

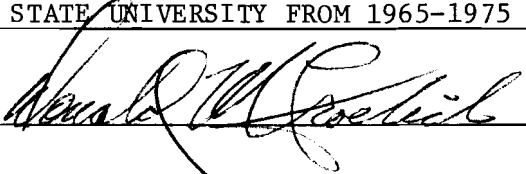
AN ABSTRACT OF THE THESIS OF

D. Lee Dye for the Master of Science

in Industrial Education presented on July 27, 1977

Title: A FOLLOW-UP STUDY OF INDUSTRIAL EDUCATION GRADUATES

OF EMPORIA STATE UNIVERSITY FROM 1965-1975

Abstract approval: 

This study focused upon 187 industrial education graduates of Emporia State University from 1965-1975. The purpose of the study was to gather information concerning the graduates. Information for the study was compiled from 150 questionnaire returns which represented 80.2 percent of the selected population. More than ten years had elapsed since the last follow-up study was accomplished; therefore, the information was considered a valuable tool for future departmental planning. After reviewing the data the following facts were disclosed:

1. Sixty and seven tenths percent of the respondents were teaching or employed in some type of educational work.
2. Seventy-six percent of the respondents were residing in the state of Kansas and 79.8 percent of them were teaching or engaged in educational work.
3. Seventy-one and three tenths percent of the respondents had received teaching positions immediately after graduation.
4. A variety of industrial education courses were taught by the

graduates on three different levels; junior high, senior high and post high school level (Vo-Tech). The average teaching experience of the graduates was approximately five years.

5. Forty-one and three tenths percent of the respondents were not teaching and listed "higher salaries in other occupations" and "dissatisfied with teaching" as the major reasons for not entering or for leaving the teaching profession. The non-teaching respondents listed 43 different non-educational occupations in which they were employed.

6. Sixty-seven and three tenths percent of the respondents had accomplished study beyond the bachelor level. These graduates had attended 32 different schools located in 14 states and had earned 39 advanced degrees. Of these graduates, 69.8 percent had received their advanced education in Kansas schools and 44.5 percent of the graduates continued study at Emporia State University.

7. Thirty-two and seven tenths percent of the graduates had not pursued graduate study and listed a number of reasons with "lack of sufficient time" and "not interested in graduate study" as the two major reasons.

8. Fifty-six and seven tenths percent of the respondents indicated they would consider continuing education if Emporia State University offered extension courses in their residential areas and only 21.3 percent of the graduates were interested in on-campus study in the evenings and on weekends.

9. Eighty-one graduates requested post-graduate courses in 31 different industrial education areas.

10. Conclusions and recommendations were derived from analysis of the data.

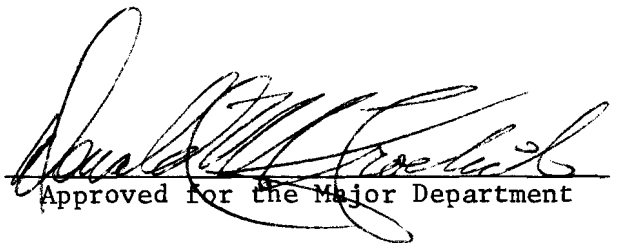
A FOLLOW-UP STUDY OF INDUSTRIAL EDUCATION GRADUATES
OF EMPORIA STATE UNIVERSITY FROM 1965-1975

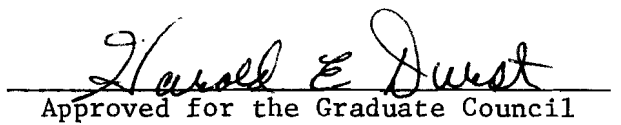
A Thesis
Presented to
the Department of Industrial Education
EMPORIA STATE UNIVERSITY

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

by
D. Lee Dye
July 1977

Th.
1911
D


Approved for the Major Department


Approved for the Graduate Council

380550 4

ACKNOWLEDGEMENTS

The investigator wishes to express his appreciation to Dr. Donald M. Froelich, for his assistance and guidance in the preparation of this thesis.

