleges in the study. This study is not designed to find out the relationships between inservice improvement programs and certain variables in such a way that predictions may be made from one to the other.

D. Definition of Terms

Educational terms, though frequently used, often develop different meanings and applications. In order to confine terms to single referents, the following meanings will be applied in this dissertation.

1. Inservice Education

The President's Commission on Higher Education made a clear distinction between "preservice" and "inservice" education, though both are a part of a single process. Preservice education was defined as the college or university work, either

in a teaching field or professional education courses that a teacher takes before employment. The Commission understood that the acceptance of employment does not terminate a teacher's preparation and training, but merely changes the location of such experiences. That training and improvement after one is employed was described as inservice education. As one reads the literature on inservice improvement, he notices that theoretical definitions are scarce. Inservice improvement is usually defined in descriptive language, either in terms of activities that may enhance improvement of teaching or reports of activities that are underway. Paul Harmly, Chairman of the North Central Association Subcommittee on Inservice Training of Teachers, summarized the term as follows: "In-service training was defined broadly by the group as 'any procedure or activity which brings about growth in one's teaching, i.e., summer school, workshop, study group, conferences or visits to other teachers.'"

Whereas the President's Commission did define the term functionally in their recommendations of inservice methods, they left it undefined, except in attitude. To the Commission, the term should be sufficiently broad to permit any activities an individual or institution felt would promote better teaching and learning. That attitude was in keeping with Monroe's definition.³³ He stated: "Broadly conceived, in-service education includes all activities of employed teachers that contribute to their professional growth and competence." In

the Fifty-sixth Yearbook of the National Society for the Study of Education, C. Glen Hass, writing on "In-service Education Today," answered the question, "What is in-service education?" His answer is quoted below:

Broadly conceived, in-service education includes all activities engaged in by the professional personnel during their service and designed to contribute to improvement on the job. . . . We recognize that professional growth may also be the result of activities or experiences initiated by teachers themselves, by the supervisory staff, by the public, by any combination of these, or by miscellaneous groups in the community.³⁴

Since this study was planned and executed before the publication of the fifty-sixth yearbook, the definition offered by Monroe is the one that was used to describe inservice education in this dissertation.

2. "In-service" and "Inservice"

In the literature dealing with inservice improvement one notices the two uses of "in-service" and "inservice." The change in spelling from the hyphenated form to the non-hyphenated form may have been prompted by the Report of the President's Commission. Their report did not use the hyphen in "inservice" or "preservice." The literature using these terms since their report seem to use the hyphen less frequently. The return to the hyphenated forms in the National Society for the Study of Education's fifty-sixth yearbook may alter what appeared to the writer as a trend away from the hyphenated forms, for the yearbook uses the hyphenated forms

in its title sections. The writer has chosen to use the non-hyphenated form except where quoting sources that employ the hyphenated form.

E. Footnotes

1. A Report of the President's Commission on Higher Education, Higher Education for American Democracy. Washington, D.C.: Department of Health, Welfare, and Education. 1947.

2. Ibid., Chapter IV, "Inservice Education," p. 37.

3. Ibid., pp. 62, 63.

4. Ibid., ch. II, p. 25.

5. Ibid., p. 39.

6. Ibid., pp. 39-41.

7. Ibid., p. 41.

8. Ibid., p. 43, Table 8.

9. Ibid., Volume IV, pp. 1-61.

10. Ibid., p. 12.

11. Ibid.

12. National Education Association, Teacher Supply and Demand in Degree-Granting Institutions. Washington, D. C.: Vol. 33, No. 4, December, 1955.

13. Ibid., p. 129.

14. Ibid.

15. President's Commission on Higher Education, op. cit., ch. IV, "Summary and Recommendations," pp. 61-62.

16. Ibid., p. 62.

17. Ibid., ch. IV, "Inservice Education," p. 37.

18. Ibid., pp. 62-63.

19. Earl Mosier, "College Teacher Supply and Demand," North Central Association Quarterly, 23 (January, 1949), pp. 260-271.

20. Ibid., p. 260.

21. Arthur Becker, "To Professionalize Education," Journal of Higher Education, 20:88-94, Feb., 1949.

✓ 22. William H. Conley, "New Dimensions for the College Teaching," Educational Record, 35:182-193, July 7, 1954.

23. Ibid., p. 187.

24. J. G. Umstattd, "Courses on College Teaching," Journal of Higher Education, 25:76-81, Feb., 1954.

25. National Education Association, op. cit., p. 162.

✓ 26. Ray Maul, "The Quest for Competent Instructional Staff," Journal of Higher Education, 26:69-74, Feb., 1955.

27. Education Summary. New London, Connecticut:

28. Ibid., April 5, 1955. (no pagination)

29. Ibid., May 20, 1955.

30. Ibid.

31. Education Directory, U. S. Office of Health, Welfare and Education. Washington, D. C.: Office of Education.

✓ 32. Paul Harmly, "In-service Education of Teachers," North Central Association Quarterly, 23:272-275, at p. 273.

33. W. S. Monroe, Encyclopedia of Educational Research. New York: Macmillan Co., c1950, p. 142.

✓ 34. National Society for the Study of Education, Fifty-sixth Yearbook, Part I, In-Service Education. Chicago: Univ. of Chicago Press, c1957, p. 13.

1

2

3

4

CHAPTER II

INSERVICE EDUCATION IN THE LITERATURE ON THE IMPROVEMENT OF COLLEGE INSTRUCTION

A. Introduction

The improvement of college instruction is a field containing many varieties and types of activities. There are particular interest areas within the broad field. Two of the most obvious are the areas of preservice and inservice improvement of teaching. Each of these has its body of relevant literature. As noted in the delimitations, this study is to deal with the inservice phase of improving instruction. However, limiting the study does not mean that one can draw a clear distinction through the literature to divide preservice from inservice improvement. To the contrary, each field affects and overlaps the other because they are both part of a continuous process. The division, though somewhat arbitrary, is for specialized academic purposes that permit one to concentrate more intensively in one area.

The writer has read in both the preservice and inservice literature. This review of literature is intended to give information and background material that he feels is pertinent to this study, to show some aspects of the development of the literature on inservice improvement, and to give

credit to sources that have been helpful in planning this study. On some occasions, articles dealing with preservice training, which affect the inservice program, will be included. In presenting this review of literature, the writer has chosen to follow an alphabetical approach for the major topics, and where possible a chronological approach within the topics. Not all articles or books can be categorized under one topic. The writer has tried to select the main emphasis, as it appeared to him, and mention the book or article under that emphasis.

B. Review of the Literature on Inservice Improvement
of College Teaching

1. Administrative Procedures Related
to Inservice Improvement

Administrative practices are closely related to inservice improvement. Indirectly, perhaps, all methods and techniques used in a school would be related to the administration in some way. Because of this close relationship, some articles reported in specific areas might well be reported in this section. Likewise, some articles reported in this section could have been reported under other headings.

Between 1905 and 1925, thirteen articles dealing with the supervision of instruction appeared in the literature.¹ This indicates a rather slow beginning for a field of literature that today is voluminous. Among administrators there did develop an interest in studying the duties and

characteristics of teachers.² During the years of 1928 through 1932, an increased interest was evidenced in the improvement of college teaching as evidenced by the increased literature on the subject.

In 1929, Charles D. Bohannon reported on a 1927 study among land-grant colleges.³ This questionnaire study, conducted from the University of New Mexico, included 47 of the 52 white land-grant colleges in the United States. The primary concern of the study was with the administration's interest in improving instruction. It had a philosophical impact in pin-pointing the administration's responsibility. The study concluded that a teacher could expect help from the administration through such activities as having supervision of his teaching, taking special courses on teaching, hearing outside lecturers, and participating in research pointed at improving instruction.

In that same year (1929), S. A. Courtis edited a most important publication dealing with the improvement of college teaching.⁴ He listed nineteen activities that administrators might seek to develop. These were helpful to the writer in trying to define what a teacher could expect administrators to provide for inservice improvement. The activities are:

1. Individual conferences with department head concerning instructional problems.
2. Faculty departmental meetings to discuss instructional problems.
3. Systematic constructive supervision.
4. Supervisory bulletin.
5. Library facilities for professional reading.

6. Demonstration teaching by skilled instructors.
7. Directed visitation to other courses.
8. Lectures relating to college teaching problems by visiting specialists.
9. Courses on problems of college instruction.
10. Service on curriculum committees.
11. Lighter teaching load to permit study or reserach.
12. Clerical assistance for routine tasks.
13. Opportunity to carry on experimental teaching.
14. Financial aid in carrying on experimental teaching.
15. Salary schedule.
16. Provision for attendance at state and national professional meetings.
17. Sabbatical leave with partial payment of salary.
18. Summer release to permit study.
19. Participation in administrative responsibilities.

The bibliography of this publication was helpful to the writer. It contained 114 entries.

Other administrative responsibilities relating to teacher selection and replacement were expressed by Edgar Tulloss.⁵ New methods were added to the lists of those previously mentioned, so the suggestions for activities grew.⁶ But in 1932, Floyd Reeves' study of thirty-five colleges, related to the Methodist Episcopal Church, indicated that faculty meetings and administrative encouragement for further education were the two most popular methods.⁷

The idea of the administration working through a faculty committee was reported by J. T. Anderson.⁸ This idea has gained considerable attention lately.

Russell and Reeves indicated some administrative procedures that seem to enhance inservice improvement.⁹ These procedures emphasized administrative-faculty cooperation in the inservice processes. This study was also significant in

that it indicated the number of schools (out of the 57 in the study) using specific administrative measures to improve instruction. Some of those activities listed in their study are included on the faculty questionnaire of the writer's study. Most of the activities listed by Russell and Reeves were included in a list by Marvin Haggerty.¹⁰ Haggerty felt that there were fifteen devices of inservice improvement that showed the administration's concern for faculty development.

The opinion that the administration had a definite responsibility for providing inservice improvement activities developed added strength. In 1946, Lloyd Blauch was so convinced of this responsibility that he wrote:

The improvement of instruction should have a definite place in the administrative policy of a college or university. It can be accomplished only through the whole-hearted cooperation of the teaching staff. A basic consideration in any effort in this direction is that teachers must desire to render increasingly effective instructional service.¹¹

Russell Cooper likewise expressed feelings about the administration's responsibility to provide inservice improvement activities.¹² But another element was also becoming apparent--that inservice improvement, though a responsibility of the administration, must be a cooperative affair.

The importance of the administrator in this program is obvious. He must encourage faculty members to take advantage of these opportunities and help underwrite the cost. He must be quick to recognize imaginative instruction and assist those who are leading the faculty in its educational analysis and experimentation. At the same time he must recognize that only the faculty members can themselves ultimately carry the program through. Since the program has meaning

only in so far as it is reflected in the daily classroom activities, the faculty must thoroughly understand and endorse the objectives. Otherwise the whole program becomes a show,

Other studies suggested different lines of administrative responsibilities, i.e., providing the incentives that make for good teaching,¹³ finding out what teachers expected from administrators in inservice activities.¹⁴

As a result of a visit to Knox College, Galesburg, Illinois, the writer had opportunity to observe an internship program for prospective liberal arts teachers.¹⁵ The initiative in this program had been taken by the administration in planning the program, applying for a grant from the Fund for the Advancement of Education, and administering the program in its college.

Through these studies, reports, and opinions one can see that certain phases of inservice improvement are regarded as responsibilities of the administration of a school. These expectations had a gradual development. But today, administrators have rather willingly accepted the responsibilities previously advocated by others. This is an important point for the writer's study, for his study proceeds on the basis that a school's administration has the responsibility for providing incentives, leadership, and financial assistance for inservice improvement.

2. Bibliographies

Of particular help to the writer in locating articles in this study were a number of bibliographies. In 1926, Lester W. Bartlett made the first attempt to gather the extant works on improvement of instruction.¹⁶ This bibliography listed 157 titles, dividing them into the following sections:

- A. Administrative Factors Which Affect the Security and Freedom of Faculty Members.
- B. Growth Through Productive Research and Recognition of Teaching Abilities.
- C. Growth Through Professional Service Outside the Institution and Contact with Practical Affairs.
- D. Growth Through Travel, Sabbatical Leave, Exchange Professorships, and Fellowships for Foreign Study.
- E. Growth Through Supervision of the Work of the Staff Member.
- F. Growth Through Professional Organizations and Professional Publications.

In 1928, Shelton Phelps¹⁷ collected a bibliography of a general nature dealing with improving college instruction. His work listed articles up to 1922.

Anna Y. Reed, in her book The Effective and Ineffective College Teacher, gives an extensive review of literature.¹⁸ One particular feature of this book which the writer appreciated was the indication of trends underway. Another bibliography of an extensive nature, which was of assistance to the writer, was the 430 entries in Evelyn W. Spieth's book, An Open Letter to College Teachers.¹⁹ Luella Coke made a significant contribution to the understanding and improvement of college teaching through her book, The Background for College Teaching.²⁰ Beside providing information on many

areas of a college teacher's training and work, this book has many references that were helpful to the writer.

W. F. Kelley's report of his dissertation study, The Inservice Growth of the College Teacher, was of invaluable assistance in the early preparation of the writer's study.²¹ Some of its contributions will be mentioned at other places in this review of literature, but among its contributions was the careful reporting of previous studies and the extended bibliography.

3. Books

Some of the books mentioned in this section have already been mentioned because of their helpfulness through their bibliographies. In 1935, the spotlight turned momentarily from periodical literature to books. At least three books dealing with college teaching were published in that year. These were all helpful to the writer in getting an understanding of some of the problems that seemed evident at this particular stage of inservice improvement development.

Evelyn Spieth's book, An Open Letter to College Teachers,²² considered some of the criticisms against college teaching, some handicaps of the teacher, and some experiments in teaching. One section of Helen M. Walker's book, The Measurement of Teaching Efficiency, dealt with the validity of some instruments used in measuring teaching ability.²³

The analysis and evaluation of student rating instruments were very thorough.

The third book published in 1935 was of considerable importance for future planning in inservice improvement. It also furnished a valuable list of inservice improvement devices used in 291 liberal arts colleges. In this book, The Effective and Ineffective College Teacher,²⁴ Anna Y. Reed listed the ten most frequently used inservice improvement methods and devices in these 291 liberal arts colleges.

In 1945, Luella Cole's book, The Background for College Teaching,²⁵ was published. The particular advantage of this book was its general coverage of many areas dealing with college teaching. It served the writer as a general reference on the many topics covered.

In 1947, the President's Commission on Higher Education²⁶ made its report on higher education in America. This comprehensive analysis of the problems of the future and suggestions for meeting them became a basic source for the writer. From it he derived a clear understanding of the need of inservice improvement programs, some of the activities that might be included in a school's program, and areas into which inservice activities may be divided. The writer considered this book to be an authoritative source on inservice improvement and heartily accepted its recommendation that inservice improvement programs should be initiated or extended on every college and university campus.

In 1949, Ordway Tead published his book College Teaching and College Learning.²⁷ Chapter V of this book deals with the improvement of learning. This concise presentation offered suggestions on the effect of teacher personality on learning.

Next to the report of the President's Commission on Higher Education the writer considers W. F. Kelley's study on The Inservice Growth of the College Teacher to have been his most valuable source.²⁸ This study was done on Catholic colleges for women. Kelley selected twenty prominent studies in inservice improvement and made a list of the 31 most frequently mentioned inservice methods and techniques used. He also divided inservice activities into ten categories, those essentially suggested by the President's Commission. The ten categories of the writer's study follow the pattern of Kelley's study.

Significant to many fields of education is Monroe's Encyclopedia of Educational Research.²⁹ This source was of particular usefulness to the writer in arriving at the definition of inservice improvement used in this paper.

4. Criticisms of College Teaching

In reading the literature on inservice improvement, one becomes aware that some of the articles are critical of college teaching, others seek to answer the criticisms, while still others accept the criticisms and suggest means of improving the criticized areas. Some of the material in this

category is helpful to understand the general weaknesses that inservice improvement programs may be used to strengthen. Some of this critical material may have given rise to the abundance of literature on inservice improvement that appeared between 1928 and 1932. Preceding and during those years, C. W. Martin made a study of the criticism directed against college teaching.³⁰ He studied 37 magazines; sixteen of a general literary nature and 21 of a professional nature. He found 37 criticisms that might be considered distinct from each other.

One of the significant questions raised in the literature on criticisms of college teaching is the relationship of teaching and research. Some expressed the feeling that research has had a premium put upon it while the attitude has been assumed that "anyone can teach." Though there were differences of opinion on how these criticisms could be averted, there was rather general agreement that a strong teaching faculty was the basic responsibility of the administration.

5. Definitions and Descriptions of Teaching and Teachers

The writer was able to locate eight articles which attempted to analyze the personal, professional, and practical classroom responsibilities of the teacher. Particularly helpful to the writer was the article by Guy Snavelly who reported for a faculty committee at Birmingham Southern College on "Who is a Great Teacher?"³¹

6. Evaluation of Teaching

Some writers have expressed the opinion that lack of recognition of good teaching may be largely due to lack of methods of determining "good teaching." Particularly relevant to this study was the debate as to how teaching could best be evaluated. Among the six articles read on this topic one could find arguments for supervision of teaching ranging from suggestions by other teachers or department heads to "inspectional visits" by a school administrative officer. In general, the literature indicated that college teachers are very resistant to evaluation and supervision if it means visits to their classrooms. In December, 1940, Charters wrote on the evaluation of the faculty.³² He pointed out that college administrators are not systematic in collecting data on faculty performance. Charters got information from 151 colleges and universities on how they evaluated the faculty. Although there were variations as to techniques, Charters could make a general conclusion:

In general, this quick census makes it clear that systematic evaluation of institutional services is with us to such an extent that those who dismiss the idea with indifference or over-cautiousness are on the defensive. Nothing is so sacred that its measurable effectiveness should not be measured. What we need are good measures; not, no measures.³³

It seems significant that Luella Cole commented on this same point in summarizing her chapter on student rating scales:

From the tone of the reports in the literature, it would appear that the rating scale has come to stay. Before long, it is likely to be as much of a fixture in American colleges as the objective test already is. Whenever it has been properly administered and intelligently interpreted, it has given teachers results that were of value to them in their daily work. Once a faculty has overcome its initial opposition to being judged at all, it usually wants the ratings repeated at frequent intervals because the results are useful and enlightening. Although the scales have administrative use, they are not as important as the educational values. It is therefore better for a faculty to survey itself than for it to be surveyed by someone else--unless the members prefer to call in an outsider who will not be subject to domestic pressures and antagonisms.³⁴

E. R. Guthrie reported on a faculty study at the University of Washington which brought out faculty reactions to evaluation.³⁵ This faculty differed from the opinions expressed by the California teachers who passed a resolution against any merit ratings in determining wages. The study on which Guthrie reported was done by the American Association of University Professors and was a questionnaire survey. The teachers were asked to list the things that should govern promotion. The first nine of their suggestions became the pattern for evaluation for promotions.

7. General

In the literature read by the writer, there were at least sixteen articles that seemed too general to classify. The difficulty in classifying these articles under the categories used by the writer stemmed from several factors, the

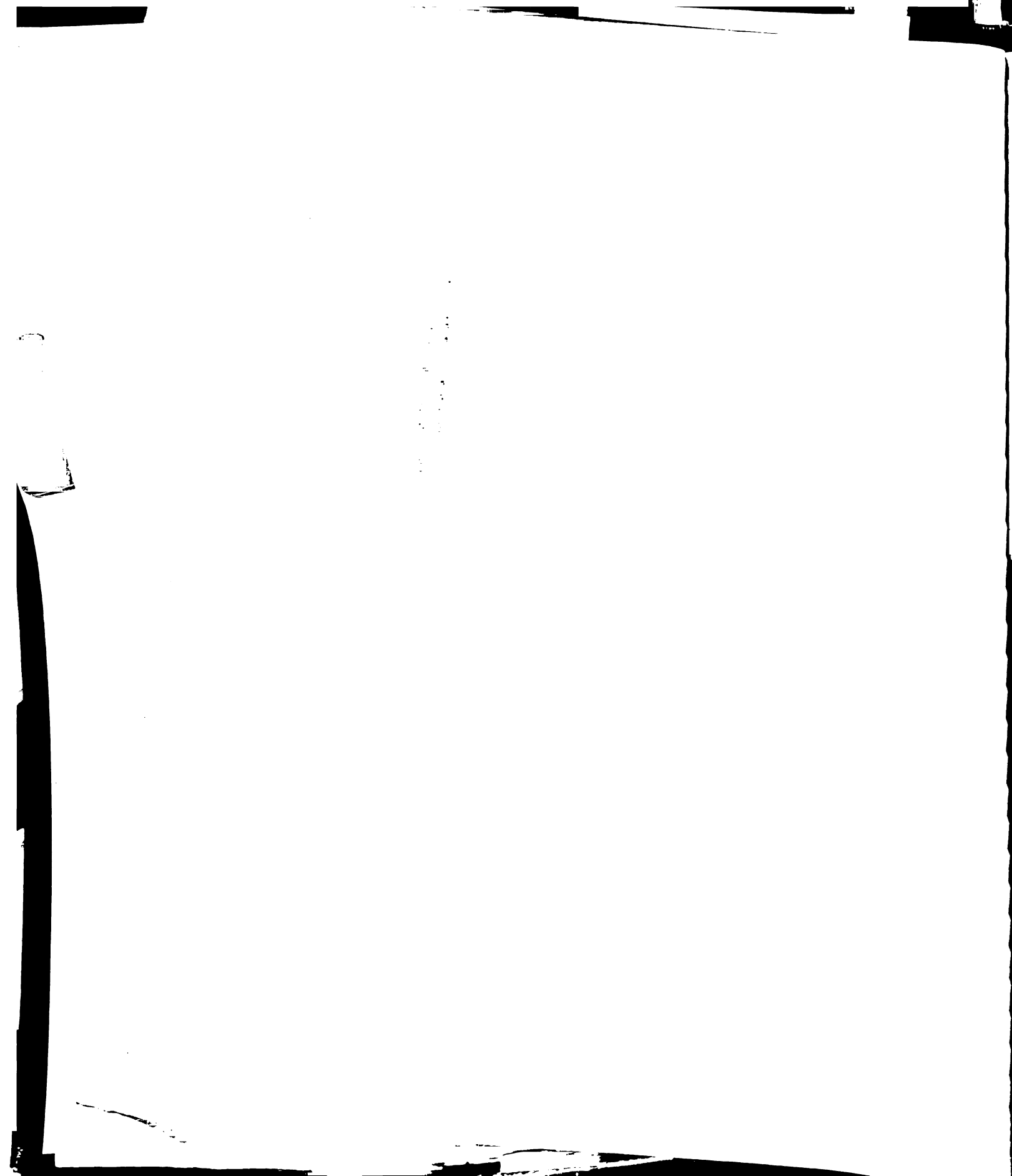
most frequent of which seemed to be the tendency for a writer to try to cover too many phases of inservice improvement in one article.

8. Leaves of Absence

In March, 1931, the American Association of University Professors published the results of a survey on Sabbatical leave practices.³⁶ This survey indicated that in general administrators believed that the Sabbatical leave is a desirable practice. The system most widely used was to give the whole year off with half pay, though some gave one-half year off with full pay, and a tendency toward the latter was indicated. The cost was, according to administrators, "so small as to be negligible." Since administrative encouragement to further study through leaves has been advocated as an important phase of inservice improvement, the writer included this item on the faculty questionnaire.

9. Library and Faculty Reading

Inservice education assumes a willingness of faculty members to read and a willingness of administrators to provide library and reading facilities for faculties. The frequent occurrence of this suggestion led the writer to include such an item in the faculty survey. However, the few articles available on faculty reading did not indicate that faculty interest in reading would match exerted efforts on the part of administrators.



10. Methods

Since one phase of the writer's study dealt with student reactions to various teaching methods and techniques, he was interested to learn what methods and techniques were often advocated in the literature. There were at least twelve articles dealing specifically with this subject. Some of these expressed student opinions about teaching methods, others were reports of college commissions. The suggestions for improving instruction through improving methods were varied. The source which was most helpful to the writer was Umstattd's report on the analysis of instructional procedures used at Biarritz American University.³⁷ To carry out this study ten instructional methods and eighteen instructional techniques were defined. These methods and techniques were used in the writer's efforts to get student reactions to the teaching methods and techniques in the eight schools studied.

11. Orientation of Faculty

The report of the President's Commission and other sources emphasized the importance of orienting the new and beginning teacher. The definiteness of this need was expressed as early as 1929, when Wilkins indicated some of the activities which could be included in an orientation program:

It is important to put young instructors under the tutelage and protection of an established and experienced member of the faculty. The newcomer is thought of as something of an apprentice and should first visit classes of other teachers for ideas and be visited by them for constructive criticism. Occasionally, the young man might be invited to lecture in advanced courses for his seniors.³⁸

This suggestion from Wilkins, the President's Commission on Higher Education and other sources were quite declarative in their suggestions on how orientation could be accomplished. The importance attached to orientation of faculty in the literature led the writer to include it on his faculty survey. The methods of orientation are varied. Robert Stripling saw a need for orientation both before and after appointment. Before appointment, he suggested that the instructor should visit the campus, receive printed materials that would give the school's history and philosophy. After accepting the position, there could follow personal letters of welcome, a supply of printed materials, summer newsletter, information from the local paper, campus newspaper, personal information about the faculty family, and alumni news. Also, he felt the administration had responsibilities to help the new faculty find housing. After the new faculty member reports for duty, he should have a sponsor who would introduce him to the school, faculty, and community. To help in the professional adjustment, Stripling felt the new faculty member should report at least two weeks before classes begin for orientation conferences. A new faculty member should have an experienced

faculty member assigned to help him with teaching problems. This sponsor would also give him help in understanding the use of teaching aids and introduce him to committee work.

12. Problems in Improving Instruction

There were at least twenty-three articles in the literature that dealt with the problems one confronts in seeking to improve instruction. The topics treated in these articles were varied, dealing with teacher preparation, administrative responsibilities, work-loads of teachers, psychology of learning, ways and methods of teaching, professional obligations of teachers, and systematic efforts of collegiate organizations to produce better teaching. The article that gave the writer the best understanding of the problems as it related to his study was the comprehensive article by Wesley Lyda in 1952.³⁹

Underlying the improvement of instruction, Lyda assumes: Rarely do we start any place without first knowing where we want to go. If education is to function, it must be based upon and somewhat organized in terms of life itself. The way the teacher teaches must be in accordance with the way the student learns. The way in which the school is organized, the design of its educational program, and its administrative practices, have little justification except as they stimulate and facilitate educational progress. What a person does with, and how he feels about, that which he knows

is more important than the mere knowledge which may be at his command. The quality of instruction, the necessity of improving instruction runs through all these assumptions. Lyda reported that 6,600 students at Brooklyn College rated instructor attributes and listed them in the following order: systematic organization of material, ability to explain it clearly, expert knowledge of the subject, ability to encourage thought, and an enthusiastic attitude toward the subject.

Lyda traced the movements that have originated in efforts to improve instruction. On the national level, the following are significant. In 1949-50, nation-wide conferences were sponsored jointly by the American Council on Education and the U. S. Office of Education. More than 150 participated. They discussed how schools might improve the preparation of teachers. The same sponsors had a second nation-wide conference to consider the problems involved in improving college teachers already employed.

There has also been much activity on the state levels. Several state-wide conferences give support to improving instruction: the annual Conference of Deans of Science and Arts held at Oklahoma A. and M. in 1950, and continuing, was such. Fifty deans from sixteen states discussed "Evaluation and Improvement of Instruction." Ball State Teachers College, of Muncie, Indiana, had a conference in which college teachers of six states participated. The Kentucky studies on Higher Education and the beginning of the Arkansas studies in Higher

Education have encouraged other states to follow suit. The publication of research studies, particularly doctors theses, has given added impetus to the movement.

Among the problems to be faced in improving instruction, Lyda mentions the following: 1. Objectives. How can they be clarified? How valid are they? How can objectives be stated in terms of human behavior? 2. Curriculum, courses, and methods of teaching. Are courses placed to satisfy the special interests of instructors or students? Methods should be based upon and consistent with the objectives in view. Lyda felt that improvement in evaluation techniques was foundational to improvement in teaching, and he offered six specific suggestions whereby he felt the procedures of evaluation could be improved.

Another topic receiving attention under methods was the question of how the increasing number of college students can be handled in the classroom situation. There seems to be no definite answer yet.

12. Research--Specific Studies

Some studies have been reported under topic headings. The study of specific studies in the field of inservice improvement was helpful to the writer in delimiting his own study and providing background material for developing his own study. In this regard, perhaps the most valuable study was W. F. Kelley's dissertation study on The Inservice Growth

of the College Teacher.⁴⁰ This study will be mentioned in the next chapter in relation to the development of the teacher questionnaire. Kelley did a frequency count on inservice improvement devices as mentioned in twenty studies. Through this procedure, he was able to come up with the 31 most frequently mentioned devices for inservice improvement. The writer has been able to locate and become familiar with these twenty studies. He has also been able to find other studies not used by Kelley in his frequency count.

Kelley's study in Catholic colleges for women used the 31 most frequently mentioned inservice devices listed in the twenty studies analyzed. The writer's survey instrument on inservice devices included seventy-six items to which faculty members could respond. The 31 devices mentioned by Kelley were incorporated into this study, but other devices were selected from readings and studies other than the twenty he analyzed. Below are mentioned the studies that have contributed to the collection of inservice devices, general information, and delimitation of the writer's study. Those marked with an asterisk are the twenty analyzed by Kelley.

In 1920, W. S. Smith gave an account of an experiment tried at Pennsylvania State College.⁴¹ This study centered around the late Professor Kilpatrick, who began his work at Pennsylvania State College in 1920.

In 1927, S. L. Pressey, et. al., wrote a book designed to give illustrations of educational research and

encourage it through these examples. Pressey said:

A large portion of graduate students in our universities, probably a majority of the candidates for the doctorate, will teach in institutions of higher education. Nevertheless, not one in a hundred of such students is given any training whatsoever dealing directly with the tremendously complex problems of instructional method, administration procedures, larger educational policy with which he must soon struggle. There is no such thing as professional training for college and university teachers.

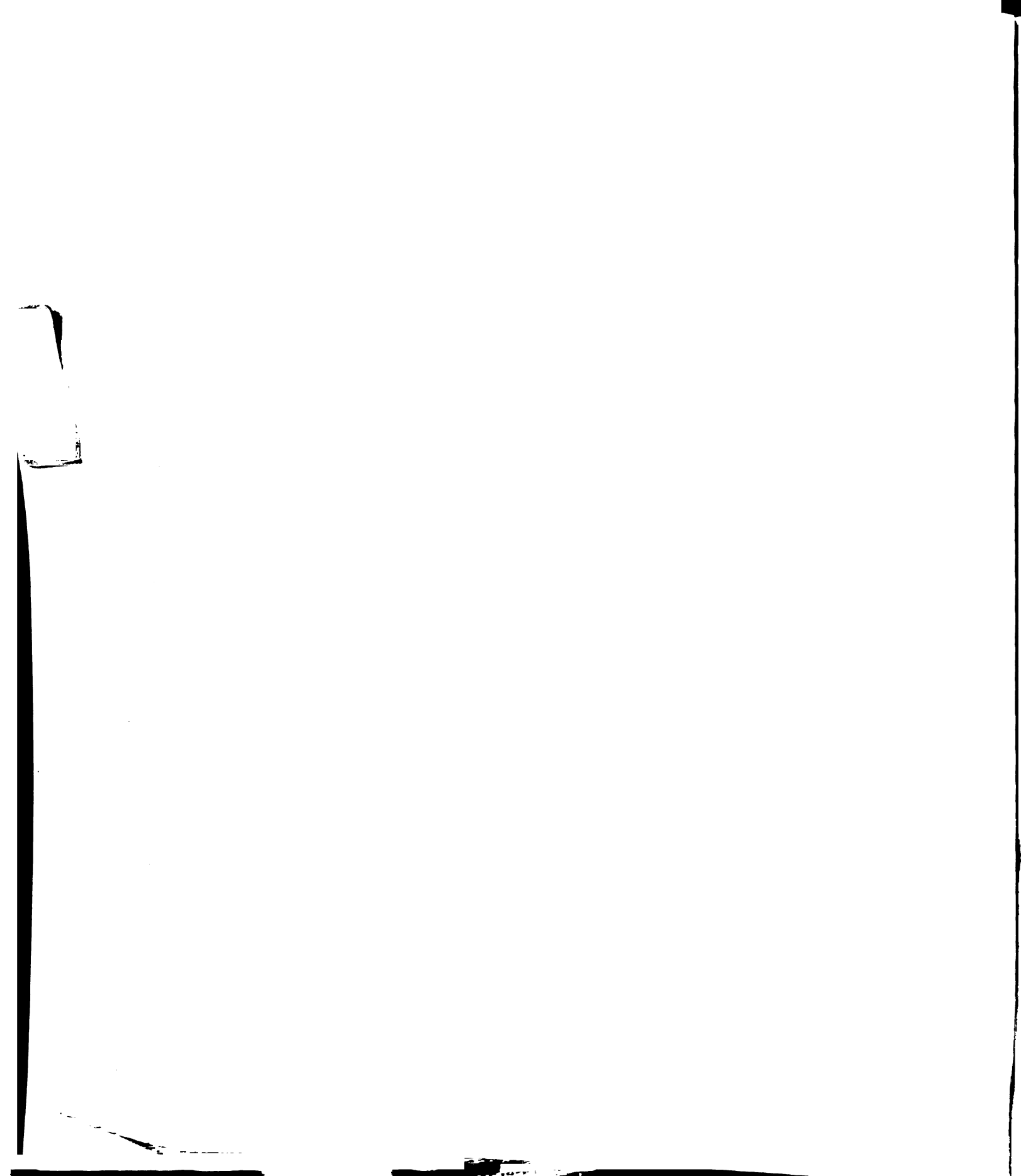
The writer believes there should be such training. He believes that college teachers should have as much of a professional and research attitude toward their teaching as toward the subject matter of their specialty. . . .

It is a curious fact that the scientific spirit has as yet hardly touched higher education. The result is that methods in our colleges and universities are still of the most crude rule-of-thumb type--although education is surely a more difficult, elaborate, and delicate "processing" than was ever carried on in any industrial plant.⁴²

Also, in 1927,* Charles D. Bohannon made a questionnaire survey from New Mexico State Teachers College on the improvement methods in forty-seven land-grant colleges.⁴³ This study was specifically directed at the problem of the administrative interest in improving instruction.

In 1928,* A. J. Klein studied seventy-four institutions, visiting fifty-nine of them.⁴⁴ He was primarily interested in the encouragement given teachers to undertake research or further graduate study. ✓

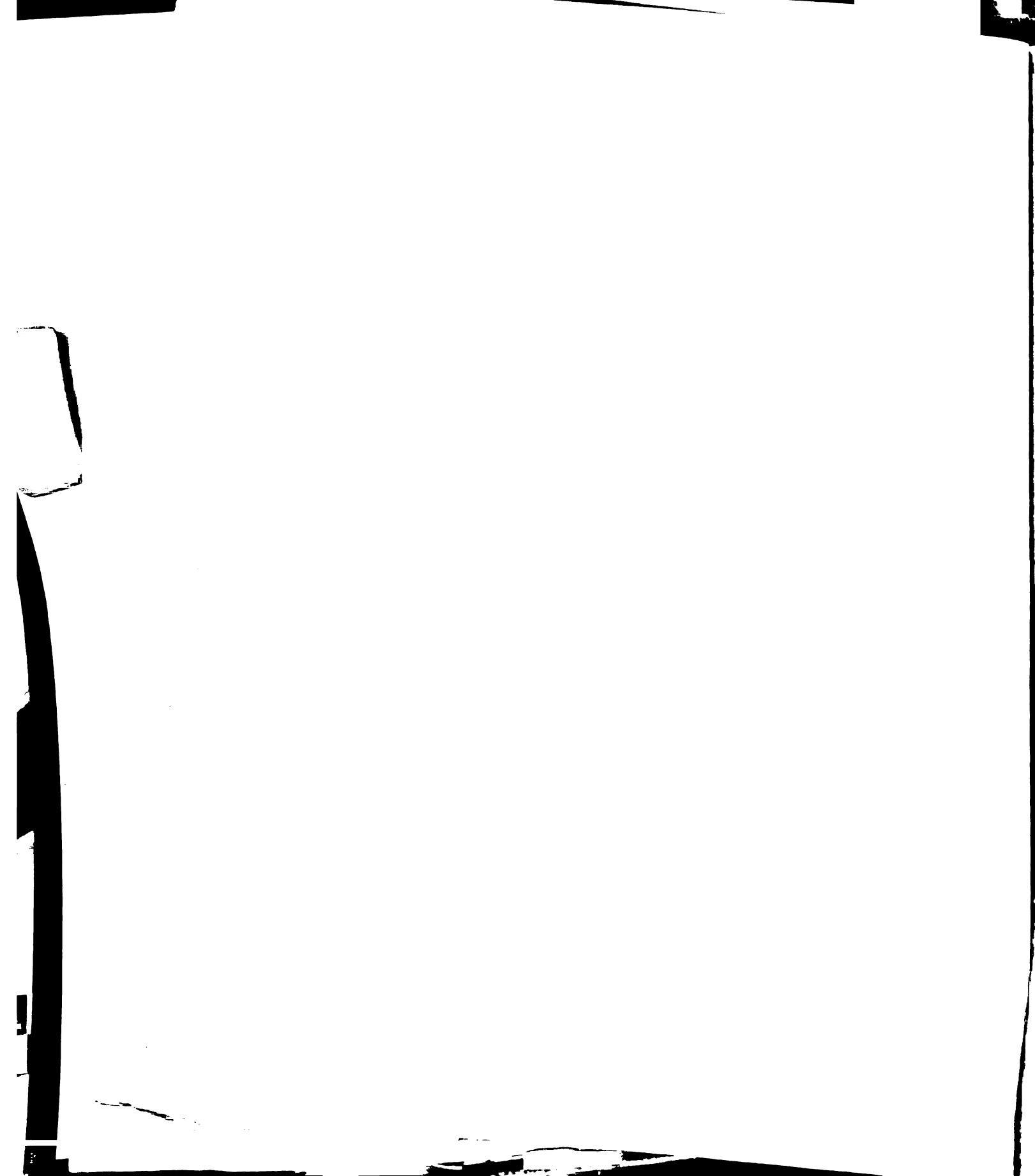
In that same year, E. C. Eckert described a self-study made by the faculty at the University of Colorado.⁴⁵ This report told of an effort by a faculty committee to sustain a program of self-survey centered around 32 points.



In 1929, there were four significant studies reported. Ernest H. Wilkins'* study dealt with the processes of helping the younger instructor.⁴⁶ Robert L. Kelley's* study was an effort to describe methods whereby faculty members can be helped to secure further professional training.⁴⁷ R. E. Tulloss* dealt with the problem of desiring, detecting, and developing good teachers.⁴⁷ This study places a heavy responsibility upon administrators for faculty development. Floyd W. Reeves* surveyed eighty-seven colleges of various types to learn their methods of improving instruction.⁴⁸

In 1930, H. L. Donovan* emphasized the need of curricular adjustments so students could be placed in classes for which they were best fitted, permitting faculty to do their best work.⁴⁹

In 1932, Russell and Reeves* reported on their study of thirty-five colleges related to the Methodist Episcopal Church.⁵⁰ They found that faculty meetings and encouragements to get further training were the main efforts toward inservice improvement. In that same year, E. E. Cordrey* did a questionnaire study on the opinions of presidents of eighty-one state teachers colleges in thirty-five states.⁵¹ He asked eight questions about the efforts to improve instruction in these institutions. He found that seventy-nine presidents felt the problem of improving the quality of instruction should be tackled. Seventy-four reported that efforts were being made toward improvement. The presidents listed various



methods of which the following represent the most widely used:

<u>Method</u>	<u>Frequency</u>
Discussion in faculty meetings	38
Preparation of course outlines or syllabi	13
Discussion in departmental or other group meetings	12
Encouraging advanced study by the faculty	12
Care in selecting new faculty	12
Actual class visitation	12
Conferences with individual teachers	11
Studies of investigations made in other institutions	11
Studies in one's own institution	9
Improvement of curricula	9
Orientation and guidance program	8
Studies of grades given in the institutions	7
Cooperation between college and training school	6
Meeting of department heads	5
Elimination of poor teachers	5
Five things mentioned	4
Two things mentioned	3
Four things mentioned	2
Eight things mentioned	1

Cordrey offered seven conclusions regarding these eighty-one colleges.

1. Nearly all presidents of teachers colleges are of the opinion that the problem of improving instruction should be undertaken.

2. Ninety percent stated that they were making efforts to improve instruction in their own institutions.

3. The most important means and methods used to bring about improvement may be listed under the heads of the above frequency distribution.

4. In general, the efforts to improve instruction are quite recent. The median years of such programs was about 2.5.

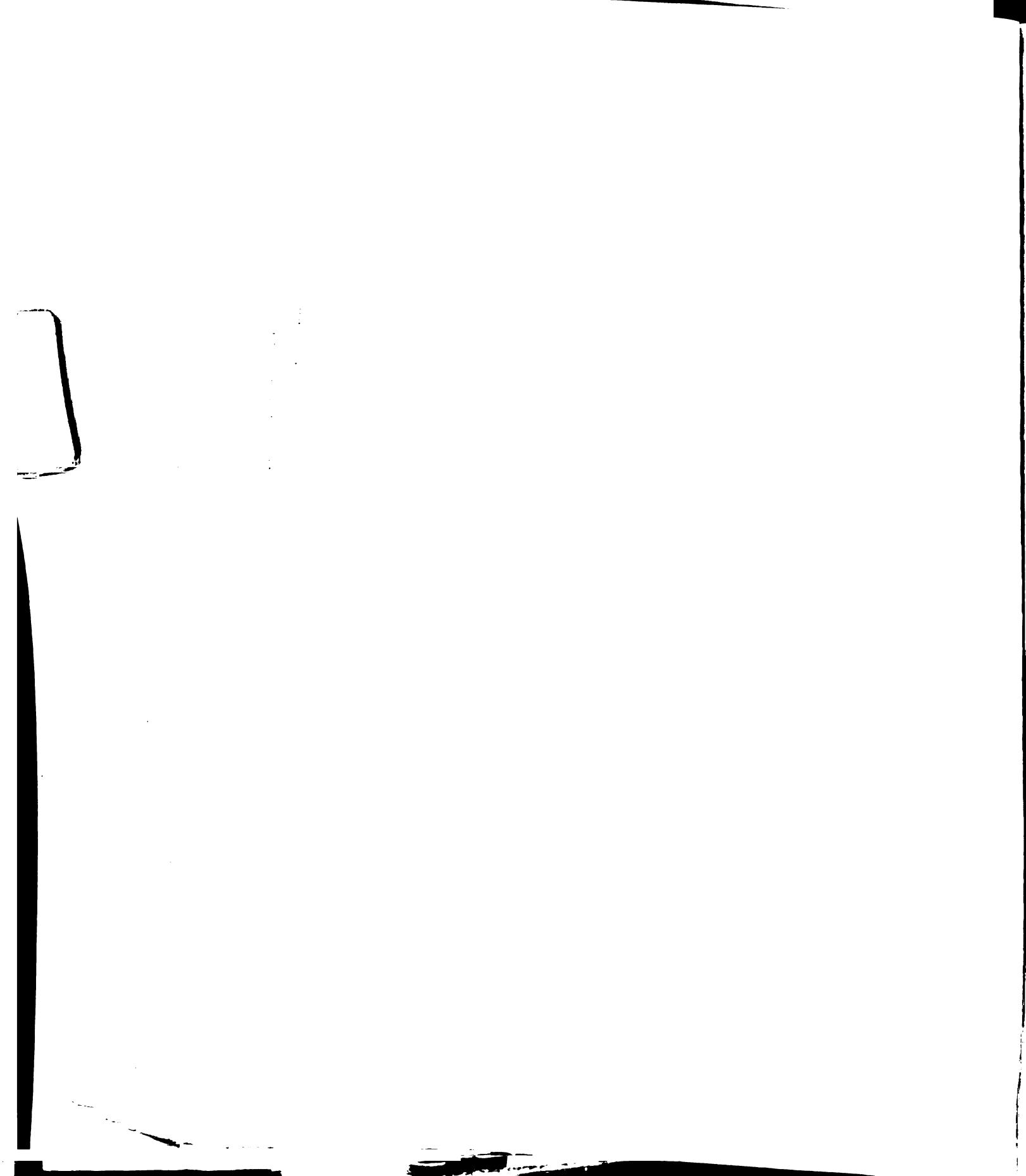
5. The presidents believed that as a result of their work their faculties had developed more active and genuine interest in improving instruction.

6. The greatest difficulty encountered is the attitude of the faculty toward the work.

7. There is need for experimental work and exchange of ideas among college teachers and presidents in order that better and more comprehensive plans may be developed and the work carried on more effectively.

Dr. Ernest Wilkins, in addressing the 1932 convention of the American Association of University Professors, suggested that the responsibility for improving teaching rested upon the profession. This led to a study among college professors on what could be done. This study was reported in 1933.* In the long list of recommendations made by the committee, they expressed a real concern for the morale factors that affect teachers and teaching.⁵² The committee report indicated resistance to "directors of instruction," or their like. The report indicated less regard for classroom supervision than any report that preceded theirs. They felt that closely associated with the question of improving the quality of teaching was the problem of improving the quality of students.

In 1935, Anna Y. Reed* conducted a study for the National Personnel Service to determine the differences between effective and ineffective college teachers.⁵³ This questionnaire



study was directed to college presidents of both liberal arts and teachers' colleges.

In 1936, J. T. Anderson reported on a program at the State Teachers College, Kearney, Nebraska.⁵⁴ In this study improvement of teaching was attempted through a faculty committee of seven, chosen from the teaching staff. In the same year, Russell and Reeves reported on a study of fifty-seven institutions made in connection with the North Central Association's evaluation program.⁵⁵ This report suggested that it is generally better to have the control of the curriculum lodged with the faculty, that an institution having definite aims is usually associated with excellence, that institutions ranked high where the department head made the initial contact for new faculty members and consulted with the dean in recommending promotions. Out of this study came a list of administrative measures that might be used in improving instruction.

In 1937, M. E. Haggerty,* in the series on The Evaluation of Higher Education, listed fifteen devices which he felt showed the administration's concern for inservice improvement.⁵⁶

In 1938, Charles E. Friley* reported on a study at Iowa State Teachers College in which the president (Friley) and a committee of the faculty worked out a program of inservice education for the school.⁵⁷ This report emphasized

the importance of full faculty participation, with supervisory responsibilities being assumed by the dean and department heads.

In 1940, Claude Neet⁵⁸ reported on a study at Massachusetts State College to improve instruction. From this study thirteen specific suggestions were developed. Although many of these suggestions have been mentioned previously, some sub-titles under them were specifically related to problems at the school.

In 1941, the North Central Association published its revised manual for accrediting colleges.* This manual listed twenty-nine devices for inservice improvement.⁵⁹

In 1943, John R. Shannon* reported a summary of interviews with seventy-one faculty members of Indiana State Teachers College.⁶⁰ Most of these teachers felt teaching could be improved, but they preferred the practices of self-supervision and self-improvement programs.

In 1944, George Strayer* directed a survey of the colleges under the control of the board of higher education of the city of New York.⁶¹ This survey resulted in a list of fifteen measures that would further professional development.

In 1945, Russell Cooper reported on a cooperative effort sponsored by the North Central Association to examine liberal arts education.⁶² Under this cooperative plan the North Central Association agreed with certain liberal arts

colleges to furnish a coordinator, two summer workshops, a clearing house for materials, visits to each college by a coordinator, facilitation of inter-campus study, and stimulation from region-wide programs. Each college was to furnish institutional interest in the project, contribute \$100.00 per year, and send one representative to the workshop. At least six values were listed as coming from this cooperative effort.

In 1946, Lloyd E. Blauch* reported on the devices that may be used to keep the administrator aware of his obligation to be the college's academic leader.⁶³

In 1947, the President's Commission on Higher Education* made its report.⁶⁴ Among its many other suggestions about inservice improvement the Commission listed thirty-seven inservice improvement devices.

In 1948, Howard J. Leahy's* findings from an inquiry addressed to 139 college and university presidents were published.⁶⁵ Ninety-eight presents gave their views on faculty improvement.

In 1949, the National Education Association* reported on its third Annual Conference on Higher Education. An assembled collection of inservice improvement devices came out of the conference.⁶⁶

In 1951, W. F. Kelley reported his doctoral dissertation, a study of inservice growth among the teachers in thirty Catholic colleges for women.⁶⁷ His study will be mentioned in more detail in the next chapter. Of particular

assistance to the writer was the frequency table on the thirty-one most frequently practiced inservice devices in twenty studies. The ten headings under which Kelley developed inservice improvement were also used by the writer in his study.

14. Research versus Teaching

One may notice in the literature on inservice improvement a healthy argument on the relative merits of teaching and research. Some of these articles indicate that too much emphasis has been put on research, consequently, not enough attention has been given to developing and rewarding good teaching. A phase of this argument is represented on both aspects of the writer's faculty survey form. As early as 1928, Harl R. Douglas made a strong bid for the recognition of good teaching by showing its relationship to research.⁶⁸ He felt a growing tendency to underrate good teaching and overrate research.

✓ The belief that the greater service lies in research activity and that to do research gives significant evidence of a higher order of genius than to do superior teaching became wide-spread. It appeared a conviction that the gift or ability to do superior teaching was a common one and not worthy of demonstration. It became apparent that one's research activities were much more likely than one's teaching activities to result in a desirable reputation among one's fellows nationally. The quality of one's teaching is not likely to spread far beyond the campus bounds, while researches are published. In the effort to maintain their respective institutions, administrators have in the majority of instances been quick to reward the

researcher and slow to recognize in a satisfying way the teacher.

The literature offers only opinions on this topic. No settled solution has been advocated.

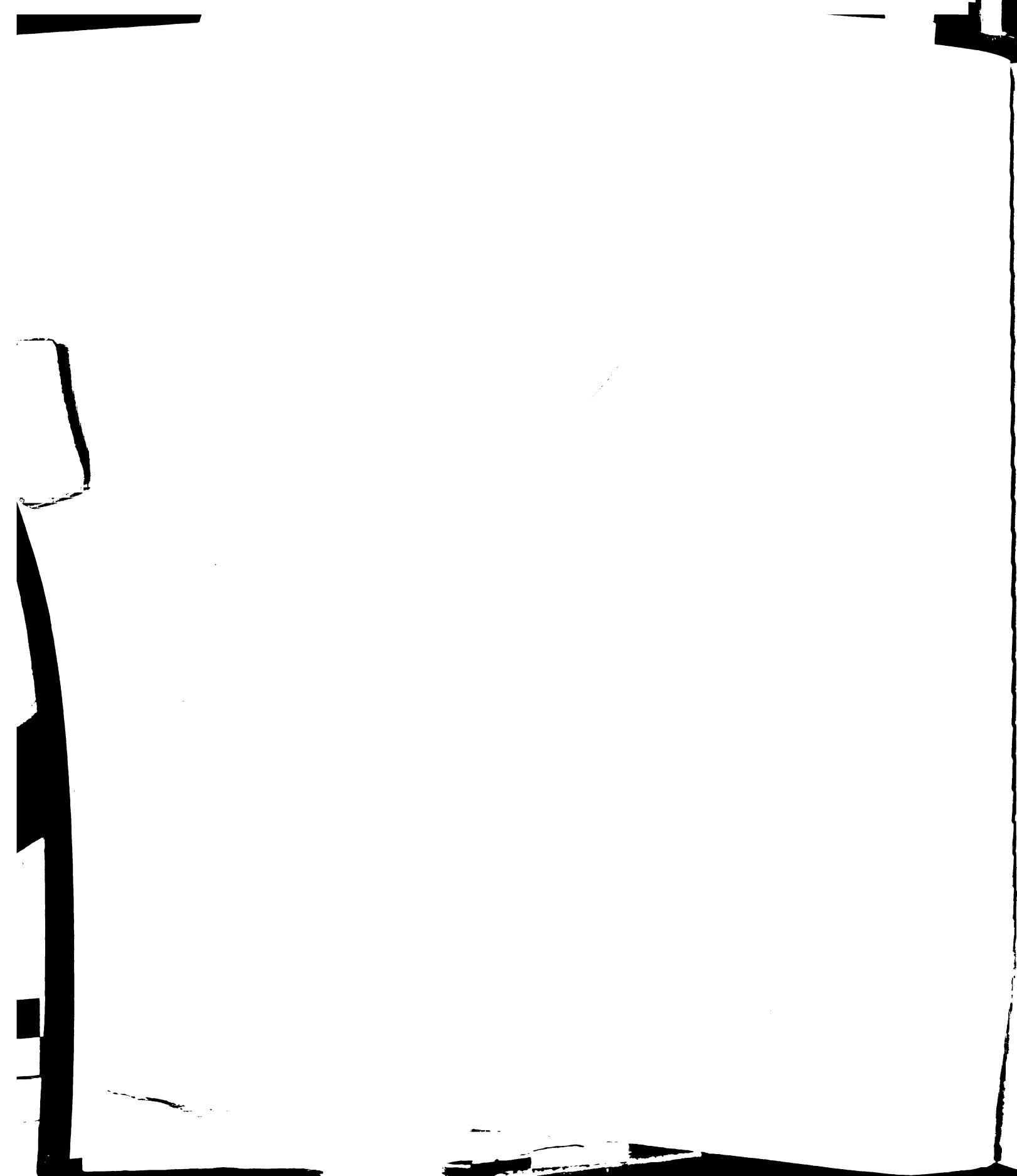
15. Self Evaluation

Self-study, self-evaluation and other terms are employed to designate those efforts by a school to critically evaluate its teaching-learning processes. The 1928 study of self-survey undertaken by the University of Colorado has already been reported. Dr. Wilkins' address at the 1932 American Association of University Professors' meeting was in a large measure responsible for the increased interest in self-study. Dr. Wilkins suggested that the improvement of teaching should come from the profession rather than having to be imposed from outside sources. This was also the position taken by Dr. Judd of the University of Chicago.

If members of college faculties will not give time to the solution of college problems and if they will not let anyone solve their problems for them, some kind of forcible measures will have to be taken. It will be unfortunate if persistence in the "do nothing" attitude results, as it has in some quarters, in the solution of academic problems by legislatures and lay boards of trustees.⁶⁹

16. Student Ratings

This topic has received considerable attention in the literature. The writer found ten articles that gave information or debate on the issues involved. Among the



arguments pro and con, the writer was particularly interested in E. R. Guthrie's report on a faculty study made at the University of Washington which brought out faculty reactions to student evaluations.⁷⁰ His findings indicated:

1. Student ratings do agree with faculty ratings of a colleague, correlation of .48.
2. Student ratings correlated with student ratings at .89.
3. Faculty juries with other faculty juries correlated .64 to .76.
4. Full professors are not rated as better teachers than assistant professors.

It was the opinion of Luella Cole, previously reported, that student ratings are probably here to stay.

17. Supervision

One area of inservice activity that has caused rather sharp differences of opinions among educators is supervision of instruction. These differences range from the title of the person to the method of the activity. The writer was able to locate ten articles dealing with various phases and levels of supervision. These articles would indicate that phases of supervision are more frequently advocated than practiced. Because of its frequent mention, several phases of supervisory activities were included on the faculty survey questionnaire of this study.

Perhaps the most significant article on the subject of supervision was Allan Burt's comprehensive chronological survey of the literature on the subject.⁷¹ Most of the

material contained in Burt's article was available to the writer; however, Burt did make available one type of literature that the writer did not have, the annual reports of presidents and administrative officers of institutions.

18. Teaching Load

Some literature indicates that excessive teaching loads may be in part responsible for poor teaching. Four articles dealing with this topic were available to the writer. Question regarding satisfaction with teaching load was included on the working conditions phase of the faculty survey for this study.

19. Working Conditions

Closely related to the matter of teaching load, yet involving more facets, is the literature on working conditions. Of help to the writer in developing the list of working conditions to which faculty responded were the North Central Association's "Revised Manual of Accrediting." Much of this material was taken from the study, previously mentioned, by Haggerty, The Faculty.⁷²

In April and May, 1947, Fred Kelley reported on three studies relating to working conditions of college faculties.^{73, 74, 75} These three studies were most helpful to give the writer understanding of the close relationship between inservice programs and working conditions. The

understanding of this close relationship gave him interest to seek in his study to determine the strength of this relationship.

C. Summary

The writer has not reported on all articles read. Some were of such a general nature that they could not be reported under a specific category. There were 172 articles available to the writer. If these articles were listed according to the several areas of inservice improvement, they would number at least 255 topics.

D. Footnotes

1. Allan Burt, "Supervision of Instruction," Peabody Journal of Education, 25:208-217, March, 1948.
2. American Council on Education, "What Does A College Teacher Do?" Educational Record, 9:96-99, April, 1928.
3. Charles Bohannon, "Improvement of Instruction in Land-Grant Colleges," Proceedings of the Forty-First Annual Convention of the Association of Land-Grant Colleges and Universities. Burlington, Vermont: Free Press Printing Company, 1929, pp. 116-131.
4. National Society of College Teachers of Education, Current Educational Readjustments in Higher Institutions. The Seventeenth Yearbook of the National Society of College Teachers of Education, 1929. Edited by S. A. Courtis.
5. Edgar Rees Tulloss, "The Improvement of College Instruction as an Administrative Problem," Association of American Colleges Bulletin, 15:73-89, March, 1929.
6. H. L. Donovan, "Changing Conceptions of College Teaching," Journal of Administration and Supervision, 16: 401-410, September, 1930.
7. Floyd Reeves, The Liberal Arts College: Based upon Surveys of Thirty-five Colleges Related to the Methodist Episcopal Church. Chicago: University of Chicago Press, 1936.
8. J. T. Anderson, "The Improvement of Teaching in the Colleges," Journal of Higher Education, 7:36-41, January, 1936.
9. John Dale Russell and Floyd W. Reeves, The Evaluation of Higher Institutions. Chicago: University of Chicago Press, 1936.
10. Melvin Haggerty, The Faculty. Vol. 2 of the Evaluation of Higher Instruction, A Report of the Committee on Revision of Standards. Chicago: University of Chicago Press, 1937.
11. Lloyd Blauch, "The Encouragement of Good Teaching," Educational Record, 27:96-106, January, 1946.
12. Russell Cooper, "Faculty Adventure in Educational Planning," Journal of General Education, 2:35-40, October, 1947.

13. Paul Harmly, "In-Service Education of Teachers," North Central Association Quarterly, 23:272-275, January, 1949.

14. Robert Norris, "In-Service Techniques for Improving College Instruction," Educational Administration and Supervision, 39:370-374, October, 1953.

15. An unpublished paper by Knox College Administration. This paper, "An Internship Program for Prospective Liberal Arts Teachers," was a proposal submitted to the Fund for the Advancement of Education as an outline of the proposed study, which, when the writer visited, was underway.

16. Lester W. Bartlett, "Bibliography of the Professional Growth of Faculty Members," Association of American Colleges Bulletin, 12:275-300, November, 1926.

17. Shelton Phelps, "The Improvement of College Teaching," Addresses and Proceedings, National Education Association. Washington: National Education Ass'n., 1928.

18. Anna Y. Reed, The Effective and Ineffective College Teacher. New York: American Book Company, 1935.

19. Evelyn Spieth, An Open Letter to College Teachers. Bloomington: The Principi Press, 1935.

20. Luella Cole, The Background for College Teaching. New York: Farrar and Rinehart, Inc., 1940.

21. W. F. Kelley, The Inservice Growth of the College Teacher. Omaha: Creighton University Press, c1950.

22. Spieth, op. cit.

23. Helen Walker, The Measurement of Teaching Efficiency. New York: Macmillan Company, 1935.

24. Anna Y. Reed, op. cit.

25. Luella Cole, op. cit.

26. President's Commission on Higher Education. Higher Education for American Democracy. Washington: Government Printing Office, 1947.

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

28. W. F. Kelley, op. cit.
29. Walter S. Monroe, editor. The Encyclopedia of Educational Research. New York: Macmillan Company, 1941.
30. C. W. Martin, "Adverse Criticisms of Higher Education," Peabody Journal of Education, 9:3-8, July, 1931.
31. Guy Snavelly, "Who is a Great Teacher?" Association of American Colleges Bulletin, 15:68-72, 1929.
32. W. W. Charters, "Sizing Up the Faculty," Journal of Higher Education, 11:457-461, December, 1940.
33. Ibid., p. 461.
34. Luella Cole, op. cit., pp. 593-594.
35. E. R. Guthrie, "The Evaluation of Teaching," Educational Record, 30:109-115, April, 1949.
36. American Association of University Professors, American Association of University Professors Bulletin. Report of the Committee, 17:214-234.
37. J. G. Umstattd, Instructional Procedures at the College Level. Austin: University of Texas Press, 1947.
38. Ernest Wilkins, "Report on the Commission on the Enlistment and Training of College Teachers," Association of American Colleges Bulletin, 15:40-45, March, 1929, at p. 43.
39. Wesley Lyda, "Some Factors in the Improvement of College Instruction," Educational Record, 33:91-104, January, 1952.
40. W. F. Kelley, op. cit.
41. W. S. Smith, "The Study Method of Teaching by College Faculty," School and Society, 11:293-294, March 6, 1920.
42. S. L. Pressey, et. al., Research Adventures in University Teaching. Bloomington: Public School Publishing House, 1927.
43. Charles Bohannon, op. cit.
44. A. J. Klein, "Administrative Procedures for Improving College Teaching," ch. 9 in Problems of College Education, edited by Earl Hudelson, pp. 102-117. Minneapolis: Univ. of Minnesota Press, 1928.

45. E. C. Eckert, "Faculty Self-Survey and the Improvement of College Instruction," School and Society, 27: 336-338, March 17, 1928.

46. Ernest Wilkins, op. cit.

47. R. E. Tulloss, op. cit.

48. Floyd W. Reeves, "The Improvement of College Teaching as an Administrative Problem," Association of American Colleges Bulletin, 15:73-90.

49. H. L. Donovan, "Constructive Activities in Improving Instruction in Eighty-seven Institutions," North Central Association Quarterly, 4:371-376.

50. Floyd W. Reeves and John Dale Russell, op. cit.

51. E. E. Cordrey, "Efforts to Improve Instruction in State Teachers Colleges," Peabody Journal of Education, 9:200-208.

52. Report of the Committee on College and University Teaching, American Association of University Professors Bulletin, 19:7-103, May, 1933.

53. Anna Y. Reed, op. cit.

54. J. T. Anderson, "The Improvement of Teaching in College," Journal of Higher Education, 7:26-41, January, 1936.

55. John D. Russell and Floyd W. Reeves, The Evaluation of Higher Institutions. Chicago. Univ. of Chicago Press, 1936.

56. Melvin Haggerty, op. cit.

57. Charles W. Friley, "The Improvement of College Teachers in Service," The Preparation and In-Service Training of College Teaching, Proceedings of the Institute for Administrative Officers of Higher Education, ch. XVI, 1938.

58. Claude Neet, "The Improvement of Instruction," Association of American University Professors Bulletin, 26: 233-236, April, 1940.

59. The Commission on Institutions of Higher Education, The Revised Manual of Accrediting. Chicago: Univ. of Chicago Press, 1941.

60. John R. Shannon, "Supervision of College Teaching," Journal of Higher Education, 14:355-358.

61. George D. Strayer, Report of the New York City Sub-Committee of the Joint Legislative Committee on the State Education System. Legislative Document (1944) No. 60.

62. Russell Cooper, "The Liberal Arts Study Goes On," North Central Association Quarterly, 20:162-166, October, 1945.

63. Lloyd E. Blauch, "The Encouragement of Good Teaching," Educational Record, 27:96-106.

64. President's Commission on Higher Education, op. cit.

65. Howard J. Leahy, The Improvement of College Instruction Through In-Service Techniques and a Practical Plan for the Evaluation of Teaching. Seton Hall College, 1948.

66. National Education Association, Current Trends in Higher Education. 1948. III Annual Conference on Higher Education. Department of Higher Education. Washington: National Educational Association, 1948.

67. W. F. Kelley, op. cit.

68. Harl Douglas, "Rating the Teaching Effectiveness of College Instructors," School and Society, 28:192-197, August 18, 1928.

69. Charles Judd, "The Improvement of Teaching", Journal of Higher Education, 3:470-474, December, 1932.

70. E. R. Guthrie, "The Evaluation of Teaching," Educational Record, 30:109-115, April, 1949.

71. Allan Burt, "Supervision of Instruction," Peabody Journal of Education, 25:208-217, March, 1948.

72. Melvin Haggerty, op. cit.

73. Fred Kelley, "Survey of College Teacher Personnel," Higher Education, 5:171-172, April, 1, 1949.

74. Fred Kelley, "Salaries of College Teachers," Higher Education, April 15, 1949.

75. Fred Kelley, "How Do Faculty Members Like Their Jobs?" Higher Education, 5:193-196, May 1, 1949.

CHAPTER III

THE SURVEY INSTRUMENTS AND THE METHODS OF SUMMARIZING THE DATA FROM THE SURVEYS

A. The Survey Instruments

To make this study it was necessary to develop some survey instruments that would give the information desired and provide some objective data for summarization. After a careful review of the literature, the writer did not find any extant survey instruments in the field of inservice improvement. He did find an instrument on teaching methods and techniques that was adequate.

1. The Teacher Questionnaire

The teacher questionnaire is the instrument used to survey the faculties of the colleges in the study. Its purpose was to determine the reaction of faculties on how well their colleges were performing certain inservice practices frequently mentioned in the literature. To develop this instrument, the writer started making a list of methods and techniques of inservice improvement mentioned in the literature he read. This procedure yielded a rather extensive, but unorganized list. Late in this procedure he was able to locate a summary of a dissertation study by William F. Kelley

on The Inservice Growth of the College Teacher.¹ A shorter summary of Kelley's study appeared in the Educational Record, April, 1952.² Kelley's study and the Report of the President's Commission formed the basis for developing the teacher questionnaire.

The President's Commission on Higher Education listed six areas under which inservice improvement might take place. It stated:

At least six types of activities, each possible of wide variation to meet local needs are desirable for means for the inservice development of faculty personnel. These are the induction of new faculty members, opportunity for group participation, intervisitation and exchange, use of outside resources, the development of central services, and directed teaching.⁴

In a breakdown and expansion of these six areas, the Commission stated ten areas of responsibility of the institution to the individual teacher. These are summarized below:⁵

1. Induction of new faculty member.
2. Opportunity for group participation through faculty meetings, departmental meetings, serving on faculty committees and working on special projects.
 - a. Voluntary participation should be the major pattern.
 - b. Group work is most productive when the objectives are of immediate concern to the persons involved.
 - c. Group decisions should result in action.
 - d. Consensus is the aim of group study.
 - e. Informal procedures are most desirable.
 - f. Skilled leadership is needed for group meetings.
 - g. Follow-through between meetings is essential.
 - h. Proceed from the specific to the general
 - i. Organization for group work should be kept simple.

3. Intervisitation and exchange--inter- or intra-institutional visits.
4. Drawing upon outside resources.
5. Development of central services.
6. Directed teaching.
7. Organized study
8. Opportunity for research.
9. Assistance through ratings and student reactions.
10. Participation in professional organizations.

The Commission also gave specific suggestions on salaries and working conditions, tenure, basis of promotions, provisions for retirement, and protection against hazards. Under a section on "Opportunities to Work Effectively"⁷ the Commission mentioned such factors as workload, leave policies, working facilities--office space, desks, laboratory apparatus--participation in decision-making, and definition of "academic freedom."

In his study, Kelley made a frequency distribution on methods and techniques of inservice improvement as mentioned in twenty studies. From these twenty studies, he developed a list of thirty-one activities most frequently mentioned in these studies. The thirty-one items chosen for his study had frequencies from five to eighteen. They are listed below:⁸

<u>Item</u>	<u>Frequency of Mention in 20 Studies</u>
1. To supervise teaching as a professional service	18
2. To provide the faculty with time for research, e.g., sabbaticals	15
3. To make use of outside consultants, lecturers, experts	15
4. To plan for the student evaluation of instruction	15
5. To sponsor cooperative faculty groups interested in instruction, e.g., curriculum, general education	14
6. To schedule all faculty meetings to clarify purposes and heighten morale	13
7. To plan intervisitation of classes within the department or college	13
8. To encourage further study in one's field or in higher education	12
9. To set departmental meetings to define course-purpose and presentations	12
10. To supply time and some funds for participation in learned societies	11
11. To recognize good teaching through promotional and salary policy	11
12. To promote departmental and divisional study groups on common interests	10
13. To provide courses locally in methods of field or in higher education	10
14. To make a systematic collection of alumni opinion	10
15. To plan for a centralized evaluation program for school	8
16. To provide opportunity to visit classes in other schools	7
17. To assign a special faculty adviser for each new teacher	7
18. To encourage individual research	7
19. To provide leave for young instructors to complete their education	6
20. To encourage reading of books and periodicals on higher education	6
21. To provide special laboratory facilities in teaching fields	6
22. To undertake studies on examination and grading procedures	6
23. To require professional educational training for appointees	6
24. To meet individual differences by sectioning, honors programs, independent study plans	6

- | | | |
|-----|---|---|
| 25. | To set up a centralized testing bureau as a faculty service | 5 |
| 26. | To keep the faculty informed through administrative newsletter | 5 |
| 27. | To plan for periodic restatement of institutional objectives | 5 |
| 28. | To keep the faculty sensitive to student personnel needs, e.g., guidance, reading ability, health | 5 |
| 29. | To secure teachers special library facilities in teaching fields | 5 |
| 30. | To induct new teachers to school's history, purpose, procedures | 5 |
| 31. | To promote attendance at summer workshops | 5 |

These thirty-one items from a list of at least 115 were used by Kelley to study the practices used by thirty-three Catholic colleges for women. Kelley divided the 115 items into ten major categories.⁹

1. Pre-contract demands and orientation to campus.
2. Clarifying institutional objectives.
3. Administrative interest in good teaching and teacher morale.
4. Enlisting the democratic cooperation of the entire faculty.
5. Assisting in the professional development of the faculty.
6. Directing or supervising instruction.
7. Developing centralized services and providing mechanical facilities.
8. Securing ratings of the faculty by students and alumni.
9. Encouraging research in education and in subject-matter fields.
10. Insuring the flow of ideas between the campus and the world.

The writer has essentially followed these ten categories in developing the teacher questionnaire for this study. He departed from using only the thirty-one items most frequently mentioned in the twenty studies because of his feeling that inservice improvement may develop around specific needs at a college. If a method is used only once, but meets a need at a college, it has been worthwhile. When asking teachers to check a list of inservice practices, it was felt better to have the list very comprehensive rather than to ask for write-ins. The choice to reject some items was based on the writer's experience of working in a liberal arts college. At some points this choice was probably arbitrary.

When the questionnaire was first drafted, it was submitted to a Thesis Seminar for consideration and comments. It was then administered to seventeen students. The participants were timed to determine how long it would take one to complete the questionnaire. The time necessary ranged from 15 to 21 minutes, with a mean of 17. Later, the questionnaire was submitted to a class in Educational Research. From this administration the writer determined the difficulty of hand-scoring the results. This experience led him to believe the results could be hand-scored. After these initial trials the questionnaire was put in the present form.

While reviewing the literature on inservice improvement the writer was impressed with the close relationship between inservice improvement and working conditions. This was

particularly borne out in the study in 1936 by Russell and Reeves.¹⁰ These authors, reporting on The Evaluation of Higher Institutions, mentioned a number of administrative practices that are commonly associated with educational and institutional excellence.

In 1949, Fred Kelley reported three studies that showed the close relationship between working conditions and the items frequently mentioned in inservice improvement programs. The first study was a "Survey of College Teacher Personnel."¹¹ The second study was "Salaries of College Teachers."¹² The third study was on "How Do Faculty Members Like Their Jobs?"¹³ All of these studies showed how non-teaching duties and working conditions affected teaching, although the last article was the most directly related. By grouping together the items from the studies of Russell and Reeves, and Fred Kelley, the list of working conditions included on the teacher questionnaire was developed. The writer felt this might give some idea of relationship between inservice improvement and working conditions.

2. The Student Questionnaire

In 1947, J. G. Umstattd published his book Instructional Procedures at the College Level.¹⁴ This book was a report of the instructional procedures used at Biarritz American University. Biarritz American University was one of the two schools established by the Armed Services to give

short term courses to 4,000 men of the armed services in the European Theater of Operations while they were waiting shipment home. In the third term of such courses, Mr. Umstattd suggested an analysis of the instructional procedures used at Biarritz. To carry out this study, twenty-eight instructional methods and procedures--ten instructional methods and eighteen instructional techniques--were defined. These were submitted to the students to be checked on a scale of Never (N), Occasionally (O), Frequently (F), and Very Frequently (VF). These instructional procedures of the above book and their definitions were adopted by the writer to determine the frequency of use of these teaching methods and techniques in the colleges studied. The writer chose a continuum of five responses to each item: Very Often, Often, Sometimes, Seldom, and Never, instead of the four above used by Umstattd.

It was felt desirable to get some student reaction to the over-all teaching-learning situations at these colleges. Such reactions may help to determine whether students are favorable or unfavorable to the frequency of use of certain methods and techniques. The writer chose some statements which he has frequently associated with the teaching-learning processes in liberal arts colleges.

3. Interview with Administrative Officer

In order to ask about the same items when interviewing administrative officers of the colleges, it was felt desirable to make out an interview sheet. This sheet served as a guide. It provided questions on some items that were not included on the teacher or student questionnaires. It also gave an opportunity to get the opinion of one connected with the planning and administration of the inservice program on how certain techniques were working.

B. Methods of Summarizing the Data from the Surveys

1. The Teacher Questionnaire

As stated previously, it was believed that several types of information could be gotten from the teacher questionnaire. The following were desired:

1. How well is the college performing these activities?
2. Do the faculty members consider these activities desirable?
3. To what extent are faculty members unfamiliar with present practices?
4. Reaction of the faculty to certain working conditions.
5. Percent of the faculty undecided about working conditions.

A scaled score for each of the above five items was obtained in the following manner:



1. How well is the college performing these activities?

A scale score of 2 was assigned to Doing Well.

A scale score of 1 was assigned to Doing But Should Improve.

A scale score of 0 was assigned to Not Doing But Should, Not Doing, and Not Doing And Should Not Do.

Unfamiliar With Present Practices was omitted from this particular question and is considered by itself later.

By multiplying the column total by the scale value assigned, a weighted column total was derived. From these, a grand weighted total of the columns was derived. By dividing the grand weighted total of the columns by the grand total of the columns, the scale value for question one was derived.

2. Do faculty members consider these activities desirable?

A similar procedure to that used for question 1 was employed, except the scale values were changed.

A scale value of 1 was assigned to Doing Well, Doing But Should Improve, and Not Doing But Should.

A scale value of 0 was assigned to Not Doing.

A scale value of minus 1 was assigned to Not Doing And Should Not Do.

The scale value for question two was the quotient resulting from the division of the grand total of weighted scores by the grand total of the column scores.

3. To what extent are faculty members unfamiliar with present practices?

With this question only Unfamiliar With Present Practices was used. It was assigned a value of 1. The grand total of column responses was divided into the total of the Unfamiliar With Present Practices column. The quotient was the percent of faculty members unfamiliar with present practices.

4. Reaction of the faculty to certain working conditions.

A scale value of 1 was assigned to the Well Pleased and Pleased columns.

A scale value of minus 1 was assigned to the Not Pleased and Dissatisfied columns. Undecided was omitted from the scoring on this question.

The weighted total of Not Pleased and Dissatisfied was subtracted from the weighted total of Well Pleased and Pleased. The remainder was divided by the grand total of responses to the four columns, and the quotient resulting was the value of question four.

5. What percent of faculty members are undecided about working conditions?

In figuring this score only the Undecided column was used. It was assigned a value of 1. The total of the column was divided by the grand total of responses to the columns. The quotient was the scale value or percentage score for question five.

2. Student Questionnaire

The student questionnaire gave information on three variables of the study:

1. The frequency of use of selected teaching methods,
2. The frequency of use of selected teaching techniques, and
3. The reaction of students to the teaching-learning situations as described by five statements.