Acknowledgement and appreciation are also extended to my wife, Marie, who was understanding and thoughtful while this study was in progress.

TABLE OF CONTENTS

	Page
LIST OF TABLES	vii
Chapter	
1. INTRODUCTION	1
THE PROBLEM AND BACKGROUND FOR THE STUDY	3
PURPOSE OF THE STUDY	3
LIMITATIONS OF THE STUDY	5
DEFINITIONS OF TERMS USED	5
Teacher	5
Industrial Arts	5
Industrial Education	6
Teacher Preparation Institution	6
Population	6
Follow-up Study	6
METHOD OF DATA COLLECTION	7
Questionnaire Construction	7
PROCEDURES FOLLOWED	9
2. INTRODUCTION	11
REVIEW OF FOLLOW-UP STUDIES	12
3. ANALYSIS OF THE DATA	16
Location and type of employment of the graduates of Emporia State University from 1965-1975	16

Chapter	Page
Grade level taught by graduates of Emporia State University	18
Industrial education subjects taught by graduates of Emporia State University	18
Number of years taught by industrial education graduates of Emporia State University from 1965-1975	20
Occupations of non-teaching graduates of Emporia State University	20
Job opportunities for industrial education graduates of Emporia State University after graduation	25
Reasons for not entering or leaving teaching reported by graduates of Emporia State University	25
Degrees earned by graduates of Emporia State University	27
Colleges and universities attended by graduates of Emporia State University	27
Reasons for not pursuing graduate study given by graduates of Emporia State University	29
Interest in continuing education by graduates of Emporia State University	33
Graduate level courses requested by graduates of Emporia State University	35
4. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	38
SUMMARY	38
CONCLUSIONS	42
RECOMMENDATIONS	44

Chapter	Page
BIBLIOGRAPHY	46
APPENDICES	49
APPENDIX A	50
APPENDIX B	56
APPENDIX C	58
APPENDIX D	60
APPENDIX E	62

LIST OF TABLES

Table	Page
I. QUESTIONNAIRE RETURNS FROM INDUSTRIAL EDUCATION GRADUATES OF EMPORIA STATE UNIVERSITY	10
II. LOCATION AND TYPE OF EMPLOYMENT OF THE GRADUATES OF EMPORIA STATE UNIVERSITY FROM 1965-1975	17
III. GRADE LEVEL TAUGHT BY GRADUATES OF EMPORIA STATE UNIVERSITY	19
IV. INDUSTRIAL EDUCATION SUBJECTS TAUGHT BY GRADUATES OF EMPORIA STATE UNIVERSITY	21
V. NUMBER OF YEARS TAUGHT BY INDUSTRIAL EDUCATION GRADUATES OF EMPORIA STATE UNIVERSITY	22
VI. OCCUPATIONS OF NON-TEACHING GRADUATES OF EMPORIA STATE UNIVERSITY	23
VII. REASONS FOR NOT ENTERING OR LEAVING TEACHING REPORTED BY GRADUATES OF EMPORIA STATE UNIVERSITY	26
VIII. DEGREES EARNED BY GRADUATES OF EMPORIA STATE UNIVERSITY FROM 1965-1975	28
IX. COLLEGES AND UNIVERSITIES ATTENDED BY GRADUATES OF EMPORIA STATE UNIVERSITY	30
X. REASONS FOR NOT PURSUING GRADUATE STUDY GIVEN BY GRADUATES OF EMPORIA STATE UNIVERSITY	34
XI. INTEREST IN CONTINUING EDUCATION BY GRADUATES OF EMPORIA STATE UNIVERSITY	34
XII. GRADUATE LEVEL COURSES REQUESTED BY GRADUATES OF EMPORIA STATE UNIVERSITY	36

Chapter 1

INTRODUCTION

In industry and big business, the primary objective of each company is to produce a marketable product or service for a profit. If substantial profit is not realized, the company soon ceases to exist. Consequently, company officials strive to insure that adequate research and development, advertisement and public surveys are conducted in order to provide the public with a satisfactory product or service.