The scale score for each of these three areas was found in a similar way. Each part of the student questionnaire offered five alternatives to be marked. Beginning from left to right, each column was assigned a value of 5-4-3-2-1. The grand weighted total of the columns was divided by the grand total of the columns to derive a scale value for each section of the questionnaire.

3. Interview with the Administrative Officer

The interview with the administrative officer was designed to get information that would not be obtained from the survey instruments. A number of pertinent questions relating to particular inservice practices and information on several of the variables were obtained from this source. In order that each administrative officer would be answering the same questions, an interview sheet was made up to serve as a guide. These interviews with administrative officers gave information on the size of the school, teacher-pupil

ratio, teaching load of the faculty, budgetary allotments for inservice improvement, percentage of faculty holding doctor's degrees, and some personal opinion of the inservice improvement activities. Where descriptive information would help interpret the numerical scores on the teacher questionnaire, it was asked for.

4. Interviews with Faculty Personnel

The interviews with faculty personnel gave descriptive information on the items marked "Doing" by the faculty. It can be observed from the information received that colleges practicing the same items were doing them in different ways. By interviewing faculty members in each college, it was possible to determine what practices were actually represented by the numerical scores on the questionnaires. It also gave some opinion of the faculty on the strength and value of these items. The interview information is basically descriptive and reported in that manner.

5. Other Information

During visits to campuses, the writer made a point of asking for additional information that might help interpret the inservice programs. From the college catalogs information was obtained on the length of faculty service. In obtaining the average years of service of the faculties the

services of professors emeriti were counted, while those of R. O. T. C. staffs were not since the college has little control over the tenure of these persons.

6. Statistical Procedures

In summarizing the data for conclusions several statistical procedures were employed. These are described in connection with the presentation of the results from the various procedures.

C. Footnotes

1. William Kelley, The Inservice Growth of the College Teacher. Omaha: Creighton University Press, 1950.
2. William Kelley, "Specific Procedures for In-Service Improvement," Educational Record, 32:132-141, April, 1952.
3. William Kelley, op. cit.
4. Ibid., Ch. IV, "Inservice Education," p. 38.
5. Ibid., pp. 38-48.
6. Ibid., Ch. V, "Improved Working Conditions," pp. 53-55.
7. Ibid., pp. 57-60.
8. William Kelley, The Inservice Growth of the College Teacher, p. 42.
9. Ibid., p. 129.
10. John Russell and Floyd Reeves, The Evaluation of Higher Education. Chicago: Univ. of Chicago Press, 1936.
11. Fred Kelley, "Survey of College Teacher Personnel," Higher Education, 5:171-172, April, 1949.
12. Fred Kelley, "Salaries of College Teachers," Higher Education, 5:193-196, April, 1949.
13. Fred Kelley, "How Do Faculty Members Like Their Jobs?" Higher Education, 5:193-196, May, 1949.
14. J. G. Umstattd, Instructional Procedures at the College Level. Austin, Texas: Univ. of Texas Press, 1947.
15. The columns on the student questionnaire were given scale values from left to right of 5-4-3-2-1.

CHAPTER IV

THE COLLEGES IN THE STUDY AND THE METHODS EMPLOYED IN THE SURVEYS

A. Introduction

The eight colleges participating in this study are listed in the Directory of Higher Education¹ as liberal arts colleges. With the introduction of pre-professional and specialized training into the liberal arts college, the definition of "liberal arts" has become less definite. The colleges in this study follow essentially the liberal arts curriculum, even though pre-professional and specialized curricula have been added. Each of these colleges advertises itself as a liberal arts college. A study of their catalogs indicates that wide variation exists among them in practices, subjects, and administration. From these colleges one would gather that home economics, physical education, business, science, and pre-professional training are considered legitimate areas of study for the liberal arts student. Two of the schools have programs of R. O. T. C.

B. The Methods of Selecting Colleges

The eight colleges in this study were not "selected" in the usual sense of that word. It would be more proper to refer to them as "cooperating schools." These colleges

were included because of their interest in engaging in a study of inservice improvement and problems of liberal arts education with the hope that some direction, guidance, and better understanding of these important areas would result.

To carry out this study the writer made visits to each campus. Accessibility, proximity to Wheaton, Illinois, the writer's home, and a school's willingness to provide the information for the surveys were important factors in the selection. The writer was also interested to get a distribution of sizes of student bodies in the study. He was also interested in a non-accredited institution (when this study started) to see if there might be a difference between accredited institutions and the non-accredited institution in inservice improvement programs. The following procedures were used in soliciting cooperation from the eight schools.

From the Directory of Higher Education,² the writer selected fifteen liberal arts colleges that he would like to include in the study. A personal letter was written to the Dean of each college explaining the study. Those who would be interested in a more detailed explanation of the study were asked to return a self-addressed postal card, indicating a convenient time for an interview. This procedure brought in ten responses of interest. Of the ten that showed interest, two were dropped because their program was basically ministerial training. After a full explanation of the study another college felt that it would conflict with a self-study

it was conducting. The seven remaining schools were used as a start, though one more was dropped because it was impossible to get an adequate return on the faculty questionnaire. This small number remaining meant that the writer must be willing to extend the distance of travel. Two other schools were added through personal contacts with the deans.

From the returned postal cards an itinerary of visits was set up. On each visit a copy of the thesis proposal was explained to the dean. The surveys to be made were explained from the standpoint of the college's responsibility. Since each college in the study was different in some respects, ways and means for the studies had to be developed on an individual basis.

Two factors that had considerable affect on the administration of the survey instruments were the frequency of faculty meetings and the type of postal service in the college. Schools that held faculty meetings frequently were able to work the teacher questionnaire into their program for a faculty meeting. Those having few faculty meetings had little time and, at best, could only distribute them at such meetings. This generally did not prove satisfactory. Plans were worked out with each dean that would best suit these two factors. This is what was meant by "selecting" the schools. Those were included that were willing to cooperate in the details necessary to administer the survey materials.

On the basis of the plans made with the deans, the survey instruments were administered.

When the survey materials from the teacher and student questionnaires were returned, the writer made a summary of the data and sent a copy to the respective deans. When this material was returned to the deans, a request was made that the dean arrange interviews with three faculty members. It was requested that these faculty members be persons who had been with the school sufficiently long to see some of the developments of the inservice program transpire. These interviews with faculty members were for the purpose of discussing the results of the faculty questionnaire. When the teacher and student surveys had been made, interviews with three faculty members held, and a personal interview with the administrative officer, the research in a school was considered finished.

C. The Colleges in the Study and the Methods Used

This study was started with seven cooperating colleges. One of the seven had to be dropped because a 50 percent return could not be gotten on the faculty questionnaire. Two others were added during the process of the surveys. The contacts that led to the addition of the two colleges will be described as they came up.

1. Augustana College

Augustana College is located at Rock Island, Illinois. "Augustana College is an institution of the Evangelical Lutheran Church."³ The college had its first home in Chicago in 1860, then at Paxton, Illinois, between 1853-1875. Since 1875, it has been located at Rock Island. Originally, the institution was known as Augustana College and Theological Seminary. In 1948, the seminary became a separate entity in organization and administration. Augustana is accredited by the North Central Association. It is also accredited by the Association of American Universities, the American Association of University Women, the National Association of Schools of Music, and is being granted a local chapter of Phi Beta Kappa.

The first contact with Dean George Arbaugh came as a result of the initial letter sent out. After a personal interview and explanation of the study, he agreed to participate. Since the faculty meets only once a month and that meeting is held during the school day, only business items are discussed. Consequently, the faculty questionnaire could not be administered at such a meeting; however, the Dean agreed to distribute them at the faculty meeting. The returns were few, and this necessitated another visit to Augustana. Permission was secured from the Dean to make the faculty survey by mail, so the few returns from the first distribution were disregarded. A questionnaire form was mailed to each full-time

faculty member with a letter explaining the study and asking cooperation. As a result, 41 forms were returned in the self-addressed and stamped envelopes.

On the second visit to Augustana, it was suggested that Monmouth College might be interested in participating in the study. The Dean was contacted, and a personal interview was arranged. After the explanation of the study, he agreed to participate, so Monmouth College was added to the list of schools. The procedures of operation there will be described later.

While the returns from the survey of the Augustana faculty were coming in, the student survey was made. A student handbook was secured from Dean Arbaugh. Since Augustana has a college postal system of its own, it was possible to distribute the survey forms through the school. The purpose of the student survey was to obtain a frequency check on the use of certain teaching methods and techniques and to get student reaction to the teaching-learning procedures as they experienced them. A sample of courses was more desired than a sample of students. A ten percent sample of the student body, with each student filling in four forms, one for each course, was felt sufficient. In order to get a ten percent return, a fifteen percent sample was selected. Since this survey was started in the fall (November), it was felt advisable to leave out the freshmen because of their lack of familiarity with the instructional methods and techniques. The sample was

proportioned among the seniors, juniors, and sophomores. Dean Arbaugh granted permission for a covering note, over his signature, to go out with the forms. Four forms with this covering note were sent to 180 students via the college postal system, asking the student to complete the forms and return them to the Dean's office. By using the college postal system a small number of town students were excluded. Four hundred and forty-two forms were returned. These were called for at the Dean's office. On the occasion when the writer called for the student survey forms, he spent a full day on campus to interview three faculty members. Excellent cooperation and interest were shown by the faculty members and the Dean. There was no observable hesitancy on the part of anyone to discuss their inservice program.

2. Greenville College

Greenville College is located in Greenville, Illinois. The college was founded in 1855 by Stephen Morse who had conceived of an institution dedicated to the higher education of women. It was first called Almira College. Two years after its founding it was incorporated and for 23 years carried on under the leadership of Mr. John B. White. When financial reverses came, the property was sold to Mr. John P. Slade, who carried on a coeducational school.

In 1892, certain lay and ministerial leaders of the Central Illinois Conference of the Free Methodist Church

purchased the property to provide distinctive Christian education for young men and women. The institution was reincorporated under the name of Greenville College and authorized to confer degrees. Since that time, many new buildings have been added to the physical facilities.

Greenville is fully accredited by the North Central Association, the University of Illinois, and the Illinois State Department of Education. The college is a member of the American Council on Education, the Association of American Colleges, and the Federation of Illinois Colleges. Greenville is a charter member of the National Commission on Accreditation. Six different baccalaureate degrees are conferred at Greenville--arts, science, education, music, theology, and natural science.

The first contact with Dean George Tade was made while attending a North Central Study Group on Critical Thinking at Illinois Wesleyan University. Since the schools attending this program were liberal arts colleges in Illinois, the writer asked Dr. Lewis Mayhew, Director of the study, for an opportunity to present his proposed study outline. After the presentation, Dr. George Tade, Dean of Greenville College, said his school would like to participate. Since Greenville is about 300 miles from Wheaton, it could not be visited as frequently as the other colleges.

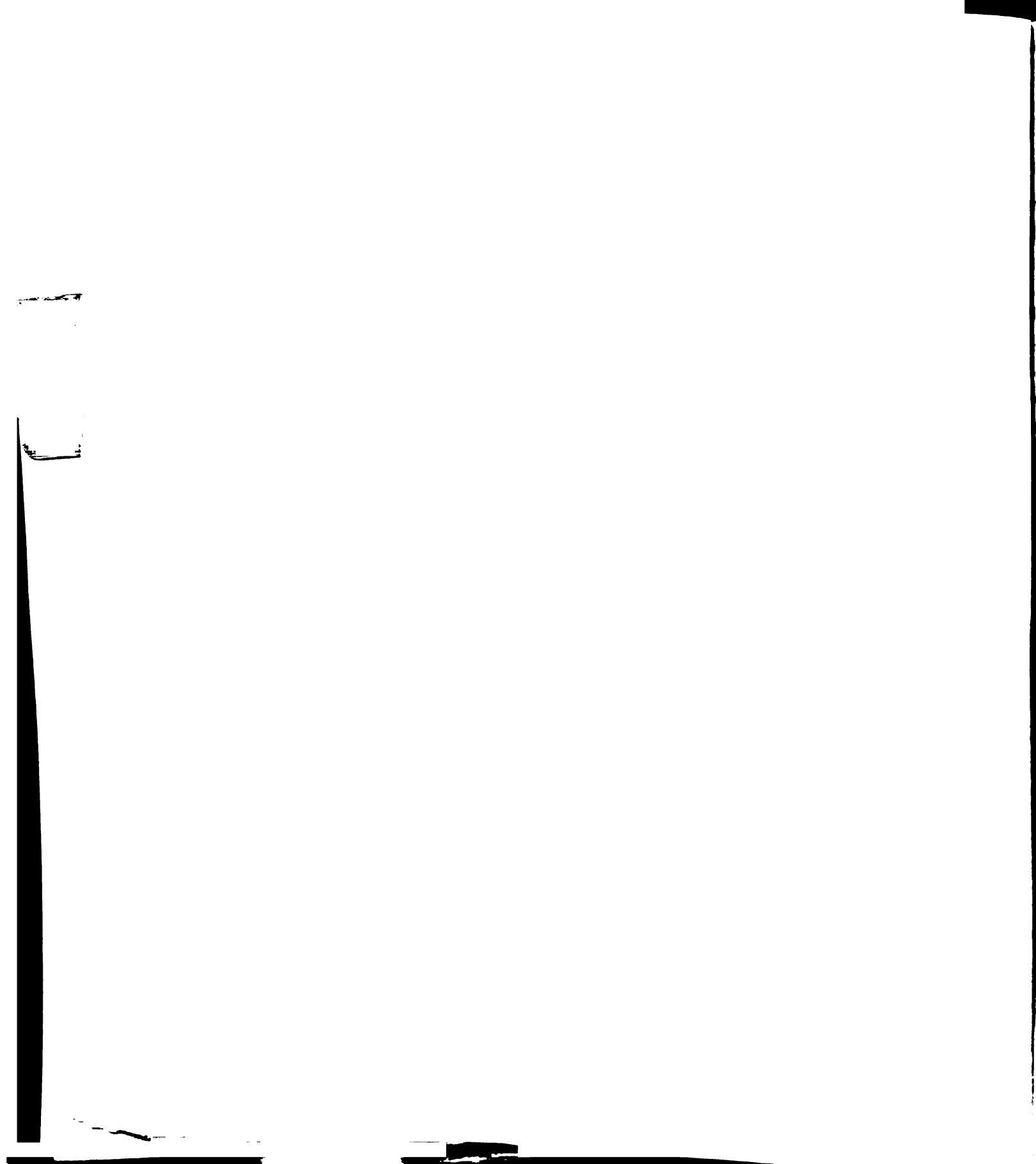
Dean Tade agreed to administer the faculty questionnaire at a faculty meeting. When he returned these, they were

summarized and a summary returned to the Dean. At the writer's request, Dean Tade sent a copy of the student directory. He also gave permission for a covering note over his signature to go out with the student questionnaires. From the handbook, a fifteen percent sample, distributed proportionately among the senior, junior, and sophomore classes, was sent out. These were distributed through the Dean's office and returned to his office. When these questionnaires were returned to the writer, a summary was made of the data and returned to the Dean.

In the early part of April, 1956, the writer made a visit to Greenville and spent two days on campus. He interviewed faculty members who had seen the inservice program develop. He also had opportunity to observe classes in session and to have two interviews with the Dean.

3. Illinois Wesleyan University

Illinois Wesleyan University is located at Bloomington, Illinois. The college was inaugurated in 1850 by thirty men composing the first board of trustees. The University was incorporated under Illinois law in February, 1853. The centennial was celebrated in 1850. Illinois Wesleyan University is accredited by the North Central Association and was on the final approved list of the Association of American Universities. The University is accredited by the University Senate of the Methodist Church and by the University of Illinois.



The school of music is approved by and holds membership in the National Association of Schools of Music.

The first contact with Dean William Beadles came as a result of the initial letter of inquiry. On the first visit to campus the program was explained, and Dean Beadles showed much interest in participating. He agreed to administer the faculty questionnaire at faculty meeting. The first visit to Illinois Wesleyan was planned in conjunction with a meeting of the North Central Association Study Group on Critical Thinking. Since other liberal arts colleges were present at the meeting, Dr. Lewis Mayhew, director of the study, permitted the writer to explain his proposed thesis to the representatives. As a result, Greenville College became a participant.

After Dean Beadles sent the forms from the teacher survey to the writer, a summary was tabulated and returned to him. Dean Beadles also sent a student handbook from which the fifteen percent sample of seniors, juniors, and sophomores were selected. Illinois Wesleyan does not have a centralized postal system for students, and the student return did not measure up to expectations. Only 250 returns came in from an expected 400 returns.

On a later visit, information was gathered from the Dean on the inservice program, and he arranged for interviews with three professors. These interviews were a departure from the general pattern in other colleges. Because of campus

11

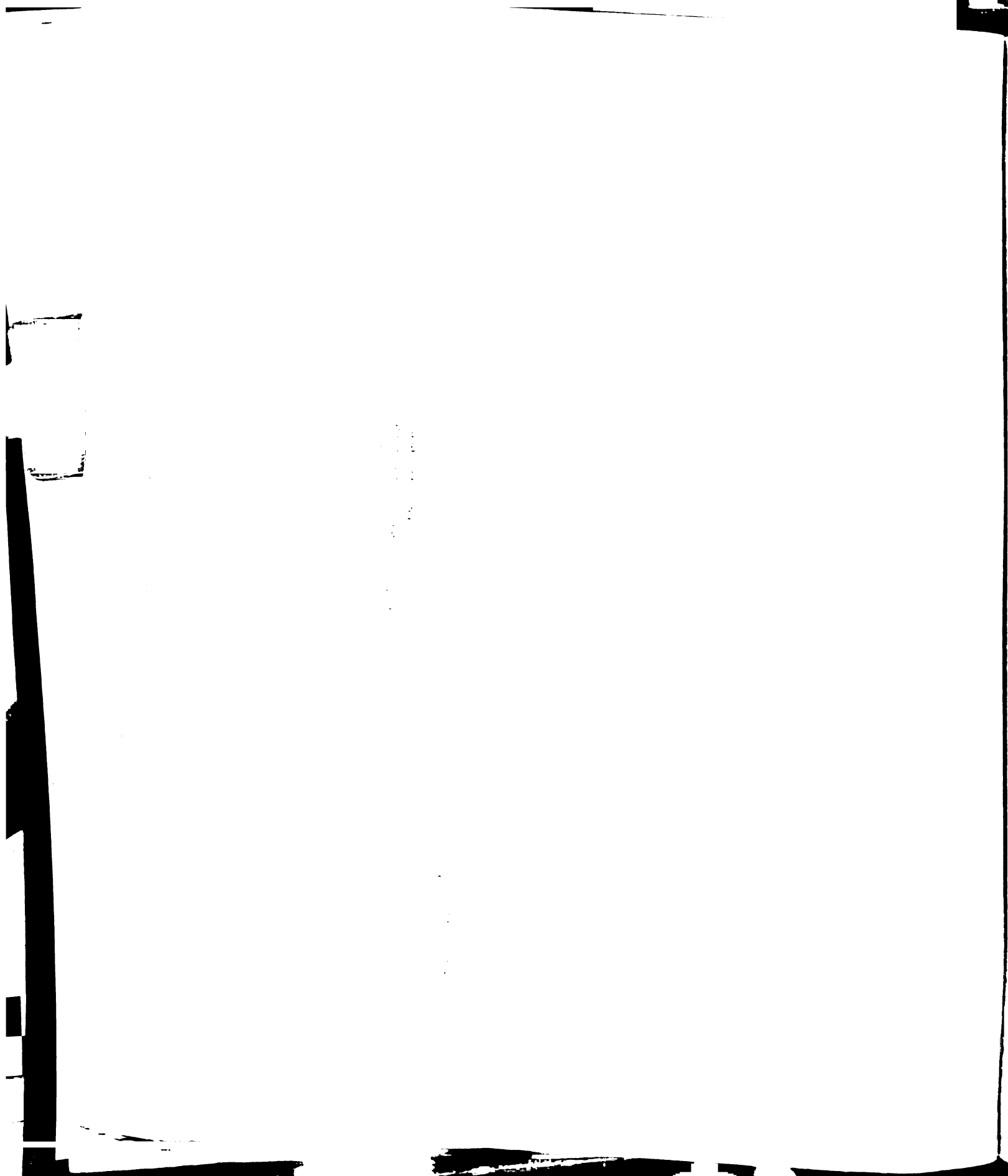
meetings on the day of the visit, it was felt advisable to meet with the three professors at one time. The professors and the writer met for two hours and 40 minutes. The group interview had some benefits as it permitted the group to try to reach consensus of opinion on the items asked.

As can be seen from the above description, the Dean was most cooperative in assisting with the study. There was no hesitancy on his part or the faculty to discuss their program.

4. Knox College

Knox College is located at Galesburg, Illinois. It is an independent, gift-supported liberal arts college. Since its early days it has been co-educational. The college was founded by a group of colonists who migrated from New York's Mohawk Valley. They bought almost a whole township at \$1.25 an acre and sold it to themselves at \$5.00 per acre. The profits from the sale constituted the first endowment of the college. In 1837, a reluctant state legislature, including Abraham Lincoln, granted a charter to Knox Manual Labor College, but it was not until 1841 that the college opened its doors to students.

Knox College is accredited by the North Central Association. Knox was accredited by the Association of American Universities until that association ceased to exist. The Knox Department of Music is accredited by the National



Association of Schools of Music, and the Department of Chemistry is approved by the American Chemical Society.

The first appointment with Dean Charles Peake came as a result of the initial letter sent out. During the writer's first interview the whole study was discussed. When the Dean saw the faculty and student questionnaires, he would not offer any "institutional cooperation." He did, however, permit the writer to work on "your own" to complete the surveys. Dean Peake was very generous with his own time and spent four hours describing their inservice program. He also arranged for interviews with three professors to get their views of the program.

The teacher questionnaire forms had to be mailed to individual faculty members with a letter explaining the study. They were asked to complete the forms and return them to the writer in a self-addressed and stamped envelope. The returns were not adequate (50 percent of the full-time faculty members). On two other visits to campus, by talking with individuals and enlisting the help of those who had not returned their forms by mail, a fifty percent sample of the faculty was achieved. The returns were summarized and discussed personally with the Dean. On this visit, the method of administering the student questionnaire was discussed. The Dean did not wish to close the door on the study, but he did not feel he could offer any "institutional help" to the writer. He was agreeable that something might be worked out "on your own."

11

Since the college did not have a college postal system for students, the alternatives were personal delivery or the U. S. mails. The latter was prohibitive by cost.

Two faculty members who had dormitory supervision agreed to help with the distribution and collection of the student questionnaires. From the student directory a fifteen percent sample of seniors, juniors, and sophomores was selected. Forms were sent to 120 students, with a covering note from the writer. The students were asked to complete the forms and leave them with one of the two faculty members mentioned above. Since most of the girls lived in one dormitory, their part presented no serious problem. But most of the men lived in scattered fraternity houses. Forms to these houses were delivered personally. The covering note asked the men to leave the complete forms with the faculty member in charge. At a later date the writer called for them.

Dean Peake was most cooperative in providing written material on the college. The visits to the college were of personal benefit to the writer.

5. Monmouth College

Monmouth College is located at Monmouth, Illinois. The college was founded in 1853 by a deeply religious pioneer who felt the need of an institution of higher learning in the western part of the state. From 1853 to 1858, the school functioned as a preparatory school, but in later years the

state legislature granted it a collegiate charter. From the beginning the college has been affiliated with the Associated Reformed Presbyterian Church (now the United Presbyterian Church of North America).

Monmouth College is on the list of approved institutions published by the Association of American Universities. The college is accredited by the North Central Association. It is given Class "A" rating by the University of Illinois. Monmouth is a member of the American Association of Colleges, approved by the American Chemical Society, and the American Association of University Women.

Monmouth was not included in the list to whom the initial letter was sent. The first contact with Dean Hugh Beveridge came while the writer was visiting Augustana College. After an interview with Dean Beveridge, he indicated that he was willing to cooperate in the study. He offered to distribute the faculty questionnaire at a faculty meeting and collect them through his office. After several months had passed only twelve completed forms had been returned. Another visit was made to the college, and permission was received from the Dean to survey the faculty again, this time by mail. The earlier returns were disregarded, and the teaching faculty was surveyed by mail. This procedure brought in 33 forms.

Dean Beveridge granted permission to administer the student survey through the college postal service, accompanied by a note over his signature. The completed forms were returned

to his office. Forms for the survey were sent to 105 students, and two hundred and sixty-eight were returned.

On a later visit the writer spent an entire day at the college, interviewing three faculty members and talking with administrative personnel about the inservice improvement program.

6. North Central College

North Central College is located at Naperville, Illinois. It is endowed and supported by the Evangelical United Brethren Church. "The honor of having taken the initiative towards the establishment of North Central College belongs to the Illinois Conference of the Evangelical United Brethren Church,"⁴ who, in 1861, invited the conferences of Wisconsin, Iowa, and Indiana to unite in founding the school. The village of Plainfield, Illinois, offered a site, which was accepted, so the college was first named Plainfield College. In 1864, the name was changed to Northwestern College, and in 1870, the institution was moved to Naperville. In 1926 the name was changed to North Central College.

North Central College is fully accredited and approved by the North Central Association. It is also approved by the Association of American Colleges and the American Council on Education. The school of music is a member of the National Association of Schools of Music.

The first appointment with Dean C. C. Erffmeyer came as a result of the initial inquiry by letter. The study was explained to Dean Erffmeyer, and he agreed to cooperate. Since the faculty had just met previous to our first interview, some time was lost in getting started. The writer was permitted to visit a faculty meeting and personally administer the faculty questionnaire. The results were tabulated and discussed with the Dean.

Dean Erffmeyer permitted a covering note over his signature to be used with the student survey. From a student list, a sample of 15 percent of seniors, juniors, and freshmen was selected. The addressed questionnaires were distributed and collected through the Dean's office. When the questionnaire forms did not come in by the requested date, the Dean sent tracers to remind the students. These data were summarized and shared with the Dean. On a subsequent visit, three faculty members were interviewed.

7. Olivet Nazarene College

Olivet Nazarene College is located at Kankakee, Illinois. The college had its earliest beginnings as an elementary school in Georgetown, Illinois, in 1907. In 1908, the school was moved to a point just south of Olivet, Illinois, and a secondary department was added. In 1909, the school became a college of liberal arts. In 1912, the trustees gave the college (then known as Illinois Holiness University)

to the Church of the Nazarene. In 1921, the name was changed to Olivet College. In November, 1929, a fire at the school destroyed much of the property. In order to continue its program of expansion, the trustees purchased the present campus and buildings owned by the St. Victor College. In 1940, the school was moved to the new campus, and the name was changed to Olivet Nazarene College.

Olivet Nazarene College is accredited by the University of Illinois as a Class "A", four-year college. It is also accredited by the Illinois State Department of Education as a teacher-training college. Graduates are admitted to the University of Illinois and other institutions with full graduate status. Undergraduates receive hour for hour credit in the undergraduate colleges. The college is a participant in the North Central Association liberal arts studies. At the beginning of this study, the school was not accredited by the North Central Association; however, the college was given full accreditation during the spring of 1956.

The first contact with Dean Willis Snowbarger came as a result of the initial letter of inquiry. After a personal interview and explanation of the study, he was interested to participate. The faculty questionnaire was administered at a faculty meeting by Dean Snowbarger. This gave almost 100 percent participation. He returned these to the writer and a summary was returned to the Dean. Student questionnaires

were sent to 120 students, and four hundred and eleven forms were returned.

Four visits to campus permitted the writer to interview three faculty members and the Dean. The cooperation from all was excellent. There was high feeling of optimism among the faculty about their program of instruction. Each was aware that progress had been, and was still being made.

8. Wheaton College

Wheaton College is located at Wheaton, Illinois. The college was organized in 1860 out of the Illinois Institute, which was started in 1853. When the college was chartered in 1860, Illinois Institute, the preparatory department, later became Wheaton Academy. Wheaton College was started under the sponsorship of Free Methodist people, but since the presidency of Dr. Johnathan Blanchard, in 1860, has been an independent and inter-denominational school.

The initial contact with Dean John Fadenrecht came as a result of the initial letter of inquiry. He made arrangements with the Academic Planning Committee for the teacher questionnaire to be made at a faculty meeting. On the afternoon the questionnaire was administered 81 members were present. These were summarized and a copy given to the Dean.

The student questionnaire was administered to a 15 percent sample of the senior, junior and sophomore classes.

Since Wheaton has a college postal system, the addressed forms were administered through the college postal system, the addressed forms were administered through the college mail. The returns did not come in very well, so a follow-up had to be made. When 485 forms were in, a summary was made and shared with the Dean.

Four interviews were held with professors on Wheaton's campus. They were people who had seen the inservice devices develop.

D. Summary

This chapter has presented a brief historical sketch of the eight colleges in the study. It will be noticed that the schools have much in common in terms of character, accreditation, and willingness to cooperate in the study. The methods used in administering the surveys were described as they had to be worked out in keeping with the circumstances of each school.

E. Footnotes

1. E. H. Wilkins, Higher Education. Washington, D. C.: U. S. Office of Health, Education, and Welfare. Government Printing Office, 1956.
2. Ibid.
3. Bulletin of Augustana College, 1955-56, p. 7.
4. Bulletin of North Central College, 1955-57, p. 14.

CHAPTER V

INSERVICE IMPROVEMENT EFFORTS IN THE INDIVIDUAL LIBERAL ARTS COLLEGES

A. Introduction

This chapter reports the findings concerning the inservice improvement in each liberal arts college studied and the information collected on the variables that will be compared with the inservice improvement program. Each college will be reported separately. The identity of the colleges is not revealed. The colleges are reported in order from the lowest score on "How well is the college performing these activities?" to the highest. The order in this chapter has no purposed relationship to the alphabetical order in Chapter IV. Each college will be reported in the following pattern:

Information received from the teacher questionnaire form.

Information received from the student questionnaire form.

Information received from the interview with the administrative officer.

Information received from the interviews with faculty personnel.

Information received from other sources.

B. Summary of the Colleges

1. College A

Of the eight colleges, this college made the lowest score on the question: How well is the college performing these activities?

a. Teacher questionnaire. There were 42 respondents to the teacher questionnaire. This represented 55 percent of the full-time faculty. There were thirty items of the questionnaire on which fifty percent or more of those responding indicated that the college was "doing" (a combined score of the "Doing Well" and the "Doing But Should Improve" columns) the activity. Three of the scores derived from the teacher questionnaire are reported as scaled scores,¹ and two are reported as percentage scores.²

¹The scaled scores for the teacher questionnaire were derived by assigning weighted scores to certain columns (Ch. III, B.). By multiplying the column total by the scale score for the column, a weighted column total was figured. From these weighted column totals, a grand weighted total of the columns was derived. This grand weighted total of the columns was divided by the grand total of the columns. The quotient derived was the scaled score for the particular question.

²Items three and five of the teacher questionnaire are reported as percentage scores. With these two items, only one column was used. The quotient resulting from the division of the column total by the grand total of the columns was the percentage score.

How well is the college performing these activities? (8) ³	.730
Do the faculty members consider these activities desirable? (5)	.678
Percent of faculty members unfamiliar with present practices. (4)	.135
Reaction of faculty members to certain working conditions. (7)	.426
Percent of faculty members undecided about working conditions. (6.5)	.115

b. Student Questionnaire. Student questionnaires were sent to 180 students. With each student completing four forms, a total possible return was 720. The actual return was 442. On the three items on which the student questionnaire gave information, the following scaled⁴ scores were made.

The frequency of use of certain teaching methods. (7)	2.23
The frequency of use of certain teaching techniques. (4)	1.73
Student reactions to the teaching-learning situations. (7)	3.63

c. Interview with Administrative Officer. The administrative officer who was interviewed holds the rank of professor. He has been in his present job for twelve years. The catalog showed a student enrollment of 1201, but the administrative officer said that a few over 1100 had been their

³The numbers in parentheses indicate the rank of the college on the variable.

⁴Scaled scores for the student questionnaire were found in the same manner as those of the teacher questionnaire, but the weighted values assigned to columns were different.

largest semester.⁵ There are 76 full-time faculty members, fourteen part-time faculty members, and a reported faculty-student ratio of 1:16. Among the faculty, there are 24 with doctor's degrees (32 percent), forty-seven with master's degrees, and five with special or bachelor's degrees. Fifteen class hours are considered a full-time teaching load. This college anticipates 1500 students in 1960.

The administrative officer was very cooperative in providing information to the questions and gave permission for records of the North Central Association to be consulted for additional data.⁶ The interview with the administrative officer yielded the following information.

This college has not cooperated with collegiate organizations in studying problems of liberal arts colleges, although, "we cooperate in unending questionnaires." It was felt that these questionnaire studies has provided only "limited insight." At the time of the interview, the college was engaged in a growth study for the next few years. Evidently, this had bearing upon the anticipated enrollment of 1500 in 1960. Also, there was a college study of audio-visual education going on. No outside resources, in terms of "experts," had

⁵The difference devolves around part-time evening-school students.

⁶The writer made a visit to the office of the North Central Association at the University of Chicago to seek additional information from records on file at the Association Office. After going over the records with an Association official, it was felt that the records did not furnish any additional information significant to this study.

been brought in to provide help. In providing means for the faculty to do research, this college grants sabbatical leaves, but they are granted on a limited basis. Its teachers have the Purdue Rating Scale available for them to receive student ratings, but these are on an optional basis. The college does encourage attendance at meetings of professional organizations by granting \$20.00 per year for convention allowance. This amount can accrue up to \$60.00, but when that maximum is reached, no more is allotted until some has been used. This college does not have a published salary policy but expects to have one within the next year. It participates in the T.I.A.A. and social security for its faculty retirement. Each faculty member has an office and desk, although some offices are shared.

It was the feeling of this administrative officer that the strongest inservice activity of the college was the induction of new teachers. The Dean of the College meets at frequent intervals with new faculty members to discuss school policy, teaching problems, and to have social times. He felt the weakest part of their inservice program was the lack of faculty study groups on professional problems. During the school year, the faculty does meet for social gatherings, with wives or husbands invited, and some effort is made at these meetings to attack academic problems. However, the Dean felt the effort was not as concerted as it ought to be. There are no specific plans for the future to accelerate or improve the

inservice activities. The administrative officer commented that "the entire matter receives frequent attention, but the modification is slow."

d. Interviews with Faculty Personnel. Through the courtesy of the Dean of the College, interviews were arranged with three faculty members. Each faculty member was courteous and cooperative in answering questions. The questions directed to them were related to the thirty items on which fifty percent or more of those faculty members responding indicated that the college was "doing" the items. This gave descriptive information on the activities represented by the numerical scores.

Orientation of the faculty. It was felt that the new teacher could fit well at this college. Several new teachers had expressed appreciation for the faculty handbook, indicating that it had made their initial adjustment easier. The handbook is "suggested" reading for all faculty. Additions are made to the handbook almost yearly by the insertion of new mimeographed sheets. "It has only been a couple of years since it was completely rewritten." From time to time, the faculty receives mimeographed notices from the Dean on changes of policy. At other times, these bulletins are published to give information on committee studies, results of the college testing program, and "most any other type of information that the faculty ought to have." These bulletins

are published on a "need" basis and are not a regular inservice effort. These bulletins were thought to serve a useful purpose since the faculty meets only once a month.

Understanding the school and its purposes. Student-wise, this college sponsors a "freshman week" in which the new students are oriented to the college. New teachers participate in this effort to become acquainted with the physical surroundings, the philosophy of the college, and an understanding of the educational program. Further efforts are made to increase faculty understanding of the college through faculty meetings. It is the practice of the President to give interpretative comments at these meetings. One of the strongest emphases of the college's philosophy and purposes is the chapel service. On a day when the writer visited the chapel service, the President delivered such an address. It concerned the "student fair" (in which money had been raised for civic enterprises) and the achievements of the forensic teams. The President emphasized the development of these activities as a part of the total education which the college sought to give. There is a faculty committee, known as the Educational Policies Committee, which has the responsibility of keeping college practice in line with college philosophy. Four or five years ago, through this committee, the catalog statement of philosophy and objectives was revised. The college publishes an alumni bulletin in which interpretative articles deal with the college's purposes and achievements.

The Dean of the College meets with new faculty members and orients them to the college's philosophy. An official publication of the church to which the college is related provides space in each issue to interpret the college to the constituency. The alumni bulletin is published six times a year. There have been faculty-student discussions on the liberal arts college, its program, philosophy, and problems. These discussions have given opportunity to think through some of the philosophical aspects of the college.

Administration's attitude and responsibility for improvement of teaching. There seemed to be a general feeling among the interviewees that inservice improvement had not received the proper "push" from the administration. Extra-teaching duties were described as "heavy" and needing attention from the administration. It was felt that a good job had been done in making information available from the registrar, personnel, and guidance officers. All freshmen testing scores are made available to the faculty members who serve as counselors for these new students. Each counselor is supposed to keep a cumulative record on his counselees. Doubt was expressed that this was followed through by all counselors. The grades are reported bi-weekly from the Dean's office, giving "low" and "honor" students. Absences are also reported on this sheet. A unique feature of these reports is the comment given by the teacher giving the low grade, as to why the grade was reported low. This gives the faculty counselor

specific information on which he may advise his counselee. A comment might be -- "Has not turned in daily assignments."

The administration does provide clerical assistance to teachers. This help is usually given through students. These students are paid by tuition reductions. One generally tries to find a student who is interested in the professor's field, so there will be more interest and efficiency in the work. Interviewees felt they had been fortunate in securing good student help. The Dean's office will provide secretarial help when it is necessary. As much as possible, the administration has shown its willingness to attack problems that affect teaching. One interviewee described this action as "very positive." At a teacher's suggestion, a large section of a class was divided.

Involving the whole faculty. The faculty is having opportunity to do long-range planning with the administration as items are presented to it from the "policies committee." There was much faculty planning involved in the construction of a new fine arts building. There is a faculty committee that deals with special faculty meetings designed to provide social and academic activities. This was not felt to be too strong since most of the meetings were more social than academic. It was felt that new faculty members had opportunity and freedom to express their views.

Assisting the faculty in its professional development. The college is quite willing to grant leaves for study when

one can finance it himself. There is also willingness on the part of the administration to work out research leaves. One interviewee had received college help for a trip to Europe. However, this leave practice seems to be worked out on an "individual bargaining basis." Some inter-departmental seminars have been tried, to integrate several areas of study, but the interviewees said the extra-teaching duties had so dissipated the energy of the teachers involved that it had not worked out too well. Mention has already been made of the provisions for attending professional meetings. Interviewees felt that the college was "more than generous" in its efforts to provide retirement benefits. The T. I. A. A. contributions are paid by the college, over and above the salary. It has also made provisions for teachers who are ordained ministers in the sponsoring church to have ministerial retirement benefits. One interviewee had received help from the newsletter the Dean's office put out reporting educational research. But it was admitted that this was not a "regular service."

Directing or supervising instruction. Although no systematic program for directing or supervising instruction is in force, it does receive rather careful attention throughout the school year. This is done by close cooperation between department heads and the Dean. Department heads usually help the new teacher get his courses set up. All three interviewees felt that one could talk to the Dean about academic problems. The Dean was described as being "sympathetic to

problems" by one, and "wise in the ways of teachers by another. "One can go in anytime for help with a problem." "The Dean can say 'No' in a nice way." Mention has already been made of the frequent meetings the Dean has with new teachers to get them oriented.

Providing centralized services. At present, there is a plan underway by the Library Committee to extend the opportunity for inter-library loans. A committee has been appointed to take charge of securing audio-visual aids. Each department has some audio-visual equipment, but this service is not centralized except for ordering films. The clerical assistance provided by students may be used to grade objective tests. There is a mimeograph machine in the Dean's office where teachers may take their test materials for duplication. In terms of teaching supplies, one interviewee said, "We can get what we really need. Of course, we operate conservatively."

Obtaining evaluations from others. The Purdue Rating Scale is made available to teachers for student ratings. This is not compulsory. Some agitation by students to have the forms used more regularly has accelerated its use. A move is afoot to make it an annual and all-college affair. When a teacher does use the Purdue Rating Scale, he evaluates the results. It is not obligatory to share them with the Dean.

Encouraging research. Some experimental designs with classes have been permitted. An experiment involving inter-departmental seminars was mentioned. It was between literature

and fine arts. Some grouping has been permitted in English and languages. The interviewees felt that if a teacher wanted to do something that seemed "sound," it would be permitted.

Insuring the flow of information to and from campus.

Faculty members who serve as student counselors have ready access to information about students. The results of testing programs are made available to counselors immediately after the results are known. The Dean publishes reports on how well the college stands with other colleges on standard test scores. A centralized record system is in the Dean's office. A teacher is free to consult these records at any time. This college had a number of church conferences on campus each year, but nothing was mentioned about educational conferences.

Working conditions. Recently there has been a liaison committee of faculty members appointed to serve with the administration on working conditions. This committee serves as a communication channel between the faculty and the administration. They are involved in plans for the future and the effects of these plans on the faculty. In general, the interviewees felt that the non-teaching responsibilities were too heavy. Three items on which the faculty indicated they were not pleased were: present salary, opportunity for travel, and opportunities for research. On seventeen items the faculty indicated that it was "pleased" (where the combined responses on "well pleased" and "pleased" were fifty percent or more of

those responding). Items that rated unusually high in the "well pleased" column were: opportunities for conferences with individual students, availability of office space, constructive attitude displayed by the administrative officers, institutional definition of "Academic Freedom," and provisions for tenure.

e. Information from Other Sources. From the college catalog information was available on the length of service of faculty members. The average years of service of the faculty are 13.35. No other material that would help interpret the inservice program, except the faculty handbook, was available. Since a section summarizing the faculty handbook will be presented later, that material is not included here.

f. Summary for the College. The remarks of the interviewees seem to indicate agreement with the statistical data--that the college does not possess a strong inservice improvement program as measured by faculty reaction to the items on the teacher questionnaire. This is indicated also by the heavy responses reported in the "not doing but should" column (507) and the "not doing" column (611).⁶ The fact that this college does not cooperate with collegiate organizations in studying programs of instruction may be a part of the lack of "push" felt by the faculty. In evaluating this

⁶Summary sheets for teacher and student questionnaires for each college are found in the Appendix.

program, one should keep in mind that the Dean teaches part-time and may not have time to give to guiding the inservice program that a non-teaching dean could give.

2. College B

This college made next to the lowest score on question one of the eight colleges in the study. The specific information from the surveys is given below.

a. Teacher Questionnaire. There were 31 items on the teacher questionnaire which the faculty indicated the school was doing. These responses were made by 36 respondents out of a faculty of forty-two (85 percent). The scores from the teacher questionnaire are as follows:

How well is the college performing these activities? (7)	.743
Do the faculty members consider these activities desirable? (7)	.624
Percent of faculty members unfamiliar with present practices. (7)	.155
Reaction of faculty members to certain working conditions. (4)	.500
Percent of faculty members undecided about working conditions. (5)	.112

b. Student Questionnaire. There were 120 students sampled. A total possible return would have been 480 forms. The actual return was 361. The scaled scores for the items on the questionnaire are as follows:

The frequency of use of certain teaching methods. (8)	2.21
The frequency of use of certain teaching techniques. (8)	1.57
Student reaction to the teaching-learning situations. (4)	3.76

c. Interview with Administrative Officer. The administrative officer who was interviewed has been at the college for thirty-four years. For the last twelve years he has served as Dean of the College. From his report, the average attendance for the two semesters of 1955-56 was 758. In 1960, this college is expecting 1,000 students. At present, there are 42 full-time faculty members and six part-time. This gives a faculty-student ratio of 1:17 (on the 758 figure). Of these faculty members, there are 19 with doctor's degrees (45 percent), twenty-six with master's degrees, and three with bachelor's or special degrees. Thirteen to 15 class hours are considered full-time teaching. Two hours of laboratory teaching are counted as one hour of teaching. On this basis, the college average is 14 hours.

This college has a specifically budgeted amount for inservice improvement. For 1955-56, it was \$3,100.00. This is broken down into \$600.00 for faculty travel, and \$2,500.00 for leaves. A teacher may be granted a semester's leave at full pay or a year's leave at half pay. During the past three years this has averaged about \$2,500.00 per semester.

This college has not cooperated with collegiate organizations in studying problems of liberal arts education. It

has held meetings with other colleges supported by its church. It was felt that these meetings had furnished some new ideas. According to the administrative officer, the college is not presently engaged in any studies of its own to improve instruction. No use of outside resource people was reported for the years 1944-45 through 1955-56. No provision is made for teachers to receive evaluation of their teaching. The college does give assistance to teachers for travel to professional societies. It has a published policy on leaves, but no promotion or tenure program published. At 68, a faculty member may retire. The school participates in the T. I. A. A. with four percent being paid by the college and four percent by the teacher. Recently, social security coverage has been added. Each faculty member has a desk to himself although some offices are shared.

According to this administrative officer, the strongest point of inservice improvement is found in the faculty meetings at which programs dealing with academic and administrative problems are discussed. Lately, a series of programs in which each department (also trustees and administration) tells about its work in relation to the whole college has been going on. Also mentioned as strengths were: the sabbatical leave program, and the encouragement from the college for faculty to attend professional meetings. The weakest part of the program was felt to be the orientation of new faculty members, especially the beginning teacher.

At present, there are no plans being considered to accelerate or improve the inservice program.

c. Interviews with Faculty Personnel. The three faculty members interviewed were very cooperative in answering questions, but all three seemed to indicate that they felt the inservice program was weak. One had a rather negative attitude about the administration's ability to get the program going.

Orientation of the faculty. There were no items in this section where fifty percent or more of those responding indicated that the college was performing the activity. This concurred with the administrative official's opinion that this was the weakest part of their program.

Understanding the school and its purposes. Faculty meetings have contributed significantly to this phase of inservice improvement. Several years ago all faculty members wrote out their objectives for the college. These were evaluated and condensed for a catalog statement. Several meetings were spent in discussing this general statement of objectives. This year, the board of trustees had a meeting with the faculty in which they presented their views on the objectives of a church-related college. Articles are written in the church periodicals explaining the program of the college. Several attractive brochures are available for distribution.

Some departments were reported to be successful in coordinating their objectives with the college objectives.

This has been particularly true in the English department with its emphasis on communication. A committee on policies clears all departmental suggestions for course additions or deletions to be sure that all changes are in line with the college's policies and objectives.

Administration's attitude and responsibility for improvement of teaching. Each of the interviewees felt the administration had not exercised strong leadership in the improvement of teaching. There is no published program for promoting the faculty on a merit basis. Promotions are generally made by the President. Evidently, the system has worked to the satisfaction of most, for no adverse criticism was heard. Although the college does not have a centralized filing system on students, it does a good job, according to these interviewees, in making information available to teachers. Reports are given on tests shortly after they are taken. A probation list is published each quarter. The Registrar's Office is open to faculty members to check on students' background or grades.

Efforts have been made to provide student help to teachers. Each department has one or more student assistants who are selected by the department. "Almost every teacher has some departmental assistance." The students are generally selected from among those who are strong in the area. In general, the interviewees felt that these students had given helpful assistance. It was felt that the administration was

ng to attack problems that affect teaching. This was
 nced by the replacement of a weak teacher and a careful
 tion of a new teacher. "Of course, they have to work
 in budgetary limits, but they will do what they can."

Involving the whole faculty. Considerable use has
 n made of the faculty in discussing the possibilities of
 creased enrollment. The President has a faculty committee
 orking on problems of administration, scholarship, and
 uildings. This committee has been working on "efficiency
 studies." Group activities have been sponsored among the
 faculty, usually involving social gatherings where wives may
 come. On several occasions there have been voluntary dis-
 cussions among faculty members. One such meeting was to
 discuss the question of future enrollments, "Quality vs.
 Quantity."

Assisting the faculty in its professional development.

The sabbatical leave program has already been described. Money
 budgeted for attending professional meetings is included in the
 departmental budgets according to the previous experience of
 expenses. One interviewee remarked, "These things (professional
 meetings) haven't helped our old teachers to change much through
 the years." Under the leave program, one teacher took a year
 off to write a mathematics book, and a literature teacher
 worked out a new course to be offered. It is also possible
 for one to submit a plan for travel as a leave program.

Directing or supervising instruction. Most of the direction for the teacher seemed to come from the departmental head, although the Dean gives personal help when it is sought. The help given by the Dean did not seem to deal as much with classroom technique as "just a chance to talk about my course with him." These types of visits to the Dean seemed to be quite frequent. "He probably gives a teacher eight to ten hours a year talking about courses." None of these visits is scheduled in a required manner.

Providing centralized services. Although the faculty rated well help in selecting audio-visual materials, this seemed to have indicated their being ordered through on office. Audio-visual equipment is centralized, but film ordering is quite individual. The experienced teacher who helps set up course objectives is usually the department head. The clerical assistance provided teachers has already been described. All interviewees were enthusiastic about the mimeograph services provided for them. This also includes stencil cutting. Expenditures for this service are provided in the departmental budget. Although one has to go through channels to get equipment, it was felt that within budgetary limits one gets what he needs.

Encouraging research. Although there were three items on which fifty percent or more of those responding indicated that the college was "doing" the item, only one--sabbatical leaves--drew a fifty percent response in the "doing well"

m. The interviewees did not feel that the other two actually representative of actual conditions, although did agree the administration permits experimentation classes when one has a good idea.

Insuring the flow of information to and from campus.

ce this college has close church relationships, there are many opportunities for students to engage in church programs. Also, student groups sponsor several community projects. Recently, a college chaplain has been engaged to coordinate the religious activities off campus. Church conferences are invited to the campus. On a day the writer visited, there were approximately 100 high school students from churches related to the college visiting campus. Several educational conferences are held on the campus each year. The Education department sponsors a meeting for school administrators in the county. Outside speakers of national repute have been engaged to address these administrators.

Working conditions. A scaled score of .500 was achieved on the working conditions. There were only three items, present salary, opportunity for research, and opportunity for travel, on which less than fifty percent of those responding indicated they were "pleased." The close relationship of this college to the sponsoring church has made it possible for working conditions that relate to financial ability to be kept at a satisfactory level while other aspects of the inservice program have been allowed to lag.

e. Information from Other Sources. From the college catalog, information was available on the average years of service of the faculty. This average was 12.67. This college lost three professors by death. None of these was close to retirement, so apart from such uncontrollable circumstances, the average may have been higher. The interviewees indicated that once a person became settled at this school, he generally stayed a long time.

f. Summary for the College. The above information will indicate that this school has only sporadic strength as measured by the faculty reactions to the questionnaire. One interviewee summed up the program as being strongest in the area of mimeographing services and weakest in orientation of new faculty members. The new faculty member was described as "being on his own," "in the dark," and "having to work his way along."

3. College C

This college rated third from the bottom on question one. There were forty items on which the teachers indicated the school was "doing" the item. The following is the specific information.

a. Teacher Questionnaire. There are forty full-time faculty members at this college. This faculty returned 35 forms (87 percent), and their reports indicated the following scores:

How well is the college performing these activities? (6)	.769
Do the faculty members consider these activities desirable? (6)	.661
Percent of faculty members unfamiliar with present practices. (2)	.097
Reaction of faculty members to certain working conditions. (6)	.484
Percent of faculty members undecided about working conditions. (4)	.115

b. Student Questionnaire. Student questionnaires were sent to 100 students. A total possible return would have been 400. The actual return was 268. The following information was obtained in the summary.

The frequency of use of certain teaching methods. (5)	2.31
The frequency of use of certain teaching techniques. (7)	1.68
The student reaction to the teaching-learning situations. (2)	3.79

c. Interview with Administrative Officer. The administrative officer interviewed has been with the college for 27 years, of which the last five have been as Dean of the College. According to him, the college had an enrollment of 645 in 1955-56. In 1960, the college is planning for 850 students. There are forty full-time faculty members and nine part-time. This gives the college a faculty-student ratio of 1:14.6. Among the faculty members there are eighteen with doctor's degrees (45 percent), 26 with master's degrees, and five with bachelor's or special degrees. The administrative officer

indicated that \$2,000.00 is budgeted for inservice improvement. From this sum, he indicated that the college gave assistance with publications and secured library materials for the faculty.

This college has not cooperated with collegiate organizations in studying liberal arts problems, and at present time did not have any institutional studies underway designed to improve instruction. No outside resource people had been brought to the campus, although they had been used to work on academic problems. The administrative officer indicated that a fund to be used in encouraging research was in the offing. The Dean's office give assistance to any teacher who wishes to receive evaluation of his teaching by providing the evaluation sheets.

Beginning next year, this college will pay round-trip coach fare for faculty members to attend professional meetings. This faculty has recently published a faculty handbook, and it is in dittoed form so it can be amended by insertions. They have a published tenure program, but their promotion policy and leave policy are not in writing. Provisions are made for retirement at age 70. The college cooperates with the T. I. A. A. program.

Each faculty member has a desk to himself, though some offices are shared. The administrative officer commented, "we consider our office facilities adequate." In listing the strongest phase of the inservice program, the administrative officer named "assistance to young instructors to continue

their graduate study." He listed as the weakest, their lack of help to young instructors in their day-to-day problems. At the time of the interview, there had been no definite plans for accelerating or improving the inservice program, except for the research fund mentioned.

d. Interviews with Faculty Personnel. Through the courtesy of the Dean, interviews were arranged with three faculty members.

Orientation of the faculty. These interviewees felt their new faculty handbook had added strength to their orientation program. Previously, a committee had been responsible for keeping the "faculty statutes," and generally, new teachers were assigned to this committee so they would become acquainted with the statutes. It was felt that these statutes were too inaccessible so the suggestion was made to the administration that a handbook be published. The committee in charge of the handbook revises it currently with insertions. The Dean's office makes a practice of publishing bulletins regarding new information on school policies, registration, schedules, etc.

This faculty has had a pre-school workshop for the past four years. This practice was initiated by the President. The meeting is planned by the administrative staff. During the past years, the following topics have been considered as themes for the workshops:

1953-54 Philosophy of a Christian College

1954-55 Counseling in a Christian College

1955-56 Teaching in a Christian Liberal Arts College

1956-57 (Proposed) Christian Emphases of the Liberal Arts College

Each of the interviewees felt these pre-school workshops had been very valuable to the orientation program. One of its strong benefits to the faculty as a whole was described as "giving the faculty chance to emphasize the spiritual unity we have in our college."

Understanding the school and its purposes. At the pre-school workshop, they have engaged in a study of "purposes of the Christian college." In connection with this study, a sub-committee was working on college objectives and philosophy to determine where curriculum changes should be made. Some departments have made efforts to bring their departmental objectives in line with the institutional aims. The number of persons in each department is small, so the department basis has not been too good as a planning basis. This college has sought to interpret its program to its constituency by its catalog and published bulletins. It observes a "Christian College Day" in the spring, which is sponsored by the National Council of Churches. This year there were over fifty persons speaking on "Christian Education" in the surrounding churches. This college has a group of townspeople called "associates." Once a month this group meets, and a different department explains its work. This college recently celebrated its centennial, and in conjunction with



that occasion published a history of the college. Its alumni bulletin goes out four times a year.

Administration's attitude and responsibility for improvement of teaching. Although no printed program for promotions is available, the interviewees felt that merit was the basic consideration in promotions. "They know who is doing good work." The administration makes psychological test scores available through the Dean's office shortly after the tests are taken by the students. The admission files are open to faculty members to get information on the students' backgrounds. Each department chairman has records on his majors and counsels his majors. When a student declares a major, his records are sent to his department chairman. This college has a very comprehensive cumulative record form that is kept by the department in counseling students.

Students may take a "proficiency examination" in any required subject. Although this is permitted, not many take advantage of it. Teachers may get student helpers through the business office. The Dean's office usually provides secretarial help when it is needed. One interviewee commented that there seems to be "more recognition than consideration" given to extra-class duties. Another interviewee commented that these are unusually heavy. There is no systematic program to take them into consideration in determining class load or pay, although an individual may get consideration if he pleads his case. This college has sought to follow the

recommendations of the American Association of University Professors in matters of academic freedom, tenure, and dismissal. The matter of academic freedom has been a topic of discussion at one of the pre-school workshops. "We have an awful lot of freedom here," one interviewee said. The administration has shown its willingness to attack problems that affect teaching, particularly in getting rid of weak teachers. In dismissing such weak teachers, the administration has sought to operate within the policies of the A. A. U. P. It was felt that the administration did give sympathetic hearing to instructional problems. "One should always keep in mind the limitations under which the college operates in discussing these problems."

Involving the whole faculty. This college has recently set up a nine-person committee to plan with the administration. The nine members are on a three-year revolving plan. They are considering such problems as student enrollment and expansion, pre-registration procedures, chapel, and buildings under discussion. Their recommendations are not always accepted exactly as proposed, but enough of them have been incorporated into plans that the committee knows its work is being relied upon. All ranks are represented on this committee. Because the departments do not have too many faculty persons within them, most academic planning is done on a divisional basis.

Assisting the faculty in its professional development.

This college does not have a published policy on leaves, but individuals may get help as need arises. At present, a committee of three persons, working under the President, is considering means to administer a fund to encourage professional growth. Two thousand dollars a year will be allocated for such use.

This college has devised some inter-departmental seminars. One has been sponsored jointly by the departments of art and foreign language. A seminar in American culture was sponsored by the department of history, English, and sociology. The administrative officer did not indicate that any outside "experts" had been brought to the campus, but their services had been used at the pre-school workshops. Some of these had spoken on non-instructional matters, i.e., "The World Situation" and "China Today."

Faculty members are encouraged to attend professional meetings, but "not helped enough." The college is free about granting absences to attend professional meetings, but only \$25.00 is allotted to each department. The science department has a special fund, donated by friends, to provide for science professors and students to take special trips. It was believed the situation for the rest of the college may be improved through the administration of the \$2,000.00 for professional development.

Directing or supervising instruction. Little seems to be done in this area, and the interviewees sensed it. The departmental chairman does what supervision of instruction is done. Each interviewee felt that one could feel free in discussing academic matters with the Dean.

Providing centralized services. This college secures books on inter-library loans from the University of Chicago, University of Illinois, and Knox College. They do not have a centralized audio-visual agency. Since the science and education departments use most of these teaching aids, orders are channeled through those departments. A ditto machine is available for faculty members to duplicate instructional materials. Because of the convenience of the ditto machine most faculty use it, although mimeographing service is available. Each department has an amount in its budget to cover costs of these items.

Encouraging research. The interviewees felt that one could feel free to experiment in his classroom. One had used his classes to set up a doctoral study.

Insuring the flow of information to and from campus. Mention has already been made of efforts like the Christian College Day, on which the college sends representatives into the surrounding churches to interpret the program to the churches. The Bible department also sponsors "student volunteer" groups for community services. Quite a bit of work has been done in community activities. The sociology department

is currently engaged in making some community surveys. Conferences are frequently invited to the campus. In order to establish better working relationships and understandings between the college and high schools from which the college's students come, high school principals are invited to the campus. This gives them an opportunity to hear reports on their former students. Coaches of the surrounding area use the athletic facilities for meetings, and a meeting of chemistry teachers of liberal arts colleges is held on the campus.

Working conditions. This faculty was generally pleased with working conditions. The scale value for the questionnaire was .484. There were 16 of the twenty items on which the faculty was "pleased." Present salary, sabbatical and other leaves, opportunity for research, and opportunity for travel were the four items with which the faculty was not "pleased."

e. Information from Other Sources. This college has two very attractive publications for students, but neither yielded information on inservice improvements. From the catalog, it was evident that the average years of service of the faculty was relatively high, 11.87.

f. Summary for the College. It was the opinion of the writer that, though this school did not show up too well on the questionnaire, there are evidences of a growing inservice program. The emphasis on faculty participation in

planning, increased efforts for leaves, travel to professional meetings, and the feeling of "we want to improve," as expressed by the interviewees, indicates considerable inservice improvement may lie ahead.

4. College D

This college rated fourth from the bottom on question one. There were 33 items on the teacher questionnaire on which fifty percent or more of those responding indicated that this college was "doing" the items.

a. Teacher Questionnaire. This college reported sixty-five full-time faculty members. There were 51 forms returned, representing 78 percent of the full-time faculty. The return on the questionnaire was helped by the questionnaire being administered at a faculty meeting. The following specific information was obtained.

How well is the college performing these activities? (5)	.863
Do the faculty members consider these activities desirable? (8)	.672
Percent of faculty members unfamiliar with present practices. (8)	.171
Reaction of faculty members to certain working conditions. (8)	.347
Percent of faculty members undecided about working conditions. (6.5)	.117

b. Student Questionnaire. Questionnaire forms were sent to 150 students. A total possible return would have been 600. The actual return was 247. This low return was probably accounted for by the fact that the college has no centralized postal system. The forms had to be sent to individual dwellings on the campus. Even though the Dean made a special effort to get more returns in, the end of the semester interfered with his efforts.

The frequency of use of certain teaching methods. (4)	2.33
The frequency of use of certain teaching techniques. (2)	1.84
Reactions of students to the teaching-learning situations. (8)	3.55

c. Interview with Administrative Officer. The administrative officer interviewed has been on the staff for 33 years. He has been in his present position since 1953. This college has a student enrollment of 1008, but in 1960, it is expecting 1200. The faculty-student ratio is 1:14. Among the faculty there are twenty-two with doctor's degrees (34 percent), forty-six with master's degrees, and seven with bachelor's or special degrees. Fifteen semester hours are considered a full-time teaching load. The average for the faculty was described as being "about fifteen." The budgetary allotment for inservice improvement is \$2500.00. Specific items financed from this amount are leaves, faculty travel, and faculty workshop.

This college is presently engaged in the study on critical thinking sponsored by the North Central Association. It has also been a member of the North Central Association Studies on Liberal Arts Education. It was felt that the summer workshop in relation to the studies on liberal arts education had made significant contributions to the workshoppers and the college as a whole. It was described as a "morale builder."

At present, this college does not have any specific studies underway to improve instruction, but it has appointed a faculty committee to deal with the improvement of instruction, so some may be forthcoming. This committee has met regularly at bi-weekly intervals. One outside "expert" who has helped much with inservice improvement is the North Central coordinator. It was felt that his visits to the campus each year had generally resulted in some improvement of instruction.

Although the college does not have funds for research grants, it does release a teacher from teaching responsibilities if he secures a sponsored project. Last year, one teacher was put on half-time teaching so he could do research on a sponsored project.

Several years ago a faculty committee drew up a teacher evaluation sheet which is used near the close of the first semester. The student reactions on these sheets are the property of the teacher and are not seen by anyone else

unless the teacher assumes the initiative in passing them on to the Dean. This college does not give any formal assistance to teachers to belong to professional organizations. In cases where the subscription to a periodical, journal, or bulletin is the same price as the membership fee, the college will pay the fee with the understanding that the magazine becomes the property of the college after receipt. About \$2,500.00 is budgeted to pay faculty travel expenses to professional meetings and to provide for leaves. The distribution for travel is made on the basis of coach fare, plus \$7.00 per day for expenses. "During the last three years, no faculty member's request to attend a convention has been refused."

The faculty handbook is currently under revision. Included in the present handbook are a published tenure plan, promotion plan, and a policy on leaves. The retirement program is in the form of insurance and social security.

At least ninety percent of the faculty members have private offices. Each has a desk of his own, even if he shares an office. It was the feeling of the administrative officer that their program for faculty travel and leaves was one of the strongest inservice practices. He felt that the orientation of new faculty members was probably the weakest. This college has recently initiated a new practice that has bearing on inservice improvement. Faculty members may have free coffee in the dining hall from 9:30 to 10:30,

five days a week. This permits several of them to get together and discuss "affairs." Although the talk is informal, it was felt that a good many academic matters get aired over the coffee.

d. Interviews with Faculty Personnel. The interviews with faculty members departed from the usual pattern of separate interviews. Because of scheduling difficulties, on the day the writer visited the campus, it was necessary to interview the three faculty members at one time.

Orientation of the faculty. The faculty handbook for this college was finished in the summer of 1955. It is a mimeographed, loose-leaf book to which additions may be made. There are at least 38 different topics treated in the book in its present form. Although a faculty bulletin is not a regular feature, it is issued occasionally from the Dean's office. These usually deal with matters of the college calendar or memoranda on meetings.

Understanding the school and its purposes. A special arrangement has been made whereby faculty members may have coffee in the mornings, five days a week, from 9:30 to 10:30. This practice was initiated at college expense to facilitate discussion among faculty members. "Anyone can start the ball rolling, and 'most everything about the school gets discussed." Some efforts have been made for an off-campus workshop for faculty discussion. This has not become a regular and strong practice.

The philosophy of the college has received recent consideration. Two committees worked out statements that were incorporated into a revised statement of the college objectives and philosophy. Each department is asked to state its own objectives in line with the college objectives. A Curriculum Committee on Changes is responsible for seeing that the departmental programs fit into the over-all curriculum of the college. Two brochures are published each year. These help interpret the program of the college and serve as companion-pieces for the catalog.

Administration's attitude and responsibility for improvement of teaching. This college has a definite promotion plan printed in the faculty handbook. It sets up four steps of academic rank, giving the academic preparation for each, the professional status as a teacher that must be achieved, and the length of time in rank before promotion. In the writer's opinion, this promotion plan was the clearest statement on promotion policies that he observed among the eight colleges studied. Recently, the University Senate has been "resurrected," and it had some discussion on the meanings of "merit" in promotion. The interviewees felt that "merit" as a basis for promotion was usually determined by the Dean, and perhaps a little "favoritism" was evident. They did express satisfaction with the policy that raises are not tied to rank, and that rank is not determined by a pay scale.

This college seems to do an adequate job of making information on students available to the faculty. They have a central file system except for current grades. Faculty personnel serve as counselors and test scores are sent to them as soon as tests are scored. Student help is available to faculty members. One department has such demand for secretarial help that it is having a half-time secretary. There are secretarial services provided for the faculty at large. This secretary will write letters, cut stencils, and mimeograph materials. The amount of student help provided for teachers varies with the departments. Student help is on a "need" basis, and is paid from \$.85 to \$1.00 per hour.

Under this college's tenure plan, a teacher of professorial, associate, or assistant rank is placed on tenure after the completion of three years of "satisfactory" teaching. Instructors remain on annual appointment. In general, the tenure program follows the pattern of the A. A. U. P. Although nothing is written concerning academic freedom, the interviewees seemed to feel that everyone has a "general understanding" of its meaning for their college. Some things are stated in contractual agreement--e.g., no drinking. Questions about conduct are asked on the employment form. It was the feeling of the interviewees that, in academic areas, they have too much freedom.

The administration has shown its willingness to attack problems that affect teaching. "They have always been

willing to attack a problem." "The Dean doesn't hesitate to say 'No' when he has to, but he is willing to consider any problem." One interviewee said he had gotten more help for laboratory assistance when he pointed out that his class was too large to operate efficiently with what he had.

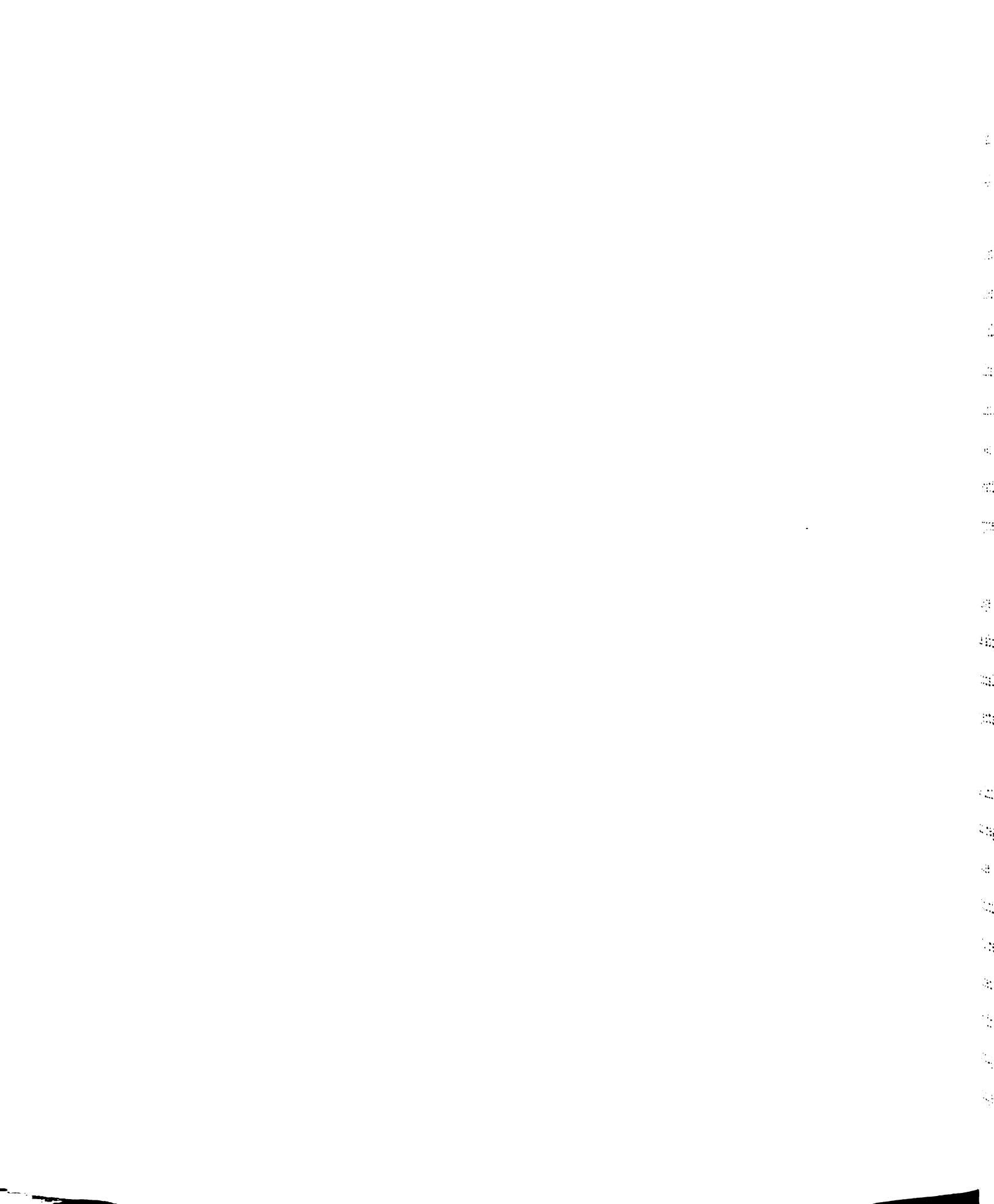
Involving the whole faculty. This college has a "Blueprint Committee" of faculty members, trustees, and students to do advance planning. The faculty does have opportunity to share in planning at faculty meetings. The President has an advisory committee, with faculty representation, that meets bi-monthly. Although the interviewees did not mention it, the faculty handbook mentions faculty representation at the trustee meetings. Two faculty members represent the faculty, and, although they are not members of the board, may have the floor for discussion. These two serve as a liaison channel between the administration and faculty.

Assisting the faculty in its professional development. A sabbatical leave policy of one semester at full pay or one year at half pay is in force. A faculty member who has had four or more years of continuous service and needs the additional study to advance in rank may be granted a leave on the above bases. Request for leave is through the department chairman. If one is granted a leave, one must sign a contract to return to the college for at least two years after the leave is completed. An alternate policy is for the individual to ask for leave without financial assistance and be free of any contractual obligations.

There is no regular way of reporting educational research. The North Central workshopper usually makes a report to the faculty on his summer studies, and on some occasions the Dean may pass around a report of a study, "but it generally doesn't reach everyone."

Directing or supervising instruction. The department head is basically responsible for the instruction in his department. This generally takes the form of "friendly advice" from time to time. The art department has an unusual practice of operating as a committee. All interviewees expressed the feeling that the faculty has much confidence in the Dean and his ability to provide educational leadership. Problems can be discussed with him openly and frankly.

Providing centralized services. The librarian is willing to secure loans from other libraries for faculty or students. There was some dissatisfaction with the audio-visual services. One of the interviewees was responsible for these services. He reported that he received \$200.00 per year for this work. He is handling these services in addition to an overloaded teaching schedule. It is not actually a centralized program, as different departments have their own equipment. The interviewees seemed pleased with the mimeographing services provided. These mimeograph services are charged to the departmental budget. It was also pointed out that the college will mail faculty's letters at school expense. In terms of supplies, one interviewee said,



"We can get what we need for our teaching, but we have to go through regular channels for it."

Obtaining evaluations from others. The faculty handbook states that each faculty member who teaches one or more courses is expected to use the student evaluation form in each class sometime near the end of the first semester. The results are the teacher's personal property unless he wishes to discuss them with the Dean. The evaluation form now in use was devised by a faculty committee. It is under consideration for revision. The interviewees felt that most everyone used it.

Encouraging research. The leave program of this college has already been explained, and mention has also been made about its attitude toward reducing teaching loads to make it possible for faculty members to work on sponsored research projects.

Insuring the flow of information to and from campus. The information that is provided about students on application and registration forms are kept in a centralized place. Because this college is church-related, there are many opportunities for students to participate in church activities and represent the college. Church conferences are also invited to the campus, so an exchange of information is going on frequently. In regard to professional information being brought to campus, the interviewees felt that the new travel budget would stimulate attendance at meetings from which they

could get new ideas. One interviewee felt there was more money available for travel to professional meetings than there were people who wanted to go.

Working conditions. There were twelve items on which this faculty said they were "pleased." This made the number on which they were "not pleased" eight. The latter are present salary, opportunity for travel, opportunities for promotion, opportunities for research, amount of clerical assistance, sizes of classes, number of class preparations, and provisions for central services.

e. Information from Other Sources. From the college catalog, the writer was able to figure the average years of service of the present faculty. That average is 6.26 years.

f. Summary for the College. Although this faculty did not indicate that it was "doing" as many items as some others, there did seem to be a fine working relationship between the faculty and the administration. The main inservice training seemed to be related to financial ability to provide, whereas some areas that would require administrative leadership to improve teaching seemed lacking. The factor of faculty initiative seemed to be quite evident in this college. The cooperation from administrative officers and faculty interviewees was excellent all the way through this study.

In regard to the student questionnaire, mention has been made that a ten percent sampling was not achieved. A ten percent sample of 1008 students would have been approximately 400 forms returned. Only 247 forms or 6.28 percent were returned. This was discussed with the Dean, and he felt that the semester examinations had hindered cooperation from students. He felt that a retake on the students would be less successful and was agreeable that this smaller sample be used.

5. College E.

This college rated fourth from the top on question one. The following specific information was gathered.

a. Teacher Questionnaire. There were 41 items on the teacher questionnaire on which fifty percent or more of those responding indicated that the college was "doing" the item. There are, according to the Dean, 43 full-time faculty members. Since there were fifty forms returned, it appears that some administrative officers or part-time teachers were present at the faculty meeting when the questionnaire was administered. These excellent returns were achieved by administering the questionnaire at a faculty meeting which takes place during the school day.

How well is the college performing these activities? (4) .939

Do the faculty members consider these activities desirable? (1) .829

Percent of faculty members unfamiliar with present practices. (5.5)	.148
Reaction of faculty members to certain working conditions. (5)	.516
Percent of faculty members undecided about working conditions. (3)	.127

b. Student Questionnaire. Questionnaires were sent to 160 students. A total possible return would have been 640 forms. The actual return was 409. The following are the scores derived.

The frequency of use of certain teaching methods. (1)	2.53
The frequency of use of certain teaching techniques. (5)	1.71
Student reactions to the teaching-learning situations. (3)	3.78

c. Interview with the Administrative Officer. The administrative officer interviewed had been a faculty member for seven years and has been in his present capacity for three years. This college has a budget of \$4,100.00 for inservice improvement. Among the items supported from this fund are: faculty workshop, speaker for the faculty workshop, North Central Association Study on Liberal Arts Education and the summer workshop, summer graduate study bonuses, convention expenses, dues, sabbatical leaves, and central services.

There are forty-three full-time faculty members and six part-time faculty members. Among these there are fourteen with doctor's degrees (32 percent), twenty-seven with

master's degrees, and six with bachelor's or special degrees. The faculty-student ratio is 1:16. Fifteen to 16 hours are considered a full-time teaching load. The college average is 14.

This college has cooperated with the North Central Association Study on Liberal Arts Education since 1948. It was felt that this participation had been most helpful to the college, particularly to inservice improvement. Specific improvements that seem to have resulted from this cooperative study are: a faculty handbook on responsibilities and procedures, a faculty tenure system, and a continuous review of the college's objectives. At the beginning of this dissertation study, this college was not accredited by the North Central Association, but it was given full accreditation during the year. The administrative officer expressed the feeling that their continuous participation in the North Central studies had been most helpful in giving direction to their inservice improvement efforts. He expressed the opinion that their desire to achieve accreditation had been their most continuous motivation to upgrade their inservice program.

At present, this college has two new inservice activities underway. A committee is currently studying "methods of evaluating instruction." Twice each month the faculty meets during the day. At the same time, students are having an "activity period," e.g., clubs, teams, class

meetings. Faculty meetings are devoted to "professional development." Reports from committees like the one studying methods of evaluation are made and general discussions on teaching-learning and administrative procedures are taken up. It was at such a meeting the teacher questionnaire was administered.

Not many "experts" have been invited to the campus to help with academic matters, but they have been used at the faculty workshop. The North Central coordinator has been a yearly visitor. In 1954-55, an accreditation team from the North Central Association made a very thorough check, and the college was put on "suspended judgment" status. Out of this report came a number of helpful suggestions for improving the college's program.

The college has not provided much assistance to professors for research. Efforts have been made to provide facilities for library research projects, and some assistance has been given in chemistry and psychology experiments. Help is given teachers in securing evaluations of their teaching. The Purdue Rating Scale is used. The results are seen by the teachers only, unless the teacher prefers to share them with the Dean. A copy of the Purdue Rating Scale is included in the faculty handbook so each faculty member will be familiar with it.

This college allows a teacher \$15.00 per year for membership in professional societies. Along with this,

expenses for registration, room, and meals are paid when one attends a professional meeting. A bonus of \$20.00 per semester hour is granted for graduate hours earned above the master's degree (exclusive of dissertation hours). A loan of \$2,000.00 may be granted to one who is within one year of meeting doctoral requirements. This loan is repaid as salary advancements at the rate of \$400.00 for four years, and the fifth year is cancelled if the teacher continues at the college. Along with these benefits the college now has a published program of promotions, tenure, and leaves. Retirement is voluntary, with tenure ceasing at age 65.

Approximately fifty percent of the teachers have private offices. The other fifty percent are officed by two's, but each has a separate desk.

The administrative officer felt that their strongest inservice improvement activity was participation in the North Central Workshop each summer. Benefits from this program have already been enumerated. It served the particular advantage of giving continuity to their efforts to improve, involved a number of faculty members, and having a coordinator attend the workshop. The efforts to encourage research were considered the weakest phase of their inservice program, although it was recognized that there are definite limitations to the research that can be done in a liberal arts college.

d. Interviews with Faculty Personnel. These interviews were the first the writer held with faculty personnel. Each interviewee was most cooperative and helpful in answering and discussing the questions.

Orientation of the faculty. The faculty responses on the questionnaire indicated that a new faculty member has an experienced faculty member appointed to serve as counselor. This is not exactly the practice, although each new faculty member does receive counseling. It is understood that the counseling will come from the Dean and the department head. Evidently the favorable responses of the faculty indicated appreciation and satisfaction with the present practice. Each of the interviewees felt the faculty handbook had made definite contributions to the college orientation of faculty members. The handbook contains 42 pages with an appendix of forms used in the faculty counseling program. It has been revised twice already. It presently provides information on 185 items. During the school year the Dean publishes bulletins on various topics. Some of these relate to students--eligibility lists, grades, etc.; others are reprints of articles from periodicals, while some are of an institutional nature--relating to visits of examiners of the North Central Association. The frequency of these bulletins is at the Dean's discretion. The three faculty members interviewed were in agreement that their pre-school faculty workshop was the most beneficial inservice for orienting the faculty. This workshop has been held for

four consecutive years. It is a noon-to-noon meeting, just previous to registration in the fall. Off-campus locations like Cedar Lake and Turkey Run State Park have been used.

Special speakers have been used at the workshops to help attack academic problems. Professor Pothoff, from the University of Illinois, was present one year to discuss "Theories of Learning." On another occasion, the North Central Coordinator spoke on "Objectives." Church leaders are also participants at these conferences. Generally the North Central workshopper for the summer is the leader. A program for the bi-weekly faculty meetings is set up in advance to get continuity from the study the workshopper had done during the summer. Among those benefits coming from the faculty workshop, the following were mentioned: development of a feeling of unity among the faculty members, new faculty members get an opportunity to meet all the people in a department in an informal way before the school year begins, educational discussions get one in the "frame of mind" for starting back to school, the spiritual and personal fellowship are inspiring and helpful.

Understanding the school and its purposes. It was the feeling of the interviewees that the faculty workshop and the bi-weekly faculty meetings had provided the best opportunities for discussing the college's philosophy and objectives. A study of objectives had been continued over a period of six or seven years through the North Central

Association Study on Liberal Arts Education. A committee worked on revisions and brought them to the faculty for discussion, changes, and adoption.

It has been an institutional policy that each teacher should file in the Dean's office a syllabus for each course. Some teachers give these to the students at the beginning of each semester. One interviewee felt the faculty had over-rated the college in its efforts to publish information that would help interpret the philosophy and history of the college. The Commission of Education of the church to which the college belongs has special publications in which the college has an opportunity to interpret its program to its constituency.

Administration's attitude and responsibility for improvement of teaching. This college has had professional ranks for only seven years. The division heads are required to have doctoral degrees. The most important criterion for promotion in rank seems to be teaching ability, but there was a feeling that "teaching ability" is not too clearly defined or measured. The \$20.00 per credit hour for summer work earned above the master's degree has stimulated additional study, but the salary schedule, as such, does not offer much inducement for professional advancement. This college sends to the faculty counselors the results of test scores and summary sheets on the entrance papers of students. Student records are open to teachers at any time. At each grading period

counselors receive notices of the grades of their counselees so they may have conferences with them. One particular advantage to teachers is the central file where information on students is kept.

Students are permitted to write off the first year of a foreign language through proficiency examinations. Student help is provided to teachers for record keeping, typing, filing, etc. On the whole, it was considered to be "very good." There is a secretary available for divisional chairmen. The published tenure program is contained in the faculty handbook. The interviewees felt that, within their power, the administrators made all efforts to attack problems that affect teaching. Encouragement had been given weak teachers to improve, and when improvement was not made, they were replaced. The rank system of academic levels and the means of achieving them were stated in the faculty handbook.

Involving the whole faculty. It was felt by the interviewees that this college has moved far in the direction of long-range planning. The efforts to achieve accreditation had necessitated such planning. Along with committees working on instructional problems, there have been committees working on personnel service areas. It was felt that personnel services were beginning to stabilize rather satisfactorily. The bi-monthly faculty meetings on professional topics required planning on a yearly basis rather than a semester-to-semester basis if a unified program were to result from the summer

work of the workshopper. The faculty has sponsored some Sunday evening discussions on matters related to Christian education. All academic matters that affect the curricular program of the college must be passed by the Educational Policies Committee, but the meetings for the faculty are planned by the Workshop Committee, of which the workshopper of the past summer is chairman.

Assisting the faculty in its professional development.

As mentioned above, a faculty committee has responsibility for planning faculty and professional meeting programs. Leaves of absence may be granted rather freely for one to study on his own expense. The sabbatical leave policy permits one a semester's leave at full pay or a full year's leave at half pay. As described previously, \$20.00 per semester hour will be granted for summer study beyond the master's degree. This payment is usually made after the work has been completed. Since this college suffered the loss of its library by fire, several years ago, it has not had the opportunity to develop faculty library facilities as it would like. Recently, a new library was dedicated, and it is anticipated that a faculty reading shelf will be initiated.

Faculty members are encouraged to attend at least one professional meeting each year. Registration fees, room, and board are paid by the college for one such meeting each year. Fifteen dollars for membership in societies will be paid by the college. Generally, a faculty member pays for

475

23

124

Figure 1

20

100

• • •

...



•

•

•

his travel expense unless he is traveling for the college. A check-list of professional meetings attended by the faculty is kept in the Dean's office. Where the college pays the membership fee in a society, the journal, if it comes with the membership, belongs to the faculty member.

Directing or supervising instruction. This faculty, as others in the study, was not being supervised by an administrative officer. The interviewees did feel that a very friendly feeling on the part of the Dean made it possible for teachers to discuss academic problems with him. Among the comments made were: "His personality makes it easy for one to talk to him." "He does not hold information gotten in confidence against a teacher." "One gets a good hearing on anything." Sometimes, the Dean may ask teachers in for conferences.

Although outside examinations are not used in evaluating instruction, efforts have been made to compare scores of different sections of a course. The department of education and sociology have made concerted efforts in this area.

Providing centralized services. Inter-library loans will be secured by the librarian upon request. Being close to Chicago, there are many possibilities from which loans may be had. Although this faculty rated itself high on getting help in selecting its audio-visual materials, the interviewees did not feel the services were adequate. They

do not have a person who is well-trained in this field, although they do have someone studying in the field.

All three interviewees were pleased with the clerical assistance the school provided. Each division and department has student assistants and proctors. The expenses for such help are included in the departmental budget. This permits student helpers to be selected by the department or division on a competence basis as well as need. For help with grading English papers a teacher is provided \$94.00 to \$98.00 per year. The per-hour pay varies from \$.55 to \$.75. They felt the student help was well distributed so those of lower rank, who may teach more students, got a fair share of the help.

The mimeographing services for tests, teaching outlines, reading lists, etc., received the highest rating next to the faculty workshop and the handbook. Money for these services is provided in the department budget. The stencils are generally cut by secretaries in the department, but in some cases the mimeographing department will cut them. It was felt that this service of mimeographing materials was appreciated by the whole faculty.

In regard to getting supplies, one interviewee said, "If an item is really needed, we can usually get it." He felt this represented the feeling of the faculty on requests for supplies. Requests usually originate in the department,

are approved by the departmental and divisional chairmen, the Dean, and the business office manager.

Obtaining evaluations from others. As mentioned previously, the Purdue Rating Scale is used for obtaining student evaluations. A teacher who uses the scale interprets the results and does not share them unless he desires. Student evaluations of teaching are not required, but encouraged. At present, no ratings have been obtained from alumni. A Public Relations Director has been chosen, and he is working on alumni organization with the hope that such evaluations from alumni will be possible in the near future.

Encouraging research. Some efforts have been made to reduce teaching loads when a teacher is engaged in research. The sabbatical leave may be used for research if the project is approved. On several occasions, alumni have made contributions for special research projects, relating to the school, but these have not been made systematically.

Insuring the flow of information to and from campus. Student records are a valuable source of information brought to campus about students, and this college has a central file for such records. There has been some follow-up work done on graduates of the ministerial program. The college seeks to keep a posting of where its graduates are serving churches. Some information on former students is acquired by graduates bringing their records up to date for the placement bureau.

A number of conferences are held on campus each year. There is a close working relationship with the denominational church sponsoring the college. The college also sponsors conferences for the churches. A music education conference was held recently. However, it was felt that little was done by way of campus-conferences for the faculty. The emphasis on attendance at professional meetings seems to indicate that it is considered an important source from which professional information may be brought to campus.

e. Information from Other Sources. From the catalog it was ascertained that the present faculty has served an average of 7.9 years.

f. Summary for the College. Although the pre-school faculty workshop was a favorite with the interviewees, as well as the whole faculty, they felt the North Central Association summer workshop had provided the most continuous encouragement to inservice improvement. This college has had a workshopper for nine years. The workshopper carries a problem to the workshop and reports to the faculty on his study of the problem. The workshopper becomes the leader of the professional meetings for the coming year, so there is good carry-over from the problem--to his study--to the work on answers.

6. College F

This college ranked third from the top on the score on question one. There were 45 items of the teacher questionnaire which the faculty indicated the college was "doing." The following specific information was obtained.

a. Teacher Questionnaire. This college reported 139 full-time faculty members. The teacher questionnaire was returned by eighty persons (57 percent). The following scores were made on the five areas.

How well is the college performing these activities? (3)	1.000
Do the faculty members consider these activities desirable? (2.)	.833
Percent of faculty members unfamiliar with present practices. (5.5)	.147
Reaction of faculty members to certain working conditions. (5)	.490
Percent of faculty members undecided about working conditions. (3)	.086

b. Student Questionnaire. The student questionnaire was sent out to 240 students. A total possible return would have been 960. The actual return was 535 or .083 of the expected ten percent.

Frequency of use of certain teaching methods. (6)	2.41
Frequency of use of certain teaching techniques. (3)	1.82
Student reactions to the teaching-learning situations. (7)	3.58

Journal of Management Education 30(6)

100

c. Interview with Administrative Officer. The administrative officer interviewed had been with the college for ten years, and has served in his present capacity for six years. This college has an enrollment of 1604, and it is not anticipating any increase in 1960 because of a ceiling enrollment. There are 139 full-time faculty members and fifteen part-time faculty members. Among these, there are forty-seven with doctor's degrees (34 percent), sixty-seven with master's degrees, and fourteen with bachelor's or special degrees (of whom eleven are R. O. T. C. officers). The faculty-student ratio is 1:17. Twelve to fifteen hours are considered full-time teaching. The college average is 13 hours.

This college does not have a special category in its budget labelled "inservice improvement." Most of the items that would be cared for in such an account are figured into the department budgets. Special matters, such as the faculty retreat, are treated as independent items. The Dean's office does have an account of \$80.00 which he may use for dinner meetings with faculty members. He may see them individually or as a group. He plans luncheon conferences through the year to get to know new teachers and talk over teaching problems with them. A fund called "contingency" is a reserve for any special academic projects that may come up during the year.

This college is a member of the North Central Association Study on Liberal Arts Education. It is currently

participating in the study on critical thinking sponsored by the North Central Association. Each year, excepting one emergency, it has sent a workshopper to the North Central Workshop. It was the feeling of the administrative officer that these cooperative studies had been of much benefit to the college. They had served as a challenge to self-study. Outgrowths from the workshop had led to campus studies. Each workshopper had expressed personal benefit and challenge to his professional growth as a result of attending the summer workshop. In some cases the workshopper has been promoted to administrative positions after he has served as chairman of the Academic Planning Committee. The workshop has served as a means of coordinating campus activities. The workshopper continues with the Academic Planning Committee for two years after his workshop experience--the first year as chairman of the committee, and the second year as an advisory member, to give continuity of leadership.

Each year this college entertains the North Central Coordinator. In 1952-53, Dr. Ruth Eckert, from the University of Minnesota, was on campus to address the faculty on instructional problems and to work on coordination of sectioned courses. She met with small groups and also with inter-departmental groups.

This college has engaged in a number of studies of its own. A thorough study was made of curricular offerings for each major. Duplication in courses has been attacked.

The Dean has made several studies on: ratio of rank to students, ratio of degrees to students. These studies included a comparison of College E with other liberal arts colleges of similar size, financial means, and philosophy to see how this college compared with others. A study of teaching loads by departments, study of income and cost data, study of office space, were among others that have been completed.

Research is generally not set up by the college, except where the "Alumni Research Fund" has made a study possible. However, a doctoral dissertation study to follow up graduates has been partially supported by the college. Research is done by several professors in the science department on projects supported from grants by private industry.

Teacher rating scales are provided through the Dean's office. These are administered on a voluntary basis by the teacher, and the results are his own. An "Instructor Rating Scale" is also available where one wishes to be rated by his department chairman or a colleague. A systematic program for rating new instructors is in force. The Dean or department head rates a new instructor on the Instructor Rating Scale at the end of the first, third, and fifth years. These ratings become a part of the teacher's permanent record. This college also has an evaluation called "Senior Interviews." Members of the personnel department hold personal interviews with graduating seniors to get suggestions on the program. One of the areas dealt with is weak and strong

courses. Such information is passed on to departmental chairmen.

Each department has a travel budget based on its established experience. How this travel fund is spent is usually decided within the department. This college follows the practice of taking out institutional membership in societies under the name of the individual, but has not generally paid for individual memberships in societies.

The tenure program is not tenure in the usual sense. It offers no security or guarantee to the teacher. It states the basis of "no annual appointment after one has been appointed for five consecutive years," but to achieve this kind of "tenure" does not mean one has assurance of employment; it merely means he does not have to be reappointed each year. The college does not have a leave policy, although leaves are given liberally for one to study at his own expense. A leave policy is expected to begin in the near future. The administrative officer said a choice had to be made recently as to further efforts to bring faculty salaries in proper line or go into a leave policy. The former was accepted as more urgent. Moves have already been made to set up leaves on special bases. The Educational Policies Committee has been authorized to grant leaves for six months with full pay or for one year at half pay. But these are made quietly," and on an individual basis. The Dean of the college has been very successful in securing outside scholarships for faculty,

receiving two in one year. Recently, the faculty adopted a new retirement program in the form of invested securities administered by a trustee and faculty committee. The college participates in social security also.

In the opinion of the administrator, the North Central Workshop each summer and its carry-over into the school year is the strongest phase of inservice improvement. He listed sabbatical leaves and research as the weakest phases of the program. A project is currently underway to revise the faculty handbook. Revised copies were distributed in the fall of 1956. Application of the studies mentioned above and further study of problems will continue. This year the faculty is studying the question of student mortality.

d. Interviews with Faculty Personnel. The faculty members were helpful in providing information, although one seemed a bit on the "negativistic" side and did not see eye-to-eye with the other two.

Orientation of the faculty. Each interviewee felt the faculty handbook was of much value. It was hypothesized that people did not read it all the way through for general information but used it as a reference source when specific situations came up. The handbook was organized in 1946, revised in 1950, 1953, and 1955. Over 140 items are covered according to the index.

This college has two types of faculty bulletins. One bulletin is bi-weekly and serves as an all-school communication

sheet. The other is a Faculty Bulletin, issued once a quarter. Articles are submitted by the faculty through an editing committee. These articles are usually centered around phases of the college's work, reports from committees, or reports on books that may be of general interest.

A pre-school workshop is held each fall just prior to registration. Sixty of the eighty faculty members responding said this was being done well. The interviewees also agreed in this position. Two felt it needed "revitalization" for the best results. The inservice aspect of it seemed to be "dragging," and repetition seemed to be setting in. Its most significant contributions were listed as giving the faculty spiritual and recreational opportunities, getting acquainted with new teachers, and a chance to "talk shop" before everything gets in such a rush. Registration and records are explained to new teachers. They do not have to face registration "cold."

Understanding the school and its purposes. This college has a faculty meeting each week. The Academic Planning Committee, of whom the summer workshopper is chairman, plans the faculty meetings for the year. They generally follow the line of the workshopper's summer study. Recently, a year's study centered around each department studying its aims in relation to the college's aims. Another year was spent in studying conflicting philosophies of education. Although departmental meetings have been held to try to relate departmental

objectives to college objectives, it was felt that not too much had been accomplished. Each teacher who proposes a new course is asked to state his course objectives and file a copy (syllabus) in the Dean's office with his departmental chairman.

It was felt that a good job was being done in promotional literature, but that much needed to be done in helping faculty members publish professional literature. The faculty bulletin might be given wider circulation.

Administration's attitude and responsibility for improvement of teaching. Each interviewee felt this college lacked an effective way of evaluating "good" teaching. Raises are generally "across the board." Although a sheet was published on the bases of achieving rank, two of the three interviewees were unfamiliar with it.

Testing results are readily available to faculty counselors. Other records are quite spread out in several offices. Clerical assistance is provided on a departmental basis. Each department budget is set up to provide help through graduate assistants and undergraduate help as needed. It was felt that lower rank teachers were not getting a "fair share" or help though carrying heavier student loads. It was believed the administration was willing to attack academic problems, but had been very negligent in getting rid of several "weak teachers."

Involving the whole faculty. Long-range planning on buildings has been done by a Campus Planning Committee. This committee has planned four completed buildings and have three in the planning stages. Outside of these activities they felt little was being planned, especially of an academic nature. The faculty committee that plans the faculty meetings has already been mentioned. This committee also plans the pre-school workshop, and makes suggestions for the North Central workshopper's study. Some departments are having luncheon meetings to share teaching methods and materials. These are voluntary, "bring your own lunch," types of meetings at which no routine business is discussed. Informal groups have formed discussions between various departments, i.e., Bible and science, English and social science in an effort to achieve better inter-departmental understanding. All three interviewees were departmental chairmen, and each believed that new teachers had made significant contributions to their departments, especially when they had just returned from graduate study.

Assisting the faculty in its professional development. It was generally expressed among the interviewees that this was a weak area. They believed the college had done well with what it had, but expressed the feeling that this area must be improved if the quality of the faculty were to be maintained. Leaves of absence were granted to individuals, but generally on one's own support. As mentioned above, a leave policy

seems to be forthcoming. Outside experts have been brought to the campus to help with academic problems. Mention has been made of Dr. Eckert's visit. The North Central coordinator also makes an annual visit. Various departments sponsor conferences on campus. Some efforts have been made to acquaint the faculty with the criteria of good teaching through demonstrations at faculty meetings. A policy of granting tuition rebates up to five semester hours for work taken in the college or the graduate school. This has made it possible for some teachers to take refresher courses, get acquainted with the teaching methods of other teachers, and to keep alive academically though not working toward a degree.

A faculty lounge and reading shelf is provided in the library. Most of the items on the shelves are of a professional nature. Although the general idea is well supported, the librarian said it was not used too much. Through the faculty bulletin mentioned above, one may have a limited distribution on articles he has written.

To encourage attendance at professional meetings each department is allowed a sum, based on previous experience, to attend meetings of learned societies. The Dean's office also keeps a record of the scholastic achievements of faculty members.

Directing or supervising instruction. Since each interviewee was a department head, consensus was achieved on the view that the department chairman should bear the

responsibility for improvement of instruction in his department. Each indicated that some efforts were being made in that direction. It was felt that the size of the college had established a bit of "formality" about talking with the Dean, and that not many teachers would talk about academic problems. They felt the Dean was very approachable and would welcome such talks.

Providing centralized services. Inter-library loans are available upon request. The librarian reported that the requests were few. An audio-visual center, manned by a full-time "expert" and student helpers, is provided. Ordering of films, projection, and counseling services on audio-visual materials are available. Projection is done by student helpers. A central projection room is fully equipped, but many classrooms are also equipped for projection.

Teachers have some help through the departmental budget for scoring objective tests, but it was felt this was too limited. If this help is not given by a departmental graduate assistant, it may be provided on a per-hour basis from a student of one's choice. A very extensive mimeographing service is provided for teachers. The interviewees agreed that the mimeographing department is one of the best service departments in the college. Each department has budgetary provisions for these services. A ditto machine that may be used by faculty members is available if one does not care or have time to get material mimeographed. It was felt that, within budget, almost

any instructional supplies could be gotten. Emergency situations that are not covered by budgeted amounts may be purchased from a contingency fund.

Encouraging research. A number of research grants have been received from outside sources, mostly in the field of chemistry. The college does reduce one's teaching load to make research possible. Several studies dealing with the college's welfare have been financed by alumni grants. There seems to be little experimentation going on on academic problems, i.e., methods, grouping, accelerated classes, etc. However, a general psychology course is planned as a pilot study to see if counseling from the personnel department can best be combined with that subject.

Insuring the flow of information to and from campus. A Christian Service Council organized work for gospel teams, Sunday School teaching, and other community services related to church work. Over 500 students teach Sunday school each week for Negro children on the south side of Chicago. Last year the Bible and Philosophy Department sponsored a conference on Kierkegaard, during his centennial birthday. The Business Department has a conference for Christian Businessmen, the Sociology Department sponsors a Christian Social Worker's Conference, and the Education Department sponsors three educational conferences each year. Many church groups and civic organizations hold meetings on the campus.

e. Information from Other Sources. From the college catalog, it was ascertained that the faculty of this college has served an average of 8.54 years.

f. Summary of the College. This college shows a good bit of activity, but the interviewees felt that much of it was organizational activity and not too productive. In several areas, such as leaves, faculty planning, and supervision of instruction by department heads, there seem to be good possibilities for increased activities. The North Central Association Studies on Liberal Arts Education, particularly the summer workshop, has played a significant part in the in-service program of this college.

7. College G.

This college ranked second of the eight college on question one. There were 56 items on the teacher questionnaire which the responding faculty indicated the college was "doing."

a. Teacher Questionnaire. This college has a full-time faculty of 67. The actual returns on the faculty questionnaire were thirty-four or 51 percent.

How well is the college performing these activities? (2) 1.036

Do the faculty members consider these activities desirable? (4)

.795

Percent of faculty members unfamiliar with present practices. (1)	.077
Reaction of faculty members to certain working conditions. (2)	.612
Percent of faculty members undecided about working conditions. (1)	.044

b. Student Questionnaire. Student questionnaires were sent out to 125 students. A total possible return would have been 500 forms. The actual return was 358. A ten percent sample would have been 316. Because of the difficulty under which the college was surveyed the sample was increased to facilitate an adequate return.

The frequency of use of certain teaching methods. (6)	2.27
The frequency of use of certain teaching techniques. (6)	1.70
Student reactions to the teaching-learning situations. (1)	3.86

c. Interview with the Administrative Officer. The administrative officer interviewed was more than kind in the amount of time and information he gave to the writer. Although he expressed an aversion to questionnaire studies and had a "gentleman's agreement" with his faculty not to participate in them, he was willing to share information freely in a personal interview. "We are always glad to have people come and see what we are doing."

The college reports an enrollment of 790. In 1960, it is expecting to have 1250--750 men and 500 women. There

is a full-time faculty of 67. Seventy percent of these have doctor's degrees. Two people in physical education and some R. O. T. C. instructors (not counted in the 67) have bachelor's or special degrees. This college was the only one in the study that operates on a quarter system. Twelve quarter hours are considered a full-time teaching load.

Approximately \$13,000.00 are earmarked for inservice improvement through a grant from the Ford Foundation. The college's own inservice budget is broken up into several types of activities. About \$1,300.00 is provided for faculty travel and research. This had been administered by an individual, but it is now administered by a committee on instruction. If a faculty member is on the official program at a professional meeting, he may receive \$10.00 per day, plus travel expenses. The college will pay dues for institutional membership through an individual. It has sponsored a faculty seminar on Religious and Democratic Values in Education. This seminar is supported by college funds and requires transcription of all sessions and pay for secretaries (about \$1,000.00 per year). Consultants have been brought to this seminar at an expense of about \$2,500.00. Departmental chairmen have been released from one-third of their regular teaching load for more effective participation in the study and the internship program.

The administrative officer commented that "we are trying to achieve a liberal arts college of academic excellence."

They have weeded out of their faculty a number of persons who did not make professional and academic progress. They presently practice hiring only doctorates. At the end of the second year, a new teacher is evaluated to determine whether he stays or not. Apart from the "planned turnover," there has been a high degree of stability.

This college has been a continuous participant in the North Central Association Studies on Liberal Arts Education. One of its faculty members was a North Central Coordinator until his death several years ago. His personal influence on the faculty had led practices to originate in the college then spread to other colleges. At present this college is carrying on a study of "Where do outstanding students come from?" and doing extensive work in evaluation of general education. In the past it has made significant contributions to the problem of high-school and college articulation studies, having sponsored a campus conference on the subject.

Experts aplenty are used. A program has been worked out whereby retired professors, nationally outstanding men in their fields, have been engaged to serve as "consultants" to various departments. These scholars have offered suggestions on curricular problems, course outlines, inter-departmental seminars, and given general advice. They are listed in the college catalog as consultants.

Although the college does not foster much research, it has encouraged research through its own willingness to be

experimental and attack problems. Also, it has provided I. B. M. equipment and set up a faculty advisor for interpretation of scores.

This college does not have a faculty handbook, as such, but it has a set of "Faculty Regulations." The administrative officer said the additional data had been developed to complete the handbook in the near future. This college participates in the T. I. A. A. program. Each faculty member has a desk to himself, though some offices are shared.

In the opinion of the administrator, there was no particular point or activity that he would call "strongest." He felt their whole attitude of "continuous self-study" was very positive. "We have tried to develop a dynamic attitude of self-evaluation." It was obvious to the writer as it was to the administrator that this attitude had led to a lot of "creative work." He felt that the research area was the field in which they had not been able to do much.

d. Interviews with Faculty Personnel. The professors interviewed shared something of the Dean's attitude toward questionnaire studies but, like the Dean, were willing to share information in personal interviews.

Orientation of the faculty. Under the present program, each new teacher is assigned to his department chairman for orientation and supervision in his teaching field. There are seminars held once each week at which time the Dean, chairmen

of the departments, and interneers meet to discuss their program. Evidently the faculty members responding regard their "Faculty Regulations" as a handbook, for their response was favorable. The Dean did not consider it a handbook. From time to time the Dean publishes information on educational items. These are distributed to the faculty as mimeographed sheets. Summaries and bulletins are published on the research done within the college. When asked why the college did not have a faculty retreat or pre-school workshop, one interviewee said, "We are not a church-related college, and our faculty does not have the common religious background which most schools have when they use the workshop."

Understanding the school and its purposes. The most characteristic emphasis of this college is its continuous effort through faculty participation to evaluate its program. This gets all the faculty involved in understanding and trying to improve the program. Since the present administration has been in office, there has been a concerted effort to develop a "distinctive liberal arts philosophy." Each interviewee felt he had freedom to discuss, experiment, and explore new ideas. "We aren't settled on anything. Everything is up for discussion." Four attractive publications complement each other and are used to interpret the college to its constituency.

Involving the whole faculty. Mention has already been made of the faculty seminars that relate to the internship program. It was felt that some of the best discussions on

college problems went on at the coffee tables. An opinion was expressed by one interviewee,

We spend an awful lot of time in bull sessions and committee meetings. Lot of it could be handled by the administration. I think one reason why they don't handle it is because there is a definite philosophy involved. Our faculty is relatively new and young. Some of the older teachers who were here when the present administration came in were released because they didn't fit into the concept of a growing college. These new folks have needed time to crystalize their thinking and see how they work as a team. As we get moving in the right direction more decisions may be made by the administration, but right now, it seems important that everyone be in on the planning. We aren't Princeton yet, but we are on our way!

Assisting the faculty in its professional development.

Although the college does not have an official leave program, the administration has been very successful in securing outside grants. In the last five years, it has secured four Ford fellowships, and two Fulbright scholarships.

Administration's attitude and responsibility for improvement of teaching. Although the interviewees felt the faculty was promoted on a merit basis, they did not know of any definition of merit for promotion purposes. A special program of "honors courses" is set up for superior students, and a student is permitted to write off any course that he can. The attitude of the administration might be summed up by a statement from an interviewee. "We don't wait for something to go wrong before discussion begins. One can talk about any kind of a problem without being on trial with it." This kind of attitude among a faculty may be more valuable than any specific activities or devices for inservice improvement.

1000

Directing or supervising instruction. On one teacher questionnaire, a respondent replied to the item: Having the departmental head responsible for helping his own department, by saying, "What else is he for, if he doesn't do this?" Evidently much discussion goes on within departments before changes are made. One interview said:

These committee meetings are a pain and take lots of time. I know my relationships with my students and my teaching suffer as a result of them. I was in a meeting for two hours on Monday, I have another one today, and I'm sure there will be a couple more before the week is over. I think some of these things could be handled by the administration without all this talk. But I do have the satisfaction that when we reach a decision, it will be acted upon. We have seen much change this way. Although I have the meetings, I would not feel right if decisions affecting me were made without me. This is the way we do things, so all in all, it seems best.

Some of the items marked "doing" in this section were closely associated with the internship program which has already been described.

Providing centralized services. The librarian informed the writer that he did secure inter-library loans for faculty and students. There seemed to be very few requests. This college has an electrical scoring machine for scoring objective tests. It also provides mimeographing services for teachers. There did not seem to be the "within budgetary limits" feeling that had been expressed by interviewees in other schools in regard to securing teaching materials.

Encouraging research. As indicated previously, a policy is followed of reducing teaching loads for teachers

helping with research. One practical characteristic of the research done in this college is its close relationship to problems affecting college teaching and administration. There have been several outside agencies that sponsored research in this college.

Insuring the flow of information to and from campus.

Although this college is not church-related, it has sponsored quite a bit of church-related community activities. On one of the writer's visits to the campus he attended a series of meetings under the direction of Dr. E. Stanley Jones. These meetings were jointly sponsored by the college and the Congregational Church in town. Some sociological studies in the community have been conducted by the college inasmuch as the college was interested in buying up a slum section for expanding its campus. As mentioned previously, there are a number of conferences held on the campus.

e. Information from Other Sources. From the catalog, it was ascertained that the present faculty has served an average of 7.9 years. As mentioned above, this college had some "planned turnover" among its faculty with the coming of the present administration. In general, those teachers who were willing to adjust to a new educational philosophy have enjoyed a rather lengthy stay at this college. Just previous to this study, a professor who had been at the college over 25 years passed away.

f. Summary for the College. This college seems to be carrying out an effective inservice program in an informal way. This program is characterized by aggressive initiative in attacking teaching problems, a willingness to keep all practices under continuous examination, and help from outside sources.

8. College H

This college ranked first among the eight colleges according to the score on question one.

a. Teacher Questionnaire. There were 44 items on the questionnaire on which fifty percent or more of those responding indicated that the college was "doing" the item. There were 28 questionnaire forms completed out of a faculty of twenty-six full-time teachers and eleven part-time teachers, or 78 percent of the total faculty.

How well is the college performing these activities? (1)	1.060
Do the faculty members consider these activities desirable? (2.5)	.940
Percent of faculty members unfamiliar with present practices. (3)	.114
Reaction of faculty members to certain working conditions. (1)	.637
Percent of faculty members undecided about working conditions. (2)	.080

b. Student Questionnaire. Student questionnaires were sent out to 85 students. A total possible return would have been 340 forms. The actual return was 279. The following scaled scores were made.

The frequency of use of certain teaching methods. (2)	2.43
The frequency of use of certain teaching techniques. (1)	1.96
Student reactions to the teaching-learning situations situations. (6)	3.60

c. Interview with the Administrative Officer. The administrative officer interviewed has been on his job for three years. This college has an enrollment of 519, but it is expecting 600 in 1960. At present, there are 26 full-time faculty members and eleven part-time. Among these, there are seven with doctor's degrees (27 percent), twenty-two with master's degrees, and eight with bachelor's or special degrees. The faculty-student ratio is 1:21.6. Fifteen semester hours are considered full-time teaching, and the college average is 15.

According to the administrative officer interviewed, this college has a budget of \$1700.00 for inservice improvement activities. Among the items financed from this amount are: a fall faculty fellowship (workshop), faculty professional hour studies, travel expenses to professional meetings, instructional aids, and visiting speakers.

This college is cooperating in the North Central Association Study on Critical Thinking. It has also sponsored

campus studies. One was sponsored in connection with the English department on "Teaching the Use of the Library." It was hoped that such a study could have continuing aspects. Another study on "Methods of Improving Oral and Written English on Campus" was sponsored by the English department but participated in by the whole faculty. This college sends a workshopper to the North Central Association Studies on Liberal Arts Education. The workshopper takes a school problem to the workshop and often the professional hour meetings during the year take their bearing from his studies at the workshop.

The administrative officer felt that significant values had resulted from the North Central Workshop participation. It had led to a rethinking of college objectives. The college made a study of its alumni to see how well its objectives were being met. Improvements in the general education program were closely related to the participation in the North Central workshop. Along with its participation in the study on Critical Thinking, this college has two other studies underway: a study of honors courses for superior students, and professional hour meetings designed toward improving instruction.

Several outside "experts" have been used in connection with inservice improvement. Among its guests were Dr. Pothoff, University of Illinois, to help with improvement of testing; Dr. Kipplinger of Drury to help with student-personnel services; Dr. Hudson, of Coe College, to help with

the program of honors courses. The North Central coordinator has also been an annual visitor.

This college does not provide financial backing for research projects, but it will approve a sabbatical leave for research. One teacher used a leave to write a book. Another made a trip to England on her leave.

The student rating form used by this college is very elaborate, consisting of four pages. It is strongly recommended, but not required. The results are the teacher's own unless he wishes to share them. For travel to professional meetings, a faculty member is allowed two-thirds of his expenses, up to \$25.00. If one is an officer in an organization or presents a paper on a program, the maximum is doubled.

The faculty handbook of this college is a very thorough and readable book. It deals with 73 different headings. Included in these are policies on promotions, leaves, tenure, and teacher ethics. Each of these is spelled out in clear terms. Although the college has its own retirement program, faculty members participate in social security. All faculty members who teach half-time or more have office facilities. Most of these are single offices. In some cases teachers may share an office but have separate desks.

In the opinion of the administrative officer, the "fall faculty fellowship" is the strongest part of their inservice program. He felt their weakest part was in helping

the new teacher. In order to improve this phase, they are planning to assign an experienced teacher to work with each new faculty member.

d. Interviews with Faculty Personnel. The faculty interviewees were unusually cooperative in giving information on the questions asked.

Orientation of the faculty. This college has had a faculty handbook for "about" ten years. It was in mimeographed form for several years, but now is an attractive booklet. It deals with at least 73 items. One interviewee said, "In our small school the faculty knows how everything is done, but the handbook is very good for the new teacher." The latest revision (1955) was the work of a faculty committee. From time to time the Dean sends out mimeographed bulletins to the faculty. These may deal with such matters as educational research, faculty affairs, or with items of "general interest." These bulletins are not a "regular" part of inservice improvement.

Each fall this college has a faculty workshop called the Fall Faculty Fellowship. Each interviewee felt it was their strongest inservice method. They felt it gave them a chance to know each other better, an opportunity to orient the faculty on the Christian purposes of the college, and an opportunity for faculty worship. The bulk of the workshop time is given to academic matters, but recreational and informal activities are encouraged.

Understanding the school and its purposes. The pre-school workshop was singled out as the place where most work was done on the college's philosophy. There, some problem is brought to the front each year. Also, the faculty professional meetings have been of much value in bringing the faculty together in their thinking. A restatement of objectives came out of these faculty professional meetings. A survey was done among the alumni to evaluate the achievement of previous objectives, and this led to the restatement. The North Central workshopper carries to the workshop a problem suggested by the faculty. After his study is completed, the theme of his study becomes the basis of the year's professional studies by the faculty. The workshopper is, by virtue of his summer's study, on the professional meetings committee.

The faculty handbook states that each teacher should state his course objectives clearly to share with the students and the administration. Along with the handbook an attractive student handbook sets forth traditions and regulations. Alumni bulletins are published monthly to help interpret the program to the constituency.

Administration's attitude and responsibility for improvement of teaching. This college has a stated policy of what it requires to achieve the various ranks. This statement is part of a published plan for promotions. This published plan states the professional, academic, and practical qualities necessary for achieving each rank. This

definite and concise statement would let one know what the expectations were. A Faculty Status Committee passes on all recommendations for promotions.

Faculty members serve as student counselors. Records in the various offices are available to counselors. The Registrar's office keeps the faculty informed with lists of honors, probations, and failing students at the end of each grading period. Students may write off required courses by proficiency examinations, but not many take advantage of this opportunity. It is done most frequently in the area of foreign languages. Clerical assistance is provided to the faculty by student help. This was not felt to be adequate, but "most of us get by with it." Secretarial assistance may be secured from the main offices.

The tenure program is stated in the faculty handbook. One can achieve tenure after being reemployed for four years. The statement of tenure lists the means for which tenure may be interrupted and the rights of such persons for hearings. Although nothing is written to define "academic freedom," personal conferences are held with each new teacher to help him understand the position of the college. The interviewees felt one had much freedom "within the purposes of the college." The administrative-faculty relationship was described as "informal." Each of the interviewees indicated that the college was operated on a democratic basis. It was also felt that one could talk to the Dean about problems without "embarrassment."



Involving the whole faculty. According to the interviewees, this college has a sense of "we-ness," i.e., unity and personalness. The workshop, professional meetings, and faculty committees give the faculty much involvement in long-range planning. There was a feeling that the administration gave much consideration to plans made by the faculty. Each interviewee told of an incident in which faculty planning had not coincided with Presidential planning. When the faculty recommendation was proposed, the President accepted the faculty vote and expressed his willingness to give it an "honest try."

A faculty committee plans work on instructional problems. This committee is responsible for the programs on professional growth. The North Central workshopper, along with the Dean and two faculty members, make up this committee. It was felt that new teachers could express their views in any professional meetings and be heard. "Since our school is small, one gets acquainted quickly and feels totally accepted."

Assisting the faculty in its professional development.

The college makes available one sabbatical leave each year. One may receive full salary for one-half year or half-salary for a whole year. Provision is made for the sabbatical to be used for research or travel, if desired. Provisions are also made to compensate teachers for graduate study at the rate of \$15.00 per credit hour. Within the college a teacher may get tuition rebates for work he takes in the college up to five credit-hours per term. The procedure for paying

two-thirds of professional meeting expenses, up to \$25.00, has already been mentioned.

Directing or supervising instruction. The departments are small, but generally the department head assumes responsibility for directing the teaching-learning in his department. One interviewee said, "There is an open door at the Dean's office. One can discuss problems with him without having his security challenged." Each interviewee felt the Dean was "understanding," and sought to cultivate that type of atmosphere with the faculty. "He is young, but he has gained a lot of respect because of the progress we have made under him."

Providing centralized services. A new library has been added to the facilities, and the librarian does secure inter-library loans. A director of visual aids will help in the selection of films, but it was felt that the resources were rather limited. Teachers who carry a "normal" load are expected to do their own paper-grading, but teachers whose classes are large may ask for student assistance in paper-grading. Mimeographing services are available. One can turn in his material at the Registrar's office. One unusual feature of this service is that students buy "chits" (small tickets) in the bookstore and pay for their mimeographed materials with the "chits." The length of the mimeographed material determines the value. Teaching supplies are usually

gotten quickly, but they are ordered through channels. This procedure of going through channels is described in the faculty handbook.

Obtaining evaluations from others. Student rating forms are used by this faculty. The form in use was drawn up by a faculty committee. One usually administers the form to one class. In the faculty handbook is a self-rating scale for teachers, involving areas of personality, spirituality, educational standards, cooperation and loyalty, professional alertness, professional integrity, and being an advisor to students. The handbook also has a concise statement on the "Teacher's Role in Improving Instruction." There are eleven suggestions listed under this topic.

Encouraging research. As indicated previously, this college will permit a sabbatical for research purposes. One teacher was permitted to go to England on a sabbatical to have library facilities necessary for a study on John Wesley. As noted previously, this college has engaged in several studies that were pertinent to particular problems at the college.

Insuring the flow of information to and from campus. This college has very close ties with its denominational church. On one occasion when the writer visited the campus, over 300 ministers were on the campus for a conference. Many students are preparing for the ministry. While in college they serve surrounding churches as pastors, Sunday school

teachers, or superintendents. This college maintains a "speaker's bureau" to provide faculty personnel as speakers for outside groups. A similar service is maintained to make it easier for students to find opportunities of service.

e. Information from Other Sources. From the college catalog it was ascertained that the average years of service of this faculty was 10.05 years.

f. Summary for the College. After visiting this college and having the four interviews, the writer had the impression that there was a tremendous faculty loyalty to the college. Faculty members seemed devoted to the college's program. The interest in inservice improvement and the number of activities underway indicated that good planning has been done. Respect for the Dean was an important factor in the fine esprit de corps. The strong ties with the denominational church have provided a sound financial basis for professional benefits to the faculty.

C. Summary of the Chapter

This chapter has presented the findings concerning the inservice improvement programs in the eight colleges studied. Each college was reported separately and reported in order from the lowest to the highest score on the question "How well is the college performing these activities?"

Information on the variables that will be compared with the score on that question was also reported. Numerical and descriptive data that would help to better understand the data gained from the surveys was presented. These data are summarized and compared in the next chapter.

11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

VI. SUMMARY AND CONCLUSIONS

A. Introduction

This chapter presents a summary of the data gained from the surveys and interviews in the eight liberal arts colleges. The methods used in summarizing the survey instruments have already been described in Chapter III; however, that description did not show how the various data would be related.

There are thirteen variables on which this study provides information in the eight colleges. The first variable, previously referred to as question one, "How well is the college performing these activities?" is considered the basic variable. The data will be summarized to show what inservice improvement activities are practiced in these colleges, what relationship, if any, the variables will have to each other, and what relationships the areas of the teacher questionnaire will have to the variables. The following are the variables and the abbreviations that will be used to refer to the variables in the further discussion:

1. How well is the college performing these activities?
(PA)
2. Do the faculty members consider these activities desirable? (DA)
3. Percent of the faculty unfamiliar with present practices. (UP)

Detailed description of Figure 1: The graph plots the percentage of total catch against the percentage of total effort for five different fishing scenarios. The x-axis represents 'Percentage of total effort' from 0 to 100. The y-axis represents 'Percentage of total catch' from 0 to 100. The legend identifies the following series: Yellow perch (solid line with circles), Rock bass (dashed line with squares), Rock bass + yellow perch (dotted line with triangles), Rock bass + yellow perch + white perch (dash-dot line with diamonds), and White perch (solid line with crosses). Yellow perch and rock bass show high catch percentages for low effort percentages, while white perch shows a more linear relationship.

Percentage of total effort	Yellow perch	Rock bass	Rock bass + yellow perch	Rock bass + yellow perch + white perch	White perch
0	0	0	0	0	0
10	85	15	100	100	10
20	80	20	100	100	20
30	75	25	100	100	30
40	70	30	100	100	40
50	65	35	100	100	50
60	60	40	100	100	60
70	55	45	100	100	70
80	50	50	100	100	80
90	45	55	100	100	90
100	40	60	100	100	100

100

4. Reaction of the faculty to certain working conditions. (RWC)
5. Percent of the faculty undecided about working conditions. (UWC)
6. Frequency of use of certain teaching methods. (TM)¹
7. Frequency of use of certain teaching techniques. (TT)¹
8. Student reactions to the teaching-learning situations. (SR)
9. Size of the college (student population). (S)
10. Teacher-pupil ratio. (T/PR)
11. Teaching load of the faculty. (TL)
12. Percent of faculty having doctor's degrees. (DD)
13. Average years of service of the faculty. (AYS)

B. General Summaries and Findings from the Data

The teacher questionnaire and the student questionnaire were summarized according to the description given in Chapter III. The teacher questionnaire gave information on variables one through five. The student questionnaire gave information on variables six through eight. Information on variables nine through thirteen was gathered from interviews with faculty members or administrative officers and from college catalogs.

¹The teaching methods and teaching techniques are defined on the student questionnaire.

After the information on the thirteen variables was gathered, Table I was prepared to show how many colleges were "performing" the various inservice improvement activities mentioned in the teacher questionnaire and to indicate activities on which the faculties desired to make further improvement or initiate. A college was considered to be performing an activity if fifty percent or more of the faculty members responding checked the "doing well" or "doing but should improve" columns. The "doing but should improve" column and the "not doing but should" column were used to determine the attitude of the faculties toward improving or initiating activities. If fifty percent or more of those responding checked the "doing but should improve" or "not doing but should" columns, this is indicated on Table I by the use of parentheses, (). Where an x is enclosed in parentheses, (x), it indicated the faculty was performing the activity, according to their judgment, but the emphasis was on the "doing but should improve" column. Where the parentheses appear without the x, (), it indicates that fifty percent of those responding checked the "doing but should improve" and the "not doing but should" columns, but the emphasis was on the "not doing but should" responses.

From Table I, one can also pick out the working conditions on which the faculties were "pleased." A faculty was considered "pleased" with a working condition if fifty percent or more of those responding checked the "well pleased" or "pleased" columns of the questionnaire.

TABLE I

COLLEGES PERFORMING THE ACTIVITIES OF THE TEACHER QUESTIONNAIRE, PLEASED WITH WORKING CONDITIONS, AND DESIRING TO IMPROVE OR INITIATE INSERVICE IMPROVEMENT ACTIVITIES

Items	Colleges								Frequencies *	
	A	B	C	D	E	F	G	H	Per.	Imp. Ini.
Orientation of Faculty by:										
1. Appointing a faculty advisor to counsel with each new faculty member.		()			(x)		x		2	1
2. Giving necessary information in the faculty handbook.	x		x	x	x	x	x	x	7	
3. Giving special induction courses before school begins.					x			()	1	1
4. Giving special information through faculty bulletins.	x	()	x	x	x	x	x	x	7	1
5. Having a pre-school workshop or retreat.			x		x	x		x	4	
Understanding the School and its Purposes by:										
1. Discussing the philosophy and objectives of the school.	x	(x)	(x)	(x)	x	x	x	x	8	3
2. Using departmental meetings to correlate course objectives with institutional objectives.		x	(x)	(x)	(x)	(x)	x	(x)	7	5
3. Having each teacher state his course objectives in outlines or syllabi.					(x)	()		()	1	1
4. Publishing available information that will help interpret or understand the school's philosophy and history.	x	x	x	x	x	x	x	x	8	
Administration's Attitude and Responsibility for Improvement of Teaching by:										
1. Promoting the faculty on a merit basis.		x	(x)	x	(x)	x	x	x	7	2

*Under frequencies, Per. is the abbreviation for performing; Imp. for improvement; and Ini. for initiate.

TABLE I (continued)

Item	Colleges											Frequencies	
	A	B	C	D	E	F	G	H	Per. Imp. Ini.				
2. Publishing the criteria of merit for promotion.	()			x	()	()		x	2			3	
3. Formulating a salary policy that will encourage good teaching, i.e., increments for those who demonstrate good teaching.	()	()	()	()	()		x		1			4	
4. Providing information on ideas, problems, results of research, etc., through a faculty bulletin.	()		()	()	()	(x)	(x)		2	2		3	
5. Making information from the personnel, guidance, and registration offices available to teachers.	x	x	x	x	(x)	x	x	x	8		1		
6. Providing "honors classes" for interested faculty and students.		x		()			x		2			1	
7. Permitting students to write off required courses by proficiency exams.			x	x			x	x	4				
8. Providing clerical assistance to teachers.	(x)	(x)	(x)	()	x	(x)	(x)	(x)	7	6		1	
9. Recognizing and giving consideration to time spent in extra-class activities.	(x)	()	(x)	()	(x)	(x)	(x)	(x)	6	6		2	
10. Providing a published tenure program.	()			x	x		x	x	4			1	
11. Defining "academic freedom" so all will know what it means.			x	x	()	()	x	x	4			2	
12. Showing its willingness to attack problems that affect teaching.	(x)	x	(x)	(x)	x	(x)	x	x	8	4			
13. Having a rank system of academic levels.	x	x	x	x	x	x	x	x	8				

TABLE I (continued)

Items	Colleges								Frequencies	
	A	B	C	D	E	F	G	H	Per.	Imp. Ini.
Involving the Whole Faculty by:										
1. Giving opportunity for long-range planning.	()	(x)	(x)	(x)	(x)	(x)	(x)	x	7	5 1
2. Having a faculty committee plan work on instructional problems.	x	x	(x)	x	(x)	x	x	x	8	2
3. Devoting departmental meetings to sharing teaching methods and aids.	()	(x)	(x)		()	(x)	(x)	(x)	5	5 2
4. Sponsoring cooperative group activities among faculty members.	()	x	x	(x)	()	(x)	x	x	6	2 2
5. Having periodic voluntary discussions on similar problems.	()	(x)	x	()	()	(x)	x	x	5	2 3
6. Giving new teachers an opportunity to express their views.	x	(x)	x	x	(x)	(x)	x	x	8	3
Assisting the Faculty in its Professional Development by:										
1. Having a faculty committee on faculty development.		()	()	()						2
2. Encouraging further study by:										
a. Granting leaves of absence for study.	x	x	x	x	(x)	x	x	x	8	1
b. Financing summer school attendance.	()	()	()	x	()	(x)	(x)	(x)	2	3
c. Arranging departmental or divisional seminars.		x		()	()	()	x		2	2
d. Demonstrating "good teaching."				()	()	()				2
e. Providing outside lecturers, "experts."	()	(x)	x	()	()	(x)	(x)		4	3 3
f. Having a class in which faculty can work on instructional problems.										
g. Acquainting the faculty with criteria of "good teaching."	()			(x)	(x)	()	()	x	3	2 2
h. Granting rebates on courses taken within the school.					x			x	2	

TABLE I (continued)

Items	Colleges								Frequencies	
	A	B	C	D	E	F	G	H	Per.	Imp. Ini.
3. Keeping the faculty reading shelf up to date through a faculty committee.					()	x	(x)	x	3	1
4. Publishing educational material written by faculty members.					()	(x)	x		2	1
5. Encouraging faculty members to attend meetings of learned societies.	(x)	(x)	(x)		x	(x)	x	x	7	4
6. Reporting educational research that might affect classroom teaching.	(x)	()	(x)	(x)	(x)	(x)	(x)	(x)	7	7
Directing or Supervising Instruction by:										
1. Having an administrative officer visit classes.										
a. On unscheduled visits.										
b. On scheduled visits.					()				1	1
2. Having a colleague visit one's class			x							
3. Having the departmental head responsible for helping his own department.	x	x	(x)	x	(x)	x	(x)	x	8	3
4. Discussing academic problems with the academic dean.	x	x	()	x	x	(x)	x	x	7	1
5. Using outside examinations to check scores made on teacher-made tests.					()					
6. Comparing exam scores, grades made by different sections of a course.							x		1	
7. Having an experienced and a non-experienced teacher working on a course together.							(x)			
8. Promoting inter-school visitation by faculty members.				()			(x)		1	1

TABLE I (continued)

Items	Colleges									Frequencies	
	A	B	C	D	E	F	G	H		Per.	Imp. Ini.
Providing Centralized Services by:											
1. Securing inter-library loans.	x		x	x		x	x	x		6	
2. Providing help in the selection and use of audio-visual aids.	(x)	(x)	(x)	(x)	(x)	x	x	x		8	5
3. Having an experienced teacher set up course objectives.	x		x			x	(x)	()		4	1
4. Having an experienced teacher help in setting up testing devices.					()	()	(x)	()		1	2
5. Providing clerical assistance to score objective tests.	x	x	x	(x)	(x)	x	x	x		8	2
6. Mimeographing tests, teaching outlines, reading lists, etc.	x	x	x	x	x	x	x	x		8	
7. Giving prompt attention to requests for teaching supplies.	x	x	x	x	x	x	x	x		8	
Obtaining Evaluations from Others by:											
1. Using student rating forms.	x			x	x	x	x	x		6	
2. Being rated by a colleague within a department.								()			
3. Being rated by an administrative officer.											1
4. Using information from senior interviews.						x	x			2	
5. Asking alumni for ratings.						()					1
6. Using standardized devices, i.e., the Purdue Scale.	x	()			x					2	1
7. Using self-evaluation forms.						x				1	
Encouraging Research by:											
1. Providing statistical services.											
2. Reducing teaching load while on research.	x		()	()	(x)	()	(x)			3	1
3. Granting Sabbatical leave for research.		()	x	(x)	()	(x)				3	1

TABLE I (continued)

Items	Colleges								Frequencies	
	A	B	C	D	E	F	G	H	Per.	Imp. Ini.
4. Providing alumni grants for research.			()		()					2
5. Encouraging grants from outside sources.	()	x	(x)	(x)		(x)	(x)	x	6	5
6. Permitting experiments with classes, grouping, and other "reasonable" designs.	x	x	x			x	x		5	
Insuring the Flow of Information to and from Campus by:										
1. Providing records that help teachers understand students.	x	x	(x)	x	x	x	x	x	8	1
2. Doing follow-up studies on graduates.	()		(x)	x	x			(x)	4	2
3. Providing for service programs away from campus--programs in churches, communities, youth work, etc.	x	x	x		x	x	(x)	(x)	8	1
4. Inviting conferences to campus.	x	x	x	x	x	x	(x)	(x)	8	2
5. Encouraging attendance at professional meetings.	(x)	(x)	(x)	x	x	(x)	x	x	8	4
6. Bringing outside technicians to campus to help with specific problems.	()		x	(x)	x	(x)	x		5	
Working Conditions:										
1. Time spent on faculty committees.	x	x	x	x	x	x	x	x	8	
2. Responsibilities of extra administrative duties.	x	x	x	x	x	x	x	x	8	
3. Time spent working with student activities.	x	x	x		x	x	x	x	7	
4. Time spent in community service.	x	x	x	x	x	x	x	x	8	
5. Present salary.			x			x	x	x	4	
6. Opportunity for travel.	x	x	x			x	x	x	2	
7. Opportunities for promotion.	x	x	x		x	x	x	x	7	
8. Retirement provisions.	x	x	x	x	x	x	x	x	8	

Working Conditions:

TABLE I (continued)

Items	Colleges								Pleased
	A	B	C	D	E	F	G	H	
9. Sabbatical and other leaves.	x	x		x	x		x	x	6
10. Opportunities for research.							x	x	2
11. Opportunities for conferences with individual students.		x	x	x	x	x	x	x	7
12. Participation in administrative decisions.	x	x	x	x	x	x	x	x	8
13. Availability of office space.	x	x	x	x	x	x	x	x	8
14. Amount of clerical assistance.	x	x	x		x	x	x	x	7
15. Constructive attitude displayed by administrative officers.	x	x	x	x	x	x	x	x	8
16. Institutional definition of "academic freedom."	x	x	x	x	x	x	x	x	8
17. Sizes of classes.	x	x	x	x	x	x	x	x	7
18. Number of class preparations.	x	x	x		x	x	x	x	7
19. Provisions for tenure.	x	x	x	x	x	x	x	x	8
20. Provisions for central services.	x	x	x		x	x	x	x	7

It is observable from the data of Table I that a variety of inservice improvement activities are being practiced by the eight colleges. There were 17 activities being practiced by all eight colleges, eighteen activities being practiced by seven colleges, five activities being practiced by six colleges, four activities practiced by five colleges, seven activities being practiced by four colleges, nine activities practiced by three colleges, thirteen activities practiced by two colleges, nine activities practiced by one college, and ten activities not being practiced by any colleges. Although the teacher questionnaire left places for respondents to write in activities being practiced but not included on the teacher questionnaire, the write-in's were so few that they were discarded. One college, G, was practicing 73 percent of the questionnaire activities. Only three colleges, A, B, and D, were practicing less than fifty percent of the activities.

Of the twenty working conditions, there were nine conditions on which all eight faculties were pleased, seven conditions on which seven faculties were pleased, one condition on which six faculties were pleased, one condition on which four faculties were pleased, and one condition on which two faculties were pleased. Working conditions 6, 10, and 5 (Opportunity for travel, Opportunities for research, and Present Salary), in that order, were those receiving the least favorable responses from the faculties.

Some general statements can be made as to which activities seemed to be most useful to the eight colleges in

their inservice improvement and which activities the faculties desired to improve or initiate. If fifty percent or more of those responding marked the "doing but should improve" or "not doing but should" columns, the writer considered this faculty as being favorable to more emphasis on this activity.

In general, it was found that a college faculty rating itself high on variable one (PA) would also rate itself high on variable two (AD). It is probably a moot question as to whether these activities are desirable because they are practiced or practiced because they are desirable. This high relationship between variable one (PA) and variable two (AD) is to be expected since the same columns were used in figuring the scaled scores for these two variables. The essential difference was in the weights assigned to the columns in figuring the scaled scores.

There were exceptions to this relationship of colleges ranking high on variable one (PA) and variable two (AD) as illustrated in College A. College A ranked lowest on variable one (PA) but outranked colleges B, C, and D on variable two (AD). In the case of College A, the dean teaches part time and is limited in his time for giving leadership to inservice improvement. In the case of College D, there seemed to be a willingness, as expressed by faculty interviews, to participate in inservice activities but little administrative leadership was provided to initiate the activities.

The faculty of College E indicated there were thirty-four inservice improvement activities which it was interested in improving or initiating. The faculty of College F was favorably inclined to improving or initiating thirty activities. The faculties showing the least interest in improving or initiating activities were of College H (fourteen activities) and College A (sixteen activities). Less interest in improving or initiating may have been expected from the faculty of College H since it marked itself as performing more of these inservice activities than other faculties, but College A marked itself as performing fewer of these inservice activities than others.

The faculty handbook, faculty bulletins, and pre-school workshop seemed to be the most helpful activities in orienting the faculties. In this area of the questionnaire, there were two faculties favorable to more emphasis on appointing a faculty advisor to counsel with each new faculty member, one faculty was favorable to some kind of induction course for new faculty members given before school begins, and one faculty was favorable to giving information through a faculty bulletin.

Discussion of the college's philosophy and objectives, using departmental meetings to correlate course objectives with institutional objectives, and publishing interpretative materials seemed to be most helpful in understanding the college and its purposes. Although all eight colleges were discussing the colleges' philosophies and objectives, three faculties indicated they were favorable to more emphasis on this activity.

Seven of the eight colleges were using departmental meetings in some way to correlate course objectives with institutional objectives, but five faculties indicated a desire for more emphasis on this activity. Three faculties felt that having each teacher state his course objectives in outline or syllabus would help in this regard. All eight colleges seemed to be publishing materials that would help interpret the colleges' programs to their constituency.

From the administrative point of view, promoting the faculty on a merit basis (though this merit basis was not frequently published or known by the faculty), making information from the personnel, guidance, and registrar's offices available to teachers, providing clerical assistance to teachers through student helpers, mimeographing services, consideration for time spent in extra-class duties, a rank system of academic levels, and a willingness of administrative officers to attack problems that affect teaching seemed to be the most prevalent practices. However, one may notice from Table I that these are areas in which faculties expressed favorable response to more emphasis on these activities. Two faculties desired improvement on the promotion by merit basis, and three faculties expressed interest in the criteria of merit being published. Four faculties were favorable to formulating a salary policy that would encourage good teaching. The activity of providing information through a faculty bulletin was desired by five faculties. The areas under administrative aspects of inservice

improvement that were of most concern to faculties were providing clerical assistance to teachers and giving recognition to time spent in extra-class activities. Although seven faculties indicated that their colleges were performing the activity of providing clerical assistance to teachers, seven of the eight faculties indicated that these services should be improved. All eight faculties felt improvement should be made in regard to consideration given to time spent in extra-class activities. Also, four of the eight faculties were concerned that more attention be given to the administration's attacking problems that affect teaching.

It is evident that faculties were being involved in planning. This was true of long-range planning on future enrollments, buildings, curricula, and faculty affairs as well as immediate problems. Although seven faculties indicated that their colleges were performing these activities, six indicated that they should be improved. Faculty planning was also evidenced in having a faculty committee work on instructional problems or plan professional meetings for the faculty. Seven of the eight colleges indicated that the use of departmental meetings to share teaching methods and techniques should be improved or initiated. Cooperative discussions that combined academic and social opportunities were popular in these colleges, but four faculties felt these should be improved or initiated. Although the activity of having periodic voluntary discussions on similar problems were held in five colleges,

100

100

there were five faculties which felt this activity should be improved or initiated. All eight faculties felt that new teachers could express their views and assume committee responsibilities, but three faculties desired improvement in this activity.

There were three methods by which faculties were assisted in their professional development. These were: leaves of absence for further study, encouragement to attend professional meetings, and reports on educational research that might affect classroom teaching. The colleges seemed willing to grant leaves of absence without pay, and this type of leave may have influenced the responses indicating that all eight colleges were granting leaves for further study. The most prevalent types of leaves with pay were a six-month's leave with full pay or a year's leave with half pay. Interviews with administrative officers indicated that selected individuals were often helped financially for a leave although a formal leave policy was not in force. Only one faculty expressed interest in the granting of leaves being improved, but four faculties expressed interest in the financing of summer studies by the colleges. Six of the faculties felt that improvement should be made in providing outside lecturers or "experts." Four faculties felt that improvement should be made in acquainting the faculty with criteria of "good teaching," and four also expressed the feeling that faculties should be encouraged to attend professional meetings. The

administrative area on which the most general consensus for improvement was expressed was reporting educational research that might affect classroom teaching. Although seven faculties reported their colleges were performing this activity, all eight faculties felt this activity should be improved or initiated. The reports on research that might affect classroom teaching were generally made by bulletins from the dean's office or at faculty meetings.

It was evident that little was being done to supervise classroom instruction through an administrative officer. None of the colleges reported that this type of activity was being practiced, and none of the faculties indicated a desire to initiate the activity. One faculty did express a desire to initiate the practice of having a colleague visit one's classes to help in supervising instruction. It was observable that the deans of the colleges were playing an important part in the orientation and supervision of teachers. This was generally done through informal meetings where academic problems were discussed. There were two faculties that desired this activity be improved or initiated. The personality and approachability of the dean were mentioned by faculty interviewees as important considerations as to whether faculty members would go to the dean with academic problems. The most prevalent kind of supervision for the classroom teacher was through the department head. It was generally felt that he was closer to the problems in his department and therefore

better able to help the members of his department. All eight colleges were performing this kind of supervision of instruction, but three faculties felt it needed improvement.

Six of the colleges had provisions for securing inter-library loans, but none of them indicated that this service should be improved. From the faculty interviewees and librarians, the opinion was generally expressed that this service was seldom used. Although all eight colleges provided some helps in the selection and use of audio-visual materials, five faculties desired improvement of these services. Other centralized services that were considered helpful were: provision for clerical assistance to score objective tests, mimeographing tests, teaching outlines, etc., and facilities for giving prompt attention to requests for teaching supplies.

Teacher evaluation, on a voluntary basis, by use of student rating scales, was the most prevalent type of evaluation. It was interesting that none of the faculties expressed interest in improving this activity. One faculty wanted to initiate the activity of being rated by an administrative officer.

Little research to improve the teaching-learning situation was being done in these eight colleges. A few research grants from outside sources had been received, but these were exceptions rather than general practice. Four faculties did feel that improvement should be made or activity initiated to reduce one's teaching load while on research. Included in

this may have been the desire to have one's teaching load reduced while serving on committees that are exploratory in nature. Four faculties felt that sabbaticals should be given for research. Two of these desired improvement of this activity and two others would like this practice initiated. Two faculties would like to initiate alumni grants for research and five would like to encourage or initiate research grants from outside sources.

One of the notable lacks in these eight colleges was research related to classroom teaching. Although five colleges reported that they were performing this activity, none of these five felt the activity should be improved.

Information moves to and from these eight campuses rather freely. Student records were considered an important source of information for counselling and were made available to faculty counselors. All eight colleges reported that student records were provided to help teachers understand students, but one faculty felt this activity should be improved. Two faculties desired to improve their follow-up studies on graduates, and one faculty desired to initiate this activity. Conferences on campus were frequent, being practiced by all eight colleges, and only two desired to improve this activity. However, four of the eight colleges that encourage attendance at professional meetings felt this activity should be improved. It was also interesting that three faculties felt more use should be made of outside technicians. Of the many conferences held on the

campuses of these eight colleges, few were of an academic nature related to the improvement of teaching.

On the section of the teacher questionnaire dealing with working conditions, there were twenty conditions listed. Of the twenty conditions, nine were marked "pleased" by eight faculties. There were seven conditions on which seven faculties indicated they were "pleased." Present salary, opportunity for travel, and opportunity for research were the conditions drawing the least amount of favorable responses. Several interviewees indicated to the writer that being "pleased" might not mean the conditions were considered adequate. It may represent the attitude that "the administration is doing the best it can with what it has."

✓From the interviews with administrative officers, it was evident that the North Central Association Studies on Liberal Arts Education and the summer workshop connected with those studies were making significant contributions to the inservice improvement programs of the colleges of this study that were participating in them. The five faculties rating themselves highest in this study were participants in the North Central studies. The lowest three colleges of this study have participated with colleges within their denominations in studies, but none reported any significant benefits as coming from participation in such studies. Also noticeable in the three lowest colleges was the lack of use of outside "experts" to help with college problems.



The five colleges participating in the North Central Association Studies on Liberal Arts Education and the summer workshop program attributed definite benefits to their participation. One dean described it as a "morale builder." The North Central coordinator was well-accepted in these five colleges and was considered a valuable source of information and inspiration through his annual visits. The colleges participating in the summer workshop had made some provision whereby the study of the summer workshopper could be carried over into the school year. This was done in some cases by making the workshopper chairman or an advisory member of the committee planning programs for faculty or professional meetings.

One dean listed a faculty handbook and restatement of objectives and philosophy of the college as specific benefits received from participation in the North Central studies. A dean indicated that participation in the North Central studies had been his college's most continuous inservice effort. Another dean felt their general education program had been strengthened by their participation. From these observations, one may conclude that these five colleges participating in the North Central Association Studies on Liberal Arts Education were deriving specific benefits from their participation.

There were similarities and differences expressed by the administrative officers interviewed concerning the strengths and weaknesses of their inservice programs. Differences were

also observable in terms of present inservice projects underway and plans for future projects. The following will make these evident.

College A:

Strongest: Induction of new teachers.

Weakest: Lack of faculty study groups on academic problems.

Present projects: None. Plans for future projects: None.

College B:

Strongest: Faculty meetings at which programs dealing with academic and administrative problems are discussed.

Weakest: Orientation of new faculty, especially the beginning teacher.

Present projects: None. Plans for future projects: None.

College C:

Strongest: Assistance to young instructors to continue graduate study.

Weakest: Helping new instructors with day-to-day problems.

Present projects: None. Plans for future projects: Yes.

College D:

Strongest: Faculty leave and travel for professional meetings.

Weakest: Orientation of new faculty members.

Present projects: Yes. Plans for future projects: Yes.

College E:

Strongest: Participation in the North Central Association on Liberal Arts Education.

Weakest: Research projects within the college.

Present projects: Yes. Plans for future projects: Yes.



College F:

Strongest: Participation in the North Central Association Studies on Liberal Arts Education.

Weakest: Sabbatical leaves and opportunities for research.

Present projects: Yes. **Plans for future projects:** Yes.

College G:

Strongest: An attitude of continuous self-study.

Weakest: Opportunities for research.

Present projects: Yes. **Plans for future projects:** Yes.

College H:

Strongest: Pre-school faculty workshop.

Weakest: Helping new teachers with classroom problems.

Present projects: Yes. **Plans for future projects:** Yes.

From these comments by administrative officers on strengths and weaknesses of their inservice programs, present projects underway, and plans for projects in the future, it can be seen that orientation and continuous help for the new teacher is an area needing attention in four colleges. Three colleges felt that research opportunities needed to be strengthened. From the observations of the writer, the greatest lack of research seemed to be research within the colleges on the teaching-learning situations. Experiments of this nature were few. It is observable that the administrative interviewees of the two lowest colleges did not report any projects underway or planned for the future. College C's administrative

officer did report plans for future studies. Beginning with College D, the administrative officers reported studies underway and planned for the future.

Interviewees of the seven colleges having faculty handbooks felt the handbooks served a definite purpose and were of special value to the orientation of new faculty members. An analysis was made of the items contained in the faculty handbooks of the seven colleges. This analysis showed that many inservice improvement activities were mentioned in the handbooks.

Much individuality was expressed by the seven colleges in the contents of their handbooks. Of the 191 items listed in the seven handbooks only four--Absences, Committees, Committee requirements and duties, Grades and grade scaling--were mentioned by all seven handbooks. Five items were mentioned in six handbooks--Attendance in class, Auditing classes, Chart on administrative duties, Church relationships, and Probation (academic). Eight items were mentioned in five handbooks--Cheating, Church attendance, Counseling, Duplicating materials, Library facilities and uses, Professional improvement, Registration, and Supplies (purchases and requisitions). From this point the variation is greater. Sixty-two items were mentioned in only one handbook.

In a broad theoretical sense all 191 items might be said to have relationship to inservice improvement, especially orientation. Interviewees indicated that faculty handbooks



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

were not read in a general way for over-all information, but they felt they were read to get specific information when a specific matter is considered. This may account for some faculty members being unfamiliar with present practices in some cases where the practices are stated in the handbook. One administrator, in a college where the faculty handbook was more abbreviated than in others, expressed some doubt about the worthwhileness of expanding their book because so few faculty members read it as it is.

C. Statistical Summaries and Findings from the Data

Table II was organized to give an over-all picture of the raw scores made by the eight colleges on the thirteen variables. This table shows the basic data from which some general conclusions are drawn. The scores and statistics derived from this study have several limitations upon them. The size of the sample is small, but the amount of research in each college necessarily kept the number small. Whatever conclusions one may draw from the data could not be used to describe other colleges of similar size, budget, or orientation. Also, one should remember that data for eight of the thirteen variables was gathered from opinion check lists. Data from interviews served as information on four variables, and this was likely to be highly opinionated. Although individual and group opinion studies have value, the validity and exactness of such studies may be questioned on certain

TABLE II
SCORES OF THE EIGHT COLLEGES ON THE THIRTEEN VARIABLES OF THE STUDY

Colleges	Variables												
	PA 1	AD 2	UP 3*	RWC 4	UWC 5*	TM 6	TT 7	SR 8	S 9	T/PR 10	TL* 11	DD 12	AYS 13
H	1.06	.94	.11	.64	.08	2.43	1.96	3.60	519	21.6	15	27	10.05
G	1.04	.93	.08	.61	.04	2.27	1.70	3.86	790	11.6	12	70	12.20
F	1.00	.94	.15	.49	.09	2.40	1.82	3.58	1604	17.	13	34	8.54
E	.94	.96	.15	.52	.13	2.53	1.71	3.78	758	16.	14	33	7.90
D	.86	.81	.17	.35	.12	2.33	1.84	3.55	1008	14.	15	34	6.26
C	.77	.89	.10	.48	.10	2.31	1.68	3.79	645	14.6	14	45	11.87
B	.74	.83	.16	.50	.11	2.21	1.57	3.76	758	17.	14	45	12.69
A	.73	.91	.14	.43	.12	2.23	1.72	3.63	1201	16.	15	32	13.35

*Indicates areas where a low score would theoretically be considered more desirable than a high score.

arbitrary grounds. Therefore, scores derived from this study would not provide exact data which would lend itself to statistical analysis to determine magnitudes of differences among these colleges. The statistics are useful, however, in suggesting some general trends and relationships among the eight colleges on the thirteen variables.

From the scores derived through faculty responses to the questionnaire, one can see that differences of inservice improvement activities exist among the eight colleges. A range of .33 points separated the top college from the bottom college. A difference of .30 points separated the second highest college from the seventh college. The colleges seem to divide into three groups--a top group including the three highest colleges, a middle group of the fourth and fifth colleges, and a lower group of the three lowest colleges. The top three colleges were separated by .06 points and the bottom three colleges were separated .04 points. The two middle colleges were separated from the top group by .06 points and from the bottom group by .08 points.

From the scores on all thirteen variables, one can observe that a college ranking itself high on variable one (PA) will tend to rank itself high on other variables. There are, however, exceptions to this tendency, and the pattern is true only in a general sense. It can be noted that College G has many high scores on the variables and ranks high more consistently than any other college. From these data, one

may say there is no definite pattern into which the variables will fall in relationship to the score on variable one.

In order to compare the rank order of the colleges on the variables, Table III, showing the rank orders of the eight colleges on the thirteen variables, was prepared. From this table one can notice the trend previously cited: a college ranking itself high on variable one will tend to rank high on the other variables.

Table III supports the observation that College G ranked high more consistently on the variables than other colleges. College D had the highest average of rank orders, i.e., it ranked low more consistently.

The writer had hypothesized that there would be some relationships between certain inservice improvement activities and certain variables of this study. He had these notions from his review of the literature and from conversations with faculty interviewees and administrative personnel in the eight colleges. In order to test whether these relationships were present between specific inservice improvement activities and specific variables, Chi-square tests were run on two-way contingency tables involving those classifications.

Before describing how the Chi-square tests were run and the results of them, some explanation concerning the use of Chi-square tests where the sample size is eight and the degree of freedom one seems necessary. In a Chi-square test under these conditions one would have to achieve a distribution

TABLE III

RANK ORDERS OF THE EIGHT COLLEGES ON THE THIRTEEN VARIABLES

College	Variables												Average
	PA 1	AD 2	UP 3	RWC 4	UWC 5	TM 6	TT 7	SR 8	S 9	T/PR 10	TL 11	DD 12	AYS 13
H	1	2.5	3	1	2	2	1	6	8	8	8	8	5
G	2	4	1	2	1	6	6	1	4	1	1	1	3
F	3	2.5	5.5	5	3	3	3	7	1	4.5	2	4.5	6
E	4	1	5.5	3	8	1	5	3	6.5	6.5	4	6	7
D	5	8	8	8	6.5	4	2	8	3	2	6.5	4.5	8
C	6	6	2	6	4	5	7	2	5	3	4	2.5	4
B	7	7	7	4	5	8	8	4	6.5	6.5	4	2.5	2
A	8	5	4	7	6.5	7	4	5	2	4.5	6.5	7	1
													5.190
													5.500
													4.192
													5.653
													4.654
													3.846
													2.538
													4.269

of 4--0; 0--4 in the cells in order to get a Chi-square significant at the five percent level. If the pattern were a 3--1; 1--3 arrangement, however, one may still feel that this is suggestive of a direction of relationship even though this pattern would be significant only at the twenty percent level.

This means that in a study where the sample size is eight the Chi-square test is severely limited in its usefulness for measuring strengths or intensities of relationships. One must decide whether he will accept only those relationships which are demonstrative of significance at the five percent level or whether he will be willing to accept more possibility of errors in relationships and have suggested directions in which relationships may lie.

If one accepts the twenty percent level of significance he must reserve caution in interpreting those relationships indicated by the test results. Chance relationships would be more likely and explanations for these could at best be only theoretical. However, these Chi-square tests at the twenty percent level of significance do seem to suggest that certain inservice improvement activities and certain variables pattern themselves in directions that would be suggestive of relationships. The writer felt that these suggested lines and directions of relationships would serve as useful checks on his hypothesized relationships. While he is not satisfied with the probability of error in relationships at this level, he recognizes the limitations imposed by the small sample size

and considers it more worthwhile to examine the data for suggested lines of relationships at the twenty percent level than to confine his discussion to the few relationships significant at the five percent level. The data presented later will indicate the value of having these tests as checks on his theorized relationships between inservice improvement activities and specific variables.

There were seventeen inservice improvement activities being performed by all eight colleges. Hypothesized relationships between these seventeen activities and specific variables were recorded and the Chi-square test with one degree of freedom was applied. The reason for choosing the seventeen items being performed by all eight colleges was that an activity being performed by all eight colleges would be more likely to influence a variable than one being performed by fewer colleges. Hypotheses of direct or inverse relationships were hypothesized between the activities and the specific variables.

On each of the seventeen inservice improvement activities being practiced by all eight colleges, the colleges were scored and ranked, being divided into categories of four high and four low. In cases where there were ties in rank that would necessitate a decision to determine whether a college would be categorized as high or low, the ties were broken by the selection of random numbers.

Two-by-two contingency tables were set up, the contingencies being, on the one hand, the inservice improvement

activities and, on the other hand, the variables. A Chi-square test with one degree of freedom was applied to each of the tables and, as indicated above, the hypothesis of independence or no relationship was rejected when the Chi-square was found to be as great or greater than $\chi^2_{.20}$.

The results of these tests are shown in Table IV. The hypothesized relationships of the writer are shown in the upper left hand corner of the cells, while the results of the Chi-square tests are shown in the lower right-hand corner of the cells. "I" represents an inverse relationship, while "D" represents a direct relationship. Although no hypotheses of independence or "no relationship" were made, this condition is represented by "0" where it was shown by the tests.

In predicting relationships, the writer had to impose some value judgments on certain variables. He considered low scores on variables 3, Unfamiliar with present practices (UP); 5, Undecided about working conditions (UWC); 10, Teacher-pupil ratio (T/P R); and 11, Teaching load (TL) as being indicative of more desirable conditions. In regard to the sizes of the colleges the writer had hypothesized that the larger colleges would have better opportunities for developing an inservice program than the smaller ones. He reasoned that in the smaller colleges there would be less faculty personnel and these people would become reinvolved in many activities, probably reducing the efficiency of the inservice program.

TABLE IV
RESULTS OF CHI-SQUARE TESTS RUN ON THE ITEMS AND THE VARIABLES

Items	Variables										
	UP	RWC	UMC	TM	TT	SR	S	T/PR	TL	DD	AYS
Understanding the School and its Purposes by:	3	4	5	6	7	8	9	10	11	12	13
1. Discussing the philosophy and objectives of the school.	I	D	I								D
4. Publishing available information that will help interpret the school's philosophy and history.	I	D	I								
Administration's Attitude and Responsibility for Improvement of Teaching by:											
5. Making information from the personnel, guidance, and registration offices available to teachers.						D	D	I			
12. Showing its willingness to attack problems that affect teaching.		D	D	D	D			I	I		
13. Having a rank system of academic levels.										D	D
Involving the Whole Faculty by:											
2. Having a faculty committee work on instructional problems.		D	D				D			D	D
6. Giving new teachers an opportunity to express their views.		D	D				I			D	D
Assisting the Faculty in its Professional Development by:											
2. a. Granting leaves of absence for study.		D	D	D	D					D	D

TABLE IV (continued)

Items	Variables											
	UP 3	RWC 4	UWC 5	TM 6	TT 7	SR 8	S 9	T/PR 10	TL 11	DD 12	AYS 13	
Directing or Supervising Instruction by:												
2. Having the department head responsible for his own department.	I D	D I		D O	D O		D O					
Providing Centralized Services by:												
2. Providing help in the selection and use of audio-visual material.				D O	D D		D O					
3. Providing clerical assistance to score objective tests.		D O		D O	D O		D O	D D				
6. Mimeographing tests, teaching outlines, reading lists, etc.		D I		D D	D D			D O				
7. Giving prompt attention to requests for teaching supplies.		D O		D D	D O			D D				
Insuring the Flow of Information to and from Campus by:												
1. Providing records that help teachers understand students.						D I	D O	D I				
3. Providing for service programs away from campus--programs in churches, communities, youth work, etc.		D O				D I	D O		I O		D I	
4. Inviting conferences to campus		D I		D O	D O		D O					
5. Encouraging attendance at professional meetings.		D D		D D	D O							

In the material below, the writer sets forth some of the intuitions and reasons for his hypotheses stated in Table IV.

Discussing the philosophy and objectives of the school.

From the attention given this activity in the review of the literature, the writer attached considerable importance to it. One must admit it is the kind of activity that could have relationships to many areas of a college's program. It seemed reasonable to expect the performance of this activity to contribute to a reduction of unfamiliarity with present practices, to help the faculty understand and develop definite reactions to the working conditions, and thereby reducing the undecidedness about working conditions. It also seemed reasonable to expect that the longer the tenure of the faculty the better this activity could be carried out. According to the tests, the expected relationships between this activity and unfamiliarity with present practices, and undecidedness about working conditions were sustained.

Publishing available information that will help interpret the school's philosophy and history. These eight colleges published various types of publicity materials that serve many functions--from student handbooks to reports in church periodicals. The writer felt this activity would show relationships with at least three variables, inverse relationships with unfamiliarity with present practices and undecidedness about working conditions, and a direct relationship with reaction to working conditions. The tests upheld the relationships with

faculty reactions to working conditions and undecidedness about working conditions.

Making information from the personnel, guidance, and registration offices available to teachers. The writer felt the practice of this activity might affect the student response variable since the records made available to teachers are often used in personal counseling situations. It was also felt that the need for such a flow of material would increase as the size of the college increased, but it would be less necessary in colleges where the teacher-pupil ratio was small. As indicated in Table IV, none of these relationships was borne out; in fact, this practice has an inverse relationship with the student response variable.

Showing its (administration's) willingness to attack problems that affect teaching. The review of literature and interviews with faculty personnel led the writer to believe the administration's efforts to improve teaching were felt and appreciated by the faculty. Such a favorable attitude by the administration, it was felt, would be reflected in positive or "pleased" faculty reactions to working conditions and perhaps be reflected in the use of a greater variety of teaching methods and techniques, in the teacher-pupil ratio being smaller and in the teaching load of the faculty being smaller. It is interesting that these relationships held up with the faculty reactions to working conditions, teaching techniques, and teaching load. The relationship with working conditions

101
 102
 103
 104
 105
 106
 107
 108
 109
 110
 111
 112
 113
 114
 115
 116
 117
 118
 119
 120
 121
 122
 123
 124
 125
 126
 127
 128
 129
 130
 131
 132
 133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525
 526
 527
 528
 529
 530
 531
 532
 533
 534
 535
 536
 537
 538
 539
 540
 541
 542
 543
 544
 545
 546
 547
 548
 549
 550
 551
 552
 553
 554
 555
 556
 557
 558
 559
 560
 561
 562
 563
 564
 565
 566
 567
 568
 569
 570
 571
 572
 573
 574
 575
 576
 577
 578
 579
 580
 581
 582
 583
 584
 585
 586
 587
 588
 589
 590
 591
 592
 593
 594
 595
 596
 597
 598
 599
 600
 601
 602
 603
 604
 605
 606
 607
 608
 609
 610
 611
 612

was not surprising to the writer since many working conditions are closely related to the improvement of teaching.

Having a rank system of academic levels. Academic ranks are usually considered to be very important to college teachers. A relationship between a rank system of academic levels and the percentage of doctor's degrees and the average years of service of the faculty would intuitively seem reasonable. Persons with doctor's degrees are likely to be more sensitive to problems of rank, and rank may be a college's means of rewarding the continuing teacher. The Chi-square tests did support the relationship with average years of service. A continuing faculty is an important factor in developing a rank system of academic levels.

Having a faculty committee work on instructional problems. Inservice improvement is best thought of as something a faculty does for itself rather than what other people cause it to do; therefore, faculty involvement is important. Such involvement could conceivably affect many phases of a college's program. The writer felt it should influence to some degree faculty reactions to working conditions. He also felt that faculty involvement might be better secured in a larger college since the same people would not be reinvolved all the time. It appeared reasonable to assume that persons with doctor's degrees and longer years of service could assume leadership roles in this faculty involvement process. Only

the relationships with working conditions and the percentage of doctor's degrees were sustained by the tests.

Giving new teachers an opportunity to express their views. Although this activity is restricted to a small number of teachers, it should help these new teachers develop reactions to working conditions. The writer felt this activity would be less necessary in the small college, but that it would be more necessary if the new teachers were persons with doctor's degrees and if the college had hopes of retaining its teachers over a long period of time. The relationships with reactions to working conditions and the percentage of doctor's degrees were sustained.

Granting leaves of absence for study. Although all eight colleges granted leaves for study, not all eight colleges granted leaves with pay. In the opinion of the writer, it would seem logical to expect results of a leave program to be reflected in the responses to working conditions, and in the use of a variety of teaching methods and techniques. It also seems that such a program would attract more persons with doctor's degrees and result in their staying with the college longer, since persons accepting leaves with pay often must agree to return to the college for several years. The writer was gratified to find these relationships sustained with reactions to working conditions, the use of a variety of teaching methods, and the larger percentage of doctor's degrees.

However, one must remember that the observance of general relationships does not imply causality.

Having the department head responsible for his own department. One of the intended purposes stated for this activity is the improvement of classroom instruction. Thus, one would expect to see some relationship to the use of a variety of teaching methods and techniques. The writer also felt it might be a means of reducing unfamiliarity with present practices and creating a favorable reaction to working conditions. It seemed that this type of supervision would become more necessary as the size of the college increased. The tests showed no relationships of this item with teaching methods, techniques, or size. They did, however, show opposite relationships from those hypothesized by the writer on working conditions and unfamiliarity with present practices. These last two seem difficult to explain unless one keeps in mind the general negative reactions college teachers have to classroom supervision of any kind.

Providing help in the selection of audio-visual materials. It was felt that the performance of this activity ~~would~~ affect the way students responded to the questionnaire on the use of a variety of teaching methods and techniques, particularly on the techniques. It was also felt that the larger colleges would have need to institutionalize their audio-visual program and thereby provide more help for teachers. This latter relationship was not borne out, but it was

encouraging to see the one with the use of a variety of teaching techniques upheld.

Providing clerical assistance to score objective tests.

The performance of this activity could show a definite relationship with faculty reactions to working conditions. It also might affect the variety of teaching methods and techniques a teacher used if he were spared the test-grading tasks and had more time to put on class activities. The writer was of the opinion that this activity would be performed more in the larger colleges and particularly if the teacher-pupil ratio were larger. Of these hypothesized relationships, the only one borne out was with the teacher-pupil ratio..

Mimeographing tests, teaching outlines, reading lists, etc. Faculty interviewees indicated much appreciation for the mimeographing services, so the writer felt it might show relationship to faculty reactions to working conditions. This relationship was not sustained by the tests; in fact, it was reverse. Perhaps one of the most significant contributions of the mimeographing services to the teacher is the provision of classroom materials. The hypothesized relationships to the use of a variety of teaching methods and techniques were both sustained. It also seems reasonable to expect mimeographing services to increase as the teacher-pupil ratio increased, but this relationship was not substantiated by the tests.

Giving prompt attention to requests for teaching supplies. This activity might be expected to show strong

relationship to working conditions and, since it involves the request for teaching supplies, to have relationship to teaching methods and techniques. It might also have relationship to teacher-pupil ratio since in large classes the acquisition of materials is very important. The relationships with teaching methods and the teacher-pupil ratio were indicated by the tests.

Providing records that help teachers understand students. The provision of records to help teachers better understand students could conceivably cause a better student reaction to the teaching-learning situations. The need for such records may be more acute in larger schools and particularly as the teacher-pupil ratio increases. The tests indicated that the student responses were less favorable in the colleges where these records were best provided, and they also indicated that such records are used less when the teacher-pupil ratio is higher and the college is larger.

Providing for service programs away from campus--
programs in churches, communities, youth work, etc. Since a number of faculty interviewees had expressed concern over the extra-class responsibilities, the writer was interested to see if this activity had any relationship to working conditions. Since these programs away from campus are often planned to facilitate co-curricular development of the student, it was hypothesized that their practice might favorably influence the student response variable. The teaching

load of the faculty might determine the extent to which faculty persons could assume responsibility for such programs, and the writer was of the opinion that these programs might be more prevalent in colleges where the faculty has served longer. None of these relationships stood the tests. It appears from the tests that student reactions to the teaching-learning situations were less favorable in colleges providing these off-campus programs. Also, where the faculty has served longer, there seem to be fewer of these programs.

Inviting conferences to campus. It was felt that the number and extent of conferences invited to campus would be directly related to faculty working conditions. One could easily believe that campus conferences could show an effect on the use of teaching methods and techniques in the classroom. It was also felt that larger colleges would more likely have conferences than the smaller ones. The Chi-square tests showed an inverse relationship between the conferences brought to campus and the faculty reactions to working conditions. It is possible that conferences mean more work, often overwork. The writer was surprised that none of the other three predicted relationships was upheld by the tests.

Encouraging attendance at professional meetings. It was the opinion of the writer that a college which could encourage attendance at professional meetings would more likely have favorable working conditions. This was sustained by the tests. It was also encouraging to note that the direct

relationship expected between attending professional meetings and using a greater variety of teaching methods was upheld, but one wonders why it was not also upheld with teaching techniques.

Table IV and the comments above indicate widespread disagreement between the writer's hypothesized relationships and the results of the tests. The writer hypothesized sixty-six relationships between the activities and the variables. Of those sixty-six hypothesized relationships, only twenty-two (33 percent) were sustained by the tests. Of those sustained by the tests, only two fell in the 4--0; 0--4 pattern and were significant at the five percent level. There were nine instances in which the results of the tests indicated relationships opposite from the writer's hypotheses.

One must keep in mind that a comparison between one of these inservice activities and a variable of the study is like a David and Goliath situation. The activity, limited in its reaction power, would have to make considerable impact to influence a variable into which a number of factors have combined to form its reaction influence. The fact that many hypothesized relationships were not sustained by the Chi-square tests may indicate that relationships between these two contingencies are not as obvious as they appear on the surface. One must also keep in mind that some which did appear could be due to chance at the twenty percent level of significance. One might argue that a 3--1; 1--3 pattern doubled or tripled in sample size would likely give a much

higher level of significance, but the reality of the case suggests that one should interpret these relationships as suggested patterns and not as hard and fast relationships. It seems probable to the writer that even with an increase in sample size the prediction of relationships between inservice activities and variables would be very difficult. The effects that an inservice activity may have on specific variables are not inherent in the activity. They may be related to the various ways in which the variables are practiced in colleges. Some inservice activities are practiced with an immediate benefit in view without too much consideration of--"What effect will this activity have on certain variables?" As one looks back over the practice of an activity he may see how it has affected certain variables and in retrospect he may offer logical reasons as to why these effects were possible. But it is unlikely that he would often undertake the practice of an activity with the purpose of directly influencing a variable. The same amount of time and effort put in directly on the variable would likely bring better returns.

The effects that certain inservice improvement activities have on certain variables are generally subtle and indirect, possibly not planned, and likely to be unpredictable ahead of time. In order to determine whether larger categories with more reactions involved would show relationships to the variables, the same type of Chi-square tests were run on contingency tables comparing the ten areas (groups of activities)

of the teacher questionnaire with the variables. Again, $\chi^2_{.20}$ was accepted as the level at which suggested relationships would be investigated. In these tests, however, hypothesized relationships were not made inasmuch as the major purpose of these tests was to see what relationships would be demonstrated by the tests at the twenty percent level. The results of these tests are shown in Table V, where relationships are shown again by "D", direct relationship, or "I", inverse relationships.

Area one, Orientation of the Faculty, showed relationship to eight variables. It was directly related to the performance of inservice activities and their desirability. The reduced undecidedness about working conditions is a worthwhile result of orienting the faculty to the college's program. Just how orientation of the faculty can have direct relationships with the use of a variety of teaching methods and techniques is not clear from this study. One might express the opinion that a proper orientation of a new teacher could encourage a teacher to use more methods and techniques, especially if the faculty handbook, dean or department head puts emphasis on this during orientation. It was interesting to notice the inverse relationships with the percent of doctor's degrees and the average years of service. If one could establish a relationship between the percentage of doctor's degrees on the faculty and the average years of service, these inverse relationships would appear to be normal expectations. It seems reasonable that persons with doctor's degrees would be

TABLE V
RESULTS OF CHI-SQUARE TESTS RUN ON THE AREAS AND THE VARIABLES

Areas	Variables												
	PA 1	AD 2	UP 3	RWC 4	UWG 5	TM 6	TT 7	SR 8	S 9	T/PR 10	TL 11	DD 12	AYS 13
1. Orientation of the Faculty	D	D	0	0	I	D	D	0	I	0	0	I	I
2. Understanding the School and its Purposes	D	D	I	D	0	D	0	0	I	D	0	I	I
3. Administration's Attitude and Responsibility for Improvement of Teaching	D	0	D	D	D	0	0	0	I	0	0	0	0
4. Involving the Whole Faculty	0	0	0	0	I	I	I	D	0	0	0	D	D
5. Assisting the Faculty in its Professional Development	D	D	0	0	I	0	D	0	0	0	0	I	I
6. Directing or Supervising Instruction	0	0	I	0	0	D	0	0	0	0	D	D	0
7. Providing for Centralized Services	D	D	D	0	D	0	D	I	D	D	0	I	0
8. Obtaining Evaluations from Others	D	D	0	0	0	D	D	I	0	D	0	I	I
9. Encouraging Research	0	0	0	0	D	I	I	I	0	D	0	D	D
10. Insuring the Flow of Information to and from Campus	0	0	0	D	0	I	I	D	I	0	0	D	D

more settled in these liberal arts colleges. One might feel that the larger colleges would need to give more attention to the orientation of teachers, but according to the tests, they were not.

Understanding the School and Its Purposes, area two, had relationships with nine variables. This area seems to be particularly related to the performance and desirability of inservice activities. It seems reasonable that efforts to better understand the college's purposes would affect faculty attitudes toward working conditions in a favorable way. The faculty may be understanding and sympathetic about working conditions though not accepting them as satisfactory. This was indicated by several faculty interviewees who commented that being "pleased" with working conditions may indicate an understanding that the administration is doing the best it can with what it has rather than satisfaction with actual working conditions.

If a college has a particular philosophy that involves the use of certain teaching procedures and classroom atmosphere to achieve its philosophy, it is quite conceivable that the efforts to understand the college and its purposes could influence the use of teaching methods. Such colleges as G and H in this study came close to fitting this type. Otherwise, the relationship with teaching methods is difficult to explain. Again, the larger colleges, where one might expect more effort to be expended in trying to understand the

college, seemed to be doing less in this activity although those colleges with smaller teacher-pupil ratios were performing more of this activity. The percentage of doctor's degrees and the average years of service showed inverse relationships to this activity. Although familiarity with the college and its purposes would normally grow as a teacher continued at a college, it does not necessarily follow that persons with advanced degrees and continuing at the college need less help to understand the college's purposes, especially if there are policy changes.

Area three, Administration's Attitude and Responsibility for the Improvement of Teaching, had relationships with five variables. The direct relationships with the performance of inservice activities and reactions to working conditions seem to indicate what several faculty interviewees said--that the administration must take an active leadership in directing the inservice program and trying to improve working conditions. These relationships seem to indicate that where the administration is actively trying to improve teaching more inservice activities were being performed with less unfamiliarity with present practices, and the reactions to working conditions were more favorable with less undecidedness about working conditions. These results would appear to be worth the time and effort the administration puts in on the efforts to improve teaching. Again, it will be noted that the larger colleges had less activity in this area, as in other areas above.

The writer had the notion that larger colleges would have better opportunities for planning inservice activities because of the larger number of people who could be involved.

Area four, Involving the Whole Faculty, had three direct and three inverse relationships to variables, according to the tests. One might reasonably expect that to the extent to which a faculty was involved in inservice improvement, there would be less undecidedness about working conditions, but the tests did not show this. The inverse relationships with the use of teaching methods and techniques were surprising to the writer. Whatever subtle effects are at work in these relationships with teaching methods and techniques are somewhat consistent in affecting both these variables. In colleges where the faculties were being involved in inservice activities there were indications that student responses to the teaching-learning situations were more favorable. It may mean that in these colleges students are also more involved in planning and sharing educational opportunities. At least some carry-over appears possible. Faculty involvement seems to be more prevalent in the colleges having more doctor's degrees and faculties with longer years of service. Persons with doctorates who have been at the colleges for some time could provide much leadership.

Area five, Assisting the Faculty in Its Professional Development, showed relationships to six variables. Of these six, the writer feels that the ones with the performance of

inservice improvement activities and teaching techniques are particularly interesting. Although this area showed an inverse relationship with undecidedness about working conditions, it reemphasizes what has already been said about the administration's responsibility to provide purposeful direction to inservice efforts. It seems unusual that this area would be related to teaching techniques but not to teaching methods. One may say that more items, things, and accessories are involved in teaching techniques--things the administration must approve and buy, but this seems unrealistic to the writer. As one might expect, there was less effort to promote professional development among the faculties where there were more doctor's degrees and longer terms of service. The writer would not agree that this is the desirable situation nor that it necessarily follows when the administration is assisting in professional development.

Area six, Directing or Supervising Instruction, was the area of the teacher questionnaire that drew the least response in the "Doing Well" column of the teacher questionnaire. If this type of activity can be a contributing factor in cutting down unfamiliarity with present practices and showing a general relationship to the use of a greater variety of teaching methods, it may have something to offer that is presently being missed by some of these colleges. As the writer suspected, this type of supervision seems more necessary in the colleges where the teacher-load is heavier. The

relationship with the percentage of doctor's degrees is likely a very indirect one and hardly seems explainable. One does not generally find more supervision of classroom instruction where there are more doctor's degrees.

Area seven, Providing for Centralized Services, had relationships with nine variables. This is the type of activity which has the potential to influence, or be influenced by, a number of variables. In terms of operating efficiency, central services may be related to almost all variables of this study. Operational efficiency is one of the ways in which it could be related to the performance and desirability of inservice improvement activities and the use of various teaching techniques. As one might reasonably expect, central services were used more in the larger colleges, but they were also used more in colleges where the teacher-pupil ratio was smaller. The inverse relationship which this area had to three other variables does not seem to be easily explainable. The writer was of the opinion that colleges providing more central services for their faculties might also provide more similar services for students and thereby receive a more favorable student response. This was not the case, according to the tests. It does make sense that more central services would be provided in the larger colleges and in cases where the teacher-pupil ratio is larger, but it does not make sense that fewer central services would be provided in colleges with higher percentages of doctor's degrees. These things do not

seem to be related in practice, and the writer is inclined to attribute this relationship to indirect influences.

Area eight, Obtaining Evaluations from Others, was related to the performance and desirability of inservice activities. It is also interesting to notice that it was directly related to the use of a variety of teaching methods and techniques and the teacher-pupil ratio. It would be difficult to say which one of these leads to the other, but one may see possibilities for either to lead and the other to follow. Teachers using more methods and techniques may be less fearful of evaluations from others and in reality may stand to gain from them; while colleges which institute the practice of obtaining evaluations may by this procedure cause teachers to be more alert to using various methods and techniques. Certainly the reduced teacher-pupil ratio would be considered an incentive to use a greater variety of methods and techniques. It appears from the tests that these evaluations are used less in colleges where the percentages of doctorates are higher and the faculties have been with the colleges longer. The writer was surprised to see the inverse relationship with student responses to learning situations. One might theorize that these valuations would favorably impress students and cause them to respond favorably. It also seems possible that evaluations from others would serve useful purposes for the larger colleges where supervision through personal contact has been reduced. The tests, however, indicate

that evaluations are more frequently secured in the smaller colleges of this study.

Area nine, Encouraging Research, had seven relationships with variables, three of which were inverse. One must keep in mind that there was little being done in these eight colleges to encourage research. The reactions of the variables against this area are reactions against very weak efforts. This makes the possibility of chance or erroneous relationships even greater and may account for the relationship with undecidedness about working conditions. It hardly seems reasonable that there would be an inverse relationship between this area and the use of various teaching methods and techniques, since the creativity of research is often advocated as a stimulus to new methods and techniques. Although some students comment that teachers get so interested in research they do little teaching, this hardly seems probable at the liberal arts level. It was interesting to note, however, that this area showed direct relationships with the percentage of doctor's degrees and the average years of service. Generally research is allotted to one with special training and experience in a field. It was also interesting to notice that research was being encouraged in colleges where the teacher-pupil ratio was smaller. Most of these colleges had provisions for reducing the teacher's load when he had a research project underway, especially if it were a project sponsored from the outside.

[illegible]

Area ten, Insuring the Flow of Information to and from Campus, had four direct and four indirect relationships with variables. Some of the inverse relationships do not seem reasonable to the writer. It does not follow that the practice of items in this area would have an effect to cut down the use of various teaching methods and techniques. Neither would one normally expect the smaller colleges to be more concerned with this activity. The activities under this area have to do with public relations as well as college work. It is conceivable that indirectly the faculty reactions to working conditions could be affected by it. Since many of these activities that relate to students are designed for the student's co-curricular development, it is not surprising to see the direct relationship with student responses. The direct dependencies with the percentages of doctor's degrees and the average years of service do not seem to be essentially significant to the performance of the activities under this area, but it is reasonable that these people may serve the college better in off-campus programs than newer teachers.

As the writer has indicated above, one must not consider these relationships as being causal. Neither should one consider them strong enough to predict the results of participating in certain areas of inservice improvement. With some unexplainable and surprising expectations, they may indicate some of the patterns of relationships which inservice areas may develop to other phases of a college's program. They do

point out the high potential of inservice activities to spread to many areas and be subtly related to a number of variables. It appears to the writer that one of the major benefits which he has received from these tests is a reduction of dogmatism about what inservice activities can be thought to do. Though he has lost none of his interest nor belief in their potential, he is much less sure about their direct results.

Although this study was not intended to examine relationships between the variables of this study, the writer felt it would be interesting to apply the Chi-square test at the twenty percent level to certain variables which he felt were particularly interesting.

According to the tests, Variable one, "How well is the college performing these activities?" seems to be related to its desirability. This is a built-in relationship however, since in marking the teacher questionnaire, one could mark only one column thereby answering both. The performance of the inservice activities also seems to have a pattern of relationship to the use of a variety of teaching methods and techniques. It would be difficult to determine the nature of this relationship. It seems possible, however, that some attitudes about trying out new inservice activities would carry over to the classroom. If this relationship between the performance of inservice improvement activities and the use of a variety of teaching methods is a substantial one, it may substantiate one of the basic reasons for encouraging inservice activities.

The writer was interested to know whether the faculty reactions to working conditions were more favorable in the smaller or larger colleges of the study. The tests suggest that the smaller colleges got more favorable reactions from their faculties than the larger ones. He was also interested to see if the undecidedness about working conditions was higher in faculties where the average years of service was small or large. The tests suggest that the undecidedness about working conditions is greater in those colleges where the turnover is heavier. It is possible that persons continuing with a college may adjust to working conditions even though they do not favor them. At least those who stay with the colleges longer seem to develop more definite opinions about working conditions.

In some of the previous tables where an inservice activity or area had been compared with teaching methods and techniques the writer was surprised to notice that the activity or area would have relationship to either methods or techniques, but not to both. For this reason he was interested to see if these two variables were related to each other. According to the tests, they were not. When a greater variety of teaching methods are used, it may not mean that a greater variety of teaching techniques are likewise used. The writer also found no relationship between the use of various teaching methods and techniques and the average years of service of the faculty.

The common accusation that "settled" teachers settle on one method is not substantiated by these tests.

The relationship between students' responses to teaching-learning situations and the faculty responses to working conditions was an interesting and direct relationship, according to the tests. It seems quite conceivable that a "pleased" faculty, in terms of working conditions, would pass along some of its spirit, even though unintentionally. The observation that these relationships may also work in the reverse is worth consideration.

D. Conclusions

In using the word "Conclusions" in a study of this nature, one must keep several reservations in mind. Some of these have already been mentioned in connection with the statistical summaries, particularly the limitations of the sample size of eight colleges. One should also keep in mind that information for eight of the thirteen variables was obtained from check-list questionnaires. There may have been some unintended prejudice by the check-list as well as by the faculty persons marking them. Information for four variables was secured through personal interviews with administrative officers. This information, though taken from reports, may be subject to some questions. Information for one variable was obtained from the college catalogs. The writer recognized these limitations when he chose these means of gathering his

data. The circumstances under which he did the research seemed to warrant these approaches.

In Chapter V a report has been made on the inservice activities practiced in each of these eight colleges. This descriptive material is both summary and conclusive for each college. From this study each college can be shown the number of inservice improvement activities its faculty felt it was performing. Each college can be shown the inservice improvement activities which its faculty desired to improve or initiate. This information seems important to each college if the college makes any purposeful effort to begin with faculty interests in developing its inservice program.

Each of the eight colleges can be shown how it compares with other colleges of similar orientation, finances, and problems on the other variables of this study. The writer feels it is particularly significant that each college knows the working conditions to which its faculty was sensitive and which it desired to have improved. Financial matters may prevent the immediate removal of the "not pleased" responses, but the study indicates where the faculty feels a start should be made. It seems unlikely that one of these colleges would have made this study of these variables in their relationship to inservice improvement. Several deans expressed some hope that this study might serve as a somewhat objective basis on which they could plan with their faculties in a long-range

inservice improvement program. The writer had agreed to furnish each college with a summary of the data relative to it.

From the data of this study and the methods by which it has been summarized, some general conclusions do seem apparent. They are listed below.

1. Among the inservice improvement activities practiced by these eight colleges there were both similarities and dissimilarities. There were seventeen activities being performed by all eight colleges. There were thirty-five activities being performed by six or more of the eight colleges. Some colleges followed the more conventional activities in their inservice efforts, but others demonstrated originality and creativity, particularly College G.

2. From this study the writer concluded that there were both qualitative and quantitative differences in the inservice improvement programs. This was demonstrated by the numerical results of the teacher questionnaire and confirmed by the interviews with faculty personnel.

3. These eight colleges were facing similar problems in their inservice improvement efforts. Common among these problems were questions of financing the desired activities, finding time for faculty members to functionally participate so they could derive benefit, and the responsibility of the administration to provide and encourage inservice improvement.

4. A college faculty ranking itself high on the performance of inservice improvement activities tended to rank

itself high on the other variables of this study. This was a general trend, however, and there were notable exceptions to this tendency.

5. Table I indicates there are many inservice improvement activities which faculties desire to improve or initiate. This may indicate that some of the motivational factors for accelerating inservice improvement efforts may be present within the faculties already.

6. This study indicated that the administration of a college has a key role to play in the planning and provisions for inservice activities. This was expressed verbally by the faculty interviewees and indicated by the suggested relationships of "Administration's Attitude and Responsibility for Improvement of Teaching" with the performance of inservice improvement activities and faculty reactions to working conditions.

7. Another aspect of leadership which this study suggests is the advisability of a college participating in inservice activities that are guided by an intercollege organization. The five colleges scoring highest on the performance of inservice activities in this study are all participants in the North Central Association Studies of Liberal Arts Education. Both the faculty interviewees and administrative officers felt that definite benefits, which could be listed, had resulted from these cooperative studies. In each of these cases provisions had been made for the summer workshopper to

carry some specific problem to the workshop for study. In most cases some arrangement had been structured whereby the summer workshopper became chairman or an advisory member of the committee working on instructional problems or arranging programs of professional study. This type of continuity within the colleges and the direction from an outside organization were the most consistently named benefits mentioned by the five participating colleges. The writer was so impressed by these reports that he suggests this type of cooperation as a "first step" in the improvement of inservice activities.

8. The statistical summaries of the relationships between certain inservice improvement activities and variables of this study can be summarized only in general statements. The limitations imposed upon the tests by the small sample size restricted the usefulness of the Chi-square tests. The tests did indicate that certain inservice improvement activities and variables tended to form patterns that were suggestive of relationships. The data also indicated that some inservice improvement activities are capable of relationships with a number of variables, some direct and others inverse. The general conclusion which the writer draws from the Chi-square tests is that predicted relationships between inservice activities and variables are very difficult to make with any accuracy. It is his opinion that the subtlety and indirectness with which these activities may relate themselves to variables would make the hypothesizing of relationships

difficult even with a much larger sample. On the basis of the tests of this study, one could not with safety suggest certain inservice improvement activities as means of strengthening a certain variable.

9. Some patterns of suggested relationships do seem to be evident between certain areas of inservice improvement and certain variables. From these one might venture some suggestions on the types of activities that might strengthen a variable. Here again, however, one could not be sure that the proper performance of an area of inservice activities would assure the improvement of the variable.

10. The writer found no general pattern of finance used to support the inservice improvement programs. The items usually covered under such a budget heading of "Inservice Improvement" were faculty leaves, faculty travel, professional organizations, and pre-school workshop.

E. Suggestions for Further Study

In this study the writer has been mostly concerned with determining what these eight liberal arts colleges were performing in inservice activities. He made no effort to determine why some colleges perform more activities than others, though the needs may be similar. Basic to the successful operation of an inservice program is the matter of motivation for the program. The writer feels it would be significant to the planning of inservice programs to have

some study on the matters of motivation; What is the administration's responsibility in providing inservice improvement opportunities? How much leadership can the administration provide and still keep the faculty involved in a growing inservice experience? What can be done about teachers who have become complacent?

In his study of the frequency of use of certain teaching methods and techniques the writer had each student fill in four forms. As a result of this approach he accumulated quite a number of forms indicating the varieties of teaching methods and techniques used in certain specific courses, e.g., United States History, Introduction to Philosophy, English Literature. He feels that it would be interesting for someone to follow through with this collected information to see what variations or similarities of methods and techniques are used within a course taught in eight different liberal arts colleges. These forms could also be grouped by departments to see if certain methods and techniques seem to be characteristically used within broad subject-matter areas.

The writer plans to share the relevant material of this study with the respective colleges. It is conceivable to him that the greatest benefit could come to him and the colleges as a result of this sharing experience.

BIBLIOGRAPHY

A. Books and Pamphlets

- American Association of Colleges for Teacher Education. Faculty Participation in College Policy Formulation and Administration, ed. by Arnold E. Joyal, AACTE Study Series No. 3. Oneonta, New York. 1956. 40 pp.
- American Association of University Professors. College and University Teaching. Report of the Committee on College and University Teaching. Easton, Pennsylvania: Published by the Association. 1933. 122 pp.
- American Council on Education. American Universities and Colleges, ed. by Mary Irwin. Washington: American Council on Education. 1956. 584 pp.
- Armstrong, W. E., Hollis, E. V., and others. The College and Teacher Education. Prepared for the Commission of Teacher Education, American Council on Education. Washington: American Council on Education. 1944. 311 pp.
- Association of Higher Education. Current Issues in Higher Education. Washington: ed. by G. Kerry Smith. National Education Association. 1956. 363 pp.
- Aydelotte, Frank. Breaking the Academic Lockstep. New York: Harper and Brothers. 1944. 183 pp.
- Bane, Charles. The Lecture in College Teaching. Boston: Gorham Press. 1931. 128 pp.
- Barr, A. S., Burton, W. H., and Brueckner, L. J. Principles of Supervision. New York: D. Appleton Century Company, (Second Edition). 1947. 879 pp.
- Brandenburg, G. D. and Remmers, H. H. Manual for the Purdue Rating Scale for Instructors. Lafayette, Indiana: Lafayette Printing Company. 1928. 31 pp.
- Briggs, Thomas H. Improving Instruction. New York: Macmillan Company. 1938. 578 pp.

- Butts, Freeman. The College Charts Its Course. New York: McGraw-Hill Book Company, Inc. 1939. 464 pp.
- Cantor, Nathaniel. The Dynamics of Learning. Buffalo: Foster and Stewart. 1946. 282 pp.
- Cole, Luella B. The Background for College Teaching. New York: Farrar and Rinehart, Inc. 1940. 616 pp.
- Conant, James B. The Citadel of Learning. New Haven: Yale University Press. 1956. 79 pp.
- Cooper, Russell M., editor. Better Colleges--Better Teachers. New York: Macmillan Company. 1944. 167 pp.
- Douglas, Harl R., editor. Controlled Experimentation in the Study of Methods of College Teaching. Eugene, Oregon: University of Oregon Press. 1929. 51 pp.
- Forrester, Norman. The American State University--Its Relations to Democracy. Chapel Hill, N. C.: University of North Carolina Press. 1937. 287 pp.
- _____. The Future of the Liberal Arts College. New York: D. Appleton Century Company. 1938. 163 pp.
- Fraser, Mowat G. The College of the Future. New York: Columbia University Press. 1937. 529 pp.
- Good, Carter V. Teaching in College and University. Baltimore: Warwick and York. 1929. 557 pp.
- Harvard University. Education in a Free Society. Report of the Harvard Committee on Objectives of General Education. Cambridge: Harvard University Press. 1945. 267 pp.
- Hudelson, Earl, editor. Problems of College Education. Minneapolis: University of Minnesota Press. 1928. 443 pp.
- _____. Class Size at the College Level. Minneapolis: University of Minnesota Press. 1928. 270 pp.
- Hutchins, Robert M. No Friendly Voice. Chicago: University of Chicago Press. 1936. 196 pp.
- _____. The Higher Learning in America. New Haven: Yale University Press. 1936. 119 pp.
- Johnston, J. B. The Liberal College in Changing Society. New York: Century Company. 1930. 316 pp.

- Kelly, Robert L., editor. The Effective College. By a group of American students of higher education. New York: American Association of Colleges. 1928. 302 pp.
- Klapper, Paul. College Teaching. Yonkers, New York: World Book Company. 1920. 575 pp.
- Koos, Leonard V. Integrating High School and College. New York: Harper and Brothers. 1946. 208 pp.
- Leahy, H. J. The Improvement of College Instruction Through In-Service Techniques. South Orange, New Jersey: Seton Hall College. 1948. 22 pp.
- Learned, W. S., and Wood, Ben. The Student and His Knowledge. Carnegie Foundation for the Advancement of Teaching. New York: Carnegie Foundation. 1938. 406 pp.
- Lindschield, Adolph. In-Service Improvement of the State Teachers College Faculty. Contributions to Education, Number 309. New York: Teachers College, Columbia University. 1928. 100 pp.
- Meiklejohn, Alexander. The Experimental College. New York: Harper and Brothers. 1932. 421 pp.
- Milner, Clyde A. The Dean of the Small College. Boston: Christopher Publishing House. 1936. 151 pp.
- Monroe, Walter S., editor. The Encyclopedia of Educational Research. New York: MacMillan Company. 1950. 1344 pp.
- Mursell, James L. Successful Teaching: Its Psychological Principles. New York: McGraw Hill Book Company. 1946. 338 pp.
- National Education Association. Current Problems in Higher Education, 1947. National Conference on Higher Education. Department of Higher Education. Washington: National Education Association. 1947. 227 pp.
- _____. Current Issues in Higher Education, 1956. Association for Higher Education, ed. by G. Kerry Smith. Washington, D. C.: National Education Association. 1956. 363 pp.
- _____. Current Trends in Higher Education, 1948. III Annual Conference on Higher Education. Department of Higher Education. Washington, D. C.: National Education Association. 1948. 199 pp.

National Education Association. Current Trends in Higher Education, 1949. IV Annual Conference on Higher Education. Department of Higher Education. Washington, D. C.: National Education Association. 1949. 202 pp.

National Society for the Study of Education. In-Service Education. Fifty-Sixth Yearbook, Part I. Chicago: University of Chicago Press. 1957. 376 pp.

Office of Education, Higher Education Division. Higher Education Enrollment: Fall, 1948. Statistical Circular No. 248. Office of Education, November 15, 1948. 40 pp.

Payne, Fernandus, and Spieth, Evelyn Wilkinson. An Open Letter to College Teachers. Bloomington, Indiana: Principia Press. 1935. 380 pp.

President's Commission on Higher Education. Higher Education for American Democracy. Washington, D. C.: Government Printing Office. 1947. Pages not numbered consecutively.

Pressey, Luella C., and Pressey, Sidney, and others. Research Adventures in University Teaching. Bloomington, Illinois: Public School Publishing Company. 1927. 242 pp.

Proceedings of the Institute for Administrative Officers of Higher Institutions. Chicago: University of Chicago Press.

Gray, W. S., editor. The Training of College Teachers, Vol. II. 1929
242 pp.

_____. Tests and Measurements in Higher Education, Vol. VIII. 1936. 238 pp.

Reavis, William C., and Judd, Charles H. The Teacher and Educational Administration. Chicago: Houghton Mifflin Company. 1942. 604 pp.

Reed, Anna Y. The Effective and the Ineffective College Teacher. New York: American Book Company. 1935. 344 pp.

Reeves, Floyd W., and Russell, John Dale. College Organization and Administration. A Report Based upon a Series of Surveys of Church Colleges. Indianapolis: Board of Education, Disciples of Christ. 1929. 324 pp.

- Reeves, Floyd W., Russell, John Dale, Gregg, H. C., Brumbaugh, A. J., and Blauch, L. E. The Liberal Arts College. Based upon Surveys of Thirty-Five Colleges Related to the Methodist Episcopal Church. Chicago: University of Chicago Press. 1932. 679 pp.
- Richard, Cyril Fuller. Denison: A Small College Studies Its Program. Granville, Ohio: Denison University Press. 1948. 167 pp.
- Richardson, L. B. A Study of the Liberal College. Hanover, N. H.: Dartmouth College Press. 1924. 282 pp.
- Strang, Ruth. Counseling Technics in College and Secondary School. New York: Harper and Brothers. 1949. 302 pp.
- Tead, Ordway. College Teaching and College Learning. New Haven, Conn.: Yale University Press. 1949. 100 pp.
- Thwing, Charles F. A History of Higher Education in America. New York: Appleton and Company. 1949. 56 pp.
- _____. The College President. New York: MacMillan Company. 1926. 345 pp.
- Umstattd, James G. Instructional Procedures at the College Level. Austin: University of Texas Press. 1947. 195 pp.
- Whitney, Fredrick L. The Growth of Teachers in Service. New York: Century Company. 1927. 308 pp.
- Wilkins, Ernest H. The College and Society. New York: Century Company. 1932. 166 pp.
- Wriston, Thomas. The Nature of a Liberal Arts College. Appleton, Wisconsin: Lawrence College Press. 1937. 177 pp.
- Zook, George, and Haggerty, M. E. The Evaluation of Higher Institutions. Volume I of Principles of Accrediting Higher Institutions. Chicago: University of Chicago Press. 1936. 194 pp.

B. Articles In Educational Periodicals and
Bulletins of Learned Organizations

American Association of University Professors. "Systems of
Sabbatical Leaves." American Association of University
Professors Bulletin. Report of the Committee, 17:219-
234, March, 1931

American Council on Education. "What Does a College Teacher
Do?" Educational Record, 9:96-99, April, 1928.

_____. College Finance. Eighteen Bulletins of the
Financial Advisory Service of the American Council on
Education. Washington: American Council, 1935.

Anderson, Hurst R. "Workshop in Higher Education." Journal
of Higher Education; 13:139-141, March, 1942.

Anderson, J. T. "The Improvement of Teaching in the College."
Journal of Higher Education, 7:36-41, January, 1936.

Anderson, Walter A., Baldwin, Rollin P., Beauchamp, Mary.
The Workshop Handbook. New York: Teacher's College,
Columbia University, 1953.

Armentrout, W. D. "College Students' Preference for Certain
Mechanics of the Class Period." School and Society, 24:
739-740, December, 1926.

Association of American Colleges. "Report of the Commission
on the Enlistment and Training of College Teachers."
Association of American Colleges Bulletin.

13:126-144, 1927.

14: 95-107, 1928.

15: 40- 45, 1929.

17: 24- 36, 1931.

_____. "The College Teacher." Association of American
Colleges Bulletin. Edited by Robert L. Kelly. Vol.
15. March, 1929.

Aydelotte, Frank. "Honors Courses in American Colleges and
Universities." Education, 46:416-419, March, 1926.

Ayers, Fred C. "Comparing and Adjusting the University
Teaching Load." Nation's Schools, 4:26-30, July, 1929.

- Badger, H. G. "Administrative Policies Governing the Salaries of College Teachers." American Association of University Professors Bulletin, 33:443-463, September, 1947.
- Bane, C. L. "The Lecture Versus the Class Discussion Method of College Teaching." School and Society, 21:300-302, March 7, 1925.
- Bartlett, L. W. "Bibliography of the Professional Growth of Faculty Members." American Association of University Professors Bulletin, 12:275-300, November, 1926.
- Becker, A. P. "To Professionalize Teaching." Journal of Higher Education, 20:88-94, February, 1949.
- Bigelow, Karl A. "Teachers for Our Times." Higher Education, 1:1-3, June 15, 1945.
- Block, E. A. "Alternatives to Classroom Lecturing." Educational Forum, 18:221-229, January, 1954.
- Bode, Boyd H. "Aims in College Teaching." Journal of Higher Education, 3:475-480.
- Bohannon, Charles D. "Improvement of Instruction in Land-Grant Colleges." Proceedings of the Forty-First Annual Convention of the Association of Land-Grant Colleges and Universities. Burlington, Vermont: Free Press Printing Company, 1929, pp. 116-131.
- Boucher, C. S. "Honored for Excellence in Teaching." The University of Chicago Magazine, 24:291-292, 1932.
- Bowman, C. C. "Administrator and the Professor." American Association of University Professors Bulletin, 32:678-686, December, 1946.
- Brandenburg, George C. "Why Teachers Fail." Bulletin of the School of Education, Indiana University. 19th Annual Conference on Educational Measurement, 9:49-60, September, 1932.
- Breed, Fredrick. "A Guide for College Teaching." School and Society, 24:82-87, July, 1926.
- Brown, Francis J. "President's Commission on Higher Education Reports Further." Higher Education, 4:145-148, March 1, 1948.

- Burt, Allan. "Supervision of Instruction." Peabody Journal of Education, 25:208-217, March, 1948.
- Campbell, Oscar James. "System of Sabbatical Leaves." American Association of University Professors Bulletin, 17:219-234, March, 1931.
- Carmichael, O. C. "The Teacher and Educational Results." Forty-First Annual Report, The Carnegie Foundation for the Advancement of Teaching. New York: Carnegie Foundation, 1948, pp. 3-12.
- Champlain, C. D. "Better College Teaching." Education, 53:493-498, April, 1953.
- Charters, W. W. "Sizing Up the Faculty." Journal of Higher Education, 11:457-461, December, 1940.
- Cooper, Russell M. "Liberal Arts Study Goes On." North Central Association Quarterly, 20:162-166, October, 1945.
- _____. "Faculty Adventures in Educational Planning." Journal of General Education, 2:35-40, October, 1947.
- _____. "New Trends in College Teaching." Supplement of Educator's Washington Dispatch. September, 1949.
- Cordrey, E. E. "Efforts to Improve Instruction in State Teachers Colleges." Journal of Education, 9:200-208, January, 1932.
- Corey, S. M. and Herrick, V. E. "Adjustment Counseling with Teachers." Educational Administration and Supervision, 30:87-96, February, 1944.
- _____. "Group Counseling with Teachers." Educational Administration and Supervision, 30:321-330, September, 1944.
- Coss, John J. "Improvement in College Teaching at Columbia University." Journal of Higher Education, 3:121-126, March, 1932.
- Cross, Wilbur L. "Improvement of College Teaching." Association of American Colleges Bulletin, 16:84-96, March, 1930.
- Craig, Hardin. "The University and the College." Journal of Higher Education, 3:487-492, December, 1932.

- Davis, Calvin O. "The Teaching Load in a University." School and Society, 19:556-558, May 10, 1924.
- Day, E. E. "Status of Teaching in the American University." Educational Record, 21:5-13, January, 1940.
- Deferrari, Roy J. "Workshop on College Organization and Administration." Higher Education, 3:9-10, March 15, 1947.
- Diemer, C. W. "Improvement of Instruction in Colleges." Peabody Journal of Education, 21:41-46, July, 1943.
- Dodge, H. L. "Improvement of College Teaching." Journal of Higher Education, 3:481-486, December, 1932.
- _____. "Preparation of College Teachers." Journal of Engineering Education, 29:62-72, September, 1938.
- Donohue, Francis J. "Training Prospective College Teachers." Journal of Higher Education, 16:323-325, June, 1945.
- Donovan, H. L. "Changing Conceptions of College Teaching." Educational Administration and Supervision, 16:401-410, September, 1930.
- Douglas, Harl R. "Rating the Teaching Effectiveness of College Instructors." School and Society, 28:192-197, August 18, 1928.
- Dudine, Sister M. Frederica. "Supervision Today." Catholic Educational Review, 45:534-540, November, 1947.
- Eckert, Ruth E. "New Design for the Training of College Teachers." Junior College Journal, 18:25-33, September, 1947.
- _____. "Some Neglected Aspects in the Preparation of College Teachers." Journal of General Education, 3:137-144, January, 1949.
- _____. "Ways of Evaluating College Teaching." School and Society, 71(1833):65-69, February 4, 1950.
- Eckhardt, E. C. "Faculty Self-Survey and the Improvement of College Instruction." School and Society, 27:336-338, March 17, 1928.
- Elder, Fred Kingsley. "Improvement of College Instruction." Educational Administration and Supervision, 35:475-488, December, 1949.

Eells, Walter C., and others. "The Improvement of College Teaching." Junior College Journal, 5: October, 1934 to April, 1935.

Evenden, E. S. "The Improvement of College Teaching." Teachers College Record, 29:587-596, April, 1928.

Fleeming, E. M. "Good Teaching is Our Most Important Job." North Central Association Quarterly, 28:367-369, April, 1954.

Franklin, R. M. and Howell, W. H. "American College Teacher: Search for Better Recruits." Educational Supervision, 2037:465, May 14, 1954.

French, C. C. "Significant Problems Involved in the Improvement of Instruction in Colleges." Southern Association Quarterly, 11:359-362, May, 1947.

Gibson, J. E. "Louisiana's Leave of Absence Policy for College Faculties." Higher Education, 2:4-5, April 1, 1946.

Gilbert, A. A. "In-Service Education of the College Faculty." Journal of Higher Education, 20:192-197, April, 1949.

Grant, Emma B. "Motivating the Course in Tests and Measurements for the Teacher-in-Training." Journal of Educational Methods, 4:190-194, 1924-5.

Gray, John E. "Committee on Administrative Problems." Junior College Journal, 16:423-426, May, 1946.

_____. "Report of the Committee on Administrative Problems." Junior College Journal, 17:33-34, September, 1946.

Gray, William S. "Survey of Current Methods in Training Prospective College Teachers." The Training of College Teachers. Proceedings of the Institute for Administrative Officers of Higher Institutions, Vol. II. Chicago: University of Chicago Press, 1930, pp. 80-90.

Gruen, F. B. "Philosophical Foundations of Collegiate Methods of Instruction." Catholic Educational Review, 37: 52-70, January, 1939.

Gutherie, E. R. "Evaluation of Teaching." Educational Record, 30:109-115, April, 1945.

Haggerty, Melvin E. "Experimenting with the College Teacher's Problems." Association of American Colleges Bulletin, 15:99-100, March, 1929.

_____. "The Improvement of College Instruction Through Educational Research." The Training of College Teachers. Proceedings of the Institute of Administrative Officers for Higher Institutions, edited by William S. Gray. Chapter XVII. 2:190-216.

_____. "The Improvement of College Instruction Through Educational Research." American Association of University Professors Bulletin, 17:330-392, May, 1931.

_____. The Faculty. Volume 2 of The Evaluation of Higher Institutions. A report of the Committee on Revision Standards. Chicago: University of Chicago Press, 1937. 218 pp.

_____. "The Improvement of College Teaching." School and Society, 27:25-37, January 14, 1928.

_____. "Faculty Quality." Journal of Higher Education, 3: 127-132, March, 1932.

Harmley, Paul W. (Chairman) "In-Service Education of Teachers." Report of Sub-committee on the In-Service Education of Teachers." North Central Association Quarterly, 23:272-275, January, 1949.

Henderson, A. D. "College Professor's Workshop." Journal of Higher Education, 25:93-95, February, 1954.

Higgins, Ruth. "Recent Trends in Higher Education." Journal of Higher Education, 11:304-312, June, 1940.

Hockema, F. C. "Improvement of Instruction." School and Society, 67:57-60, January 24, 1948.

Hoppock, Robert. "New York University Students Grade Their Professors." School and Society, 66:70-72, July 26, 1947.

"Improvement of College Teaching." Journal of Higher Education, 11:40, November, 1954.

Jackson, F. H. "New Teacher in the Arts College." Journal of Higher Education, 23:185-190, April, 1952.

- Jacobs, Albert C. "New Dimensions for the College Teacher." A Symposium. Educational Record, 35:182-193, July, 1954.
- Journal of Higher Education. "How Much Do Faculty Members Read?" 9:243-247, May, 1938.
- Kandel, I. L. "Evaluation of Faculty Services." Association of American University Professors Bulletin, 26:452-460, October, 1940.
- Karner, Erwin F. "Leave Them Thinking." Peabody Journal of Education, 32:166-169, November, 1954.
- Kelly, Fred J. "Survey of College Teacher Personnel." Higher Education, 5:171-172, April 1, 1949.
- _____. "Salaries of College Teachers." Higher Education, 5:187-189, April 15, 1949.
- _____. "How Do Faculty Members Like Their Jobs?" Higher Education, 5:193-196, May, 1949.
- Kelly, Robert L. "Great Teachers and Methods of Developing Them." Association of American Colleges Bulletin, 15:342-377, November, 1929.
- _____. "Changing Criteria for Testing College Teachers." School and Society, 45:89-92, January 16, 1937.
- Ketchum, Ralph and Sawyer, Michael O. "An Honors Program for Gifted Students." Journal of Higher Education, 26:148-152, March, 1955.
- Kunkel, B. W. "The Survey of College Faculties." A Report of the Commission on the Enlistment and Training of College Teachers. Association of American Colleges Bulletin, 22:206-210, March, 1936.
- Lapoe, J. L. "Rutgers University Faculty Study Group." School and Society, 48:861-862, December 31, 1938.
- Lawson, S. "Internship for College Teachers." Journal of Higher Education, 21:409-410, November, 1950.
- Lyda, Wesley J. "Some Factors in the Improvement of College Instruction." Educational Record, 33:91-104, January, 1952.
- McKeefery, W. J. "How Can Instruction in Colleges and Universities be Improved?" North Central Association Quarterly, 28:401-402, April, 1954.

- Martin, Clyde V. "How to Become a Stand-Out College Teacher." Junior College Journal, 25:392-394, March, 1955.
- Martin, C. W. "Adverse Criticism of Higher Education." Peabody Journal of Education, 9:3-8, 1931.
- Mathewson, Franklin T. "Evaluation of In-Service Devices for Meeting Specific Needs of Science Teachers in Secondary Schools." Science Education, 26:78-82, February, 1942.
- Maul, Ray C. "The Quest for Competent Instructional Staff." Journal of Higher Education, 26:69-74, February, 1955.
- Mead, A. R. "Some Trends in College and University Teaching." Educational Administration and Supervision, 38:107-110, February, 1952.
- Morse, H. T. "Improving Instruction in the College Classroom." Junior College Journal, 25:513-523, May, 1955.
- Munro, William B. "A Self-Study of College Teaching." Journal of Higher Education, 3:459-463, December, 1932.
- National Society of College Teachers of Education. Current Educational Readjustment in Higher Institutions. The Seventeenth Yearbook of the National Society of College Teachers of Education, 1929. Edited by S. A. Curtis. 178 pp.
- National Society for the Study of Education. In-Service Education. Fifty-Sixth Yearbook of the National Society for the Study of Education, Part I, 1957. Chicago: University of Chicago Press.
- Neet, C. C. "Improvement of Instruction." Association of American University Professors Bulletin, 26:233-236, April, 1940.
- Norris, R. B. "Administering Inservice Education in the College." School and Society, 77:327-329, May 23, 1953.
- Norris, R. B. "In-Service Techniques for Improving College Instruction." Educational Administration and Supervision, 39:370-374, October, 1953.
- Odom, Charles L. "An Objective Determination of the Qualities of a Good College Teacher." Peabody Journal of Education, 21:109-116, September, 1943.

- Ohlsen, M. M. "Personalizing College Teaching." Journal of Higher Education, 20:410-413, November, 1949.
- Palmer, Archie. "The In-Service Training of Young College Teachers." Association of American Colleges Bulletin, 15:443-467, December, 1929.
- Patterson, Herbert. "An Experiment in Supervising College Teaching." School and Society, 21:146-147, January 31, 1925.
- Phelps, Shelton. "The Improvement of College Teaching." Addresses and Proceedings, National Education Association, 67:68-76. Washington: National Education Association, 1928.
- Perrigo, Lynn J. "Evaluation of Teaching Devices by Student Questionnaires." Education, 58:235-236, December, 1937.
- 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, 1930. 2:133-146.
- _____. "Constructive Attitudes in Improving Instruction in Eighty-Seven Institutions." North Central Association Quarterly, 4:371-376, December, 1929.
- Richardson, John S. "Introduction to a Workshop." Educational Method, 19:7-9, October, 1939.
- Riley, John W., Ryan, Bryce F., and Lifshitz, Marcia. The Student Looks at His Teacher. New Brunswick, New Jersey: Rutgers University Press, 1950. 166 pp.
- Robertson, David A. "The College President's Responsibility for Good Teaching." Association of American Colleges Bulletin, 22:538-540, December, 1936.
- School and Society. "Students to Rate Instructors at the University of Michigan." 66:359, November, 1947.
- _____. "Cornell University Offers a Course in College Teaching." 70:235, October 8, 1949.
- Shannon, John R. "Supervision of College Teaching." Journal of Higher Education, 14:355-358, October, 1943.
- Skidmore, H. M. "Supervision of Junior College Instruction." Junior College Journal, 2:542-546.

- Snavely, Guy E. "Who Is a Great Teacher?" Association of American Colleges Bulletin, 15:68-72, March, 1929.
- Soper, D. W. "Four-dimensional Teaching Method." American Association of University Professors Bulletin, 39:404-412, September, 1953.
- Straub, J. S. "Student's Right to Good College Teachers." Educational Outlook, 28:25-28, November, 1953.
- Stripling, Robert O. "Orientation Practices for New College Faculty Members." American Association of University Professors Bulletin, 40:553-562.
- Taylor, W. S., and others. "The Study of Methods of Teaching by College Faculty." School and Society, 11:293-294, March 6, 1950.
- Teacher Education. "Student Criticisms of College Teaching." Journal of Teacher Education, 4:294, December, 1953.
- Travers, Robert. "Appraisal of the Teaching of the College Faculty." Journal of Higher Education, 21:41-42, January, 1950.
- Tulloss, Edgar Rees. "The Improvement of College Instruction as an Administrative Problem." Association of American Colleges Bulletin, 15:68-72, March, 1929.
- Umstattd, J. G. "Courses on College Teaching." Journal of Higher Education, 25:76-81, February, 1954.
- Van Keuren, E. and Lease, B. "Student Evaluation of College Teaching." Journal of Higher Education, 25:147-150, March, 1954.
- Voeks, Virginia. "Ridicule and Other Determinants to Effective Teaching." American Association of University Professors Bulletin, 40:621-630, Winter, 1954-55.
- Wakeman, G. "A Suggestion for Improving College Teaching." School and Society, 51:455-456, April 6, 1940.
- Weeks, I. D. "Inservice Education for College Teachers." School and Society, 76:37-39, July, 1952.
- Whitehead, M. J. "Are You Afraid of Student Ratings?" Journal of Teacher Education, 4:135-136, June, 1953.

Wilkins
O

R

Wilson,
H

Ziegel,
P

Zook, C
s
3

Wilkins, Ernest H. "The Teacher as a Colleague." Journal of Higher Education, 3:497-499, December, 1932.

_____. "The Improvement of College Teaching." Educational Record, 14:500-506, October, 1933.

Wilson, Howard E. "In-Service Training of Teachers by Radio." Harvard Educational Journal, 9:276-278, May, 1939.

Ziegel, W. H. "In-Service Training of College Teacher." Peabody Journal of Education, 17:2-11, July, 1939.

Zook, George A. "Major Problems in the Improvement of Instruction in Higher Education." School and Society, 30:277-282, August 31, 1929.

APPENDICES

TEACHER QUESTIONNAIRE

Below are listed some activities that might be used by a faculty and administration in an inservice improvement program. Some of them may appeal to you, others may not. In the columns to the right of the page, please check your reaction to each item as it is practiced in your school. Do not sign your name. When you have completed the questionnaire, please return it to the Dean of the College.

	DOING WELL	DOING BUT SHOULD IMPROVE	NOT DOING BUT SHOULD	NOT DOING	NOT DOING AND SHOULD NOT DO	UNFAMILIAR WITH PRESENT PRACTICE
Orientation of Faculty by:						
1. Appointing a faculty advisor to counsel with each new faculty member.						
2. Giving necessary information in the faculty handbook.						
3. Giving special induction courses before school begins.						
4. Giving special information through faculty bulletins.						
5. Having a pre-school workshop or retreat.						
6. Others						
Understanding the School and Its Purposes by:						
1. Discussing the philosophy and objectives of the school.						
2. Using departmental meetings to coordinate course objectives with institutional objectives.						
3. Having each teacher state his course objectives in outlines or syllabi.						
4. Publishing available information that will help interpret or understand the school's philosophy and history.						
5. Others						
Administration's Attitude and Responsibility For Improvement of Teaching by:						
1. Promoting the faculty on a merit basis.						
2. Publishing the criteria of merit for promotions.						
3. Formulating a salary policy that will encourage good teaching, i.e., increments for those who demonstrate good teaching.						
4. Providing information on ideas, problems, results of research, etc., through a faculty bulletin.						
5. Making information from the personnel, guidance, and registration offices available to teachers.						
6. Providing "honors classes" for interested faculty and students.						
7. Permitting students to write off required courses by proficiency examinations.						
8. Providing clerical assistance to teachers.						
9. Recognizing and giving consideration to time spent in extra-class activities.						
10. Providing a published tenure program.						
11. Defining "academic freedom" so all will know what it means.						
12. Showing its willingness to attack administrative problems that affect teaching.						
13. Having a rank system of academic levels.						
14. Others.						
Involving the Whole Faculty by:						
1. Giving opportunity for long-range planning.						
2. Having a faculty committee plan work on instructional problems.						
3. Devoting departmental meetings to sharing teaching methods and aids.						

	DOING WELL	DOING BUT SHOULD IMPROVE	NOT DOING BUT SHOULD	NOT DOING	NOT DOING AND SHOULD NOT DO	UNFAMILIAR WITH PRESENT PRACTICES
4. Sponsoring cooperative, group activities among faculty members.						
5. Having periodic, voluntary discussions on similar problems.						
6. Giving new teachers an opportunity to express their views.						
7. Others.						
Assisting the Faculty in its Professional Development by:						
1. Having a faculty committee on faculty development.						
2. Encouraging further study by:						
a. Granting leaves of absence for study.						
b. Financing summer school attendance.						
c. Arranging departmental or divisional seminars.						
d. Demonstrating "good teaching."						
e. Providing outside lecturers, "experts."						
f. Having a class in which faculty can work on instructional problems.						
g. Acquainting the faculty with criteria of "good teaching."						
h. Granting rebates on courses taken within the school.						
3. Keeping the faculty reading shelf up to date through a faculty committee.						
4. Publishing educational material written by faculty members.						
5. Encouraging faculty members to attend meetings of learned societies.						
6. Reporting educational research that might affect classroom teaching.						
7. Others						
Directing or Supervising Instruction by:						
1. Having an administrative office visit classes.						
a. On scheduled visits.						
b. On unscheduled visits.						
2. Having a colleague visit one's classes.						
3. Having the departmental head responsible for helping his own department.						
4. Discussing academic problems with the Academic Dean.						
5. Using outside examinations to check scores made on teacher-made tests.						
6. Comparing exam scores, grades made by sections of the same course.						
7. Having an experienced and a non-experienced teacher working on a course together.						
8. Promoting inter-school visitation by faculty members.						
9. Others.						
Providing Centralized Services by:						
1. Securing inter-library loans.						
2. Providing help in the selection and use of audio-visual aids.						
3. Having an experienced teacher help in setting up course objectives.						
4. Having an experienced teacher help in setting up testing devices.						
5. Providing clerical assistance to score objective tests.						
6. Mimeographing tests, teaching outlines, reading lists, etc.						
7. Giving prompt attention to requests for teaching supplies.						
8. Others.						
Obtaining Evaluations from Others by:						
1. Using student rating forms.						
2. Being rated by colleagues within a department.						
3. Being rated by an administrative officer.						

...ing information
...ing alumni for
...ing standardized
...ing self-evalua
...ers.

...ing Research
...ing statisti
...ing teaching
...ing Sabbatica
...ing alumni g
...eraging grant
...mitting experim
...er "reasonable
...ers.

...ing the Flow of
...ing records
...ers.
...ing follow-up st
...ing for serv
...urches, commu
...ing confere
...eraging attend
...ing outside t
...ific problems.
...ers.

...are listed
...of each item, pl

...time spent on facu
...responsibilities o
...time spent working
...time spent in comm
...present salary.
...opportunity for tr
...opportunities for
...retirement provis
...mathematical and oth
...opportunities for
...opportunities for
...participation in
...availability of o
...percent of clerica
...destructive atti
...institutional def
...sizes of classes.
...number of class p
...provisions for te
...provisions for ca
...ers.

	DOING WELL	DOING BUT SHOULD IMPROVE	NOT DOING BUT SHOULD	NOT DOING	NOT DOING AND SHOULD NOT DO	UNFAMILIAR WITH PRESENT PRACTICES
4. Using information from senior interviews.						
5. Asking alumni for ratings.						
6. Using standardized devices, i.e., Purdue scale.						
7. Using self-evaluation forms.						
8. Others.						
Encouraging Research by:						
1. Providing statistical services.						
2. Reducing teaching load while on research.						
3. Granting Sabbatical leave for research.						
4. Providing alumni grants for research.						
5. Encouraging grants from outside sources.						
6. Permitting experiments with class size, grouping, and other "reasonable designs."						
7. Others.						
Insuring the Flow of Information to and from Campus by:						
1. Providing records that help teacher understand students better.						
2. Doing follow-up studies on graduates.						
3. Providing for service programs away from campus--programs in churches, communities, youth work, etc.						
4. Inviting conferences to campus.						
5. Encouraging attendance at professional meetings.						
6. Bringing outside technicians to campus to help with specific problems.						
7. Others.						

Below are listed some factors that affect a teacher's work. In the columns to the right of each item, please indicate your reaction of how these practices affect you.

	WELL PLEASED	PLEASED	NOT PLEASED	DIS- SATISFIED	UNDECIDED
1. Time spent on faculty committees.					
2. Responsibilities of extra administrative duties.					
3. Time spent working with student activities.					
4. Time spent in community services.					
5. Present salary.					
6. Opportunity for travel.					
7. Opportunities for promotion.					
8. Retirement provisions.					
9. Sabbatical and other leaves.					
10. Opportunities for research.					
11. Opportunities for conferences with individual students.					
12. Participation in administrative decisions.					
13. Availability of office space.					
14. Amount of clerical assistance.					
15. Constructive attitude displayed by administrative officers.					
16. Institutional definition of "Academic Freedom."					
17. Sizes of classes.					
18. Number of class preparations.					
19. Provisions for tenure.					
20. Provisions for central services.					
21. Others.					

Below are
and techni
other. To
use of the
form for e

Instructional Met
Normal Lecture
Instructor.
Informal Lecture
Questions, com
Discussion: A
several indivi
Panel: An inf
by several ind
Forum: Formal
followed by p
Student Report
study of a pro
Direct convers
illustrate by a
Tutorial: In
very small gro
and abilities.
Laboratory:
investigation
other practice
Examination:
Others.

Instructional te
Parable: A s
concept is ex
Anecdote: A
interest, of
Dramatization
situation, o
Debate: A d
formal or lo
Field Trip:
plant, store
exhibit, or
Visual Mater
graphic mate
the learning
Auditory Aid
presentation
Demonstratio
ations to de
Coaching: S
or small gro

APPENDIX B

STUDENT QUESTIONNAIRE

Below are listed and defined some methods and teaching devices. Some methods and techniques may work better and be used more often in one course than another. To the right of each item, please check the frequency of your professors' use of them. Please fill in a form for four of your courses, using a different form for each. This form is for

..... on the level.
 (Course) (Course level: Fr., Soph., Jr., Sr.)

.....
 (My major is)

.....
 (Class: Soph., Jr., Sr.)

	VERY OFTEN	OFTEN	SOME- TIMES	SELDOM	NEVER
Instructional Methods:					
1. Formal Lecture: An uninterrupted verbal presentation by an instructor.					
2. Informal Lecture: A conversational presentation interspersed with questions, comments, and brief discussion.					
3. Discussion: An extended exchange of ideas actively stimulated by several individuals, followed by group discussion.					
4. Panel: An informal, though planned conversational presentation by several individuals, followed by group discussion.					
5. Forum: Formal presentation by several individuals in succession, followed by group discussion.					
6. Student Reports: A verbal presentation by students after special study of a problem or subject.					
7. Direct conversational Method (Languages): The teaching of a foreign language by actually using it in a speech-hearing approach.					
8. Tutorial: Instruction of an individual student, or students in a very small group, with special attention to personal interests and abilities. (Do not confuse with "Coaching" as defined below)					
9. Laboratory: student application, manipulation, practice, research, investigation, or experimental work in a laboratory, workshop, or other practical situation.					
10. Examination: The use of oral, written, or performance tests.					
11. Others.					
Instructional techniques:					
1. Parable: A short and often imaginative narrative through which a concept is explained by analogy.					
2. Anecdote: A brief narrative of an incident or event of special interest, often personal or biographical.					
3. Dramatization: Presentation, by acting, of an event, episode, situation, or story.					
4. Debate: A discussion or examination of a problem or issue by the formal or logical presentation of arguments, followed by rebuttal.					
5. Field Trip: A planned visit by a class or committee to a factory, plant, store, farm, school, museum, celebration, folk dance, art exhibit, or museum.					
6. Visual Material: Models, exhibits, specimens, pictures, or other graphic materials and objects shown to clarify and to intensify the learning.					
7. Auditory Aids: Devices such as recordings, sound films, or radio presentations used to clarify and intensify the learner's perception.					
8. Demonstrations: The use of objects or materials with verbal explanations to describe structures or to explain processes of operations.					
9. Coaching: Special assistance outside the classroom to individuals or small groups who are experiencing difficulty in learning.					

- 1. Guest Instruct
instruction th
discussions.
- 2. Use of Local P
through lectur
- 3. Other Intellec
of other count
instructors on
- 4. Use of Other
minerals, flo
- 5. Construction:
acquire an un
- 6. Exhibitions:
- 7. Concert: A m
or instrument
- 8. Recital: Sam
or to one ind
- 9. Written Repor
students afte
- 10. Others.

To the right

- 1. This faculty
variety of t
- 2. This faculty
intellectual
- 3. This class p
teacher and
- 4. One feels fr
interview w
- 5. On the whol
in this cla
- 6. Express in
toward the
that is not

P. 2--Student Questionnaire

	VERY OFTEN	OFTEN	SOME- TIMES	SELDOM	NEVER
10. Guest Instructors: The aid of colleagues or visiting persons in instruction through lectures, demonstrations, illustrations, or discussions.					
11. Use of Local People: The aid of local inhabitants in instruction through lectures, demonstrations, illustrations, or discussions.					
12. Other Intellectual Activities: The classroom use of citizens of other countries (except local inhabitants), such as guest instructors or guest students.					
13. Use of Other Local Resources: Collections and use of local minerals, flora, fauna, artifacts, or other cultural objects.					
14. Construction: The making of a model or an object by students to acquire an understanding of basic principles or to develop skills.					
15. Exhibitions: A display of results of student learning activities.					
16. Concert: A musical performance of some length by several voices or instruments, or both.					
17. Recital: Same as a concert, except limited to small ensembles, or to one individual with or without an accompanist.					
18. Written Reports or Term Papers: Written papers prepared by students after special study of a problem or subject.					
19. Others.					

To the right of each statement below, please check your reaction:

	AGREE STRONGLY	AGREE	UNDECIDED	DISAGREE	DISAGREE STRONGLY
1. This faculty member is encouraged to experiment with a variety of teaching methods and devices.					
2. This faculty member has a personal interest in the intellectual development of each student.					
3. This class permits much personal contact between teacher and students.					
4. One feels free to ask this teacher for a personal interview when he feels he needs it.					
5. On the whole, grading is done fairly and objectively in this class.					
6. Express in writing any general feeling you have toward the teaching-learning process in your school that is not expressed in items 1-5.					

APPENDIX C

INTERVIEW SHEET FOR ADMINISTRATIVE OFFICER

Name of interviewee _____ Position _____

Rank _____ Years on the job _____

1. College enrollment (1955-56) _____

2. Expected in 1960 _____

3. Number of full-time faculty _____

4. Part-time faculty _____

5. Ratio of faculty to students _____

6. Number of faculty with Doctor's degrees _____

Master's degrees _____

Bachelor's or Special degrees _____

Teaching fellows _____

7. What is considered "full-time" in terms of class hours? _____

8. What is the school average of class hours per faculty? _____

9. What is your budgetary allotment for providing inservice
improvement? _____

10. List any specific activities financed from this allotment.

a.

b.

c.

d.

e.

f.

g.

h.

i.

j.

Any special explanation related to 9, 10.

11. Would you permit me to seek information from the North Central Association on the variables mentioned in the thesis outline? (teacher/student ratio, teacher load, teacher turnover, budgetary limitations, for the period 1944-45 to 1954-55). _____
12. If no, would you provide them for me through one of the college administrative offices? _____
13. To what extent has your college cooperated with collegiate organizations in studying problems of Liberal Arts Colleges?
14. What significant contributions have resulted to your college from such cooperative studies?
15. Is your college presently engaged in any institutional studies designed to improve instruction?
16. What outside resources have been used by the school in the past few years ("few" can be interpreted by interviewee to include any events between 1944-45 and 1954-55) to improve instruction?
17. What opportunities for research are provided by the institution?
18. What assistance is made for teachers to receive evaluation of his teaching from rating devices?
19. What assistance is made for teachers to participate in professional organizations?
20. Does your college have a published faculty handbook? _____
Secure one if possible.

21.

22.

23.

24.

25.

26.

21. Does your college have a published policy on promotions, tenure, and leaves?
22. What provisions are made for retirement?
23. Does each faculty member have an office with a desk to himself?
24. What, in your opinion, is your strongest inservice improvement activity?
25. What, in your opinion, is your weakest inservice improvement activity?
26. What plans, if any, are being considered for accelerating or improving inservice improvement activities?