Institutions of higher education, such as colleges and universities, also produce products. These "products" are the graduates of the institution.¹ The quality of the graduates can be no better than the quality and standards of the institution which produces them. Officials of these institutions, therefore, must continually monitor and evaluate programs of instruction to insure that students are receiving the best there is in educational instructions.

Dr. W. R. Miller, chairman, Practical Arts and Vocational-Technical Education of the University of Missouri, said the following about instructional programs:

It is also evident that we cannot afford to use poor methods and techniques of instruction. Without practical and effective educational programs under expert instructors, much of the large

¹Robert D. Hogan, "A Follow-up Study of 1948-1963 Graduates of Kansas State Teachers College, Emporia, With Twenty or More Hours in Industrial Arts" (unpublished Field Study, Department of Industrial Arts, Kansas State Teachers College of Emporia, 1965), p. 1.

investment will be lost.

The need for more and better educational programs for people of all ages is alarmingly evident. There is no standing still. Because so many of us must learn and keep learning as far into the future as anyone can see, it is imperative that the most practical and effective instructional procedures be used. Our progress and well being as individuals and as a nation depend greatly on how well we learn.²

In order to evaluate the effectiveness of any program of education, officials of the institution need to know the degree of success, adjustment and opinions of its graduates. A program of instruction in any institution of learning must be so designed that each segment of training contributes to the overall preparation of the individual.³

To effectively evaluate a program of instruction, each department within the institution must conduct follow-up studies of its graduates on regularly established intervals. In a 1955 follow-up study of industrial arts graduates of Pittsburg State Teachers College, Martin E. Gonser recommended that follow-up studies be conducted every five years.⁴ This investigator concurs with Gonser's recommendations, especially if the information is to be used as criteria for updating instructional programs.

We are living in an age when education is becoming increasingly complex. Each day technological and scientific breakthroughs change

²W. R. Miller and Homer C. Rose, Instructors and Their Jobs, 3d ed.; (Chicago, Ill.: American Technical Society, 1975), p. 2.

³William G. Nelson, "A Follow-up Study of 1946-1955 Graduates of Kansas State Teachers College, Emporia, With Twenty or More Hours in Industrial Arts" (unpublished Masters Thesis, Department of Industrial Arts, Kansas State Teachers College of Emporia, 1957), p. 1.

⁴Martin E. Gonser, "A Follow-up Study of Graduates With Majors in Industrial Education from 1935-1949" (unpublished Masters Thesis, Department of Industrial Arts, Kansas State Teachers College, Pittsburg, 1950), p. 1.

the posture of instructional programs and cause them to become obsolete. With these changes occurring more frequently, it becomes difficult, if not impossible, for an institution of higher education to keep its programs of instruction in pace with the changes unless follow-up studies are conducted periodically.

THE PROBLEM AND BACKGROUND FOR THE STUDY

The last follow-up study of industrial education graduates of Emporia State University (formerly Emporia Kansas State College) was completed in 1965 inclusive of years 1948-1963. As previously stated in the study, one researcher recommended that follow-up studies be conducted every five years, if they are to be meaningful. Therefore, this investigator believed that a follow-up study was long overdue and would be of great value to the institution and the department. The faculty of the Department of Industrial Education has, for sometime, recognized the need for such a study and agreed that it would be of great value to the department in future planning of instructional courses.

The recognition of the need for information concerning industrial education graduates of Emporia State University from 1965-1975 was justification for the study.

PURPOSE OF THE STUDY

The purpose of the study was to gather data pertinent to industrial education graduates of Emporia State University from 1965-1975. Since it had been more than ten years since the last follow-up study was conducted, numerous questions, concerning the graduates needed to be answered. Some of the more specific questions are listed as follows:

1. Where are the graduates now located?
2. How many graduates are presently teaching or engaged in educational work?
3. How many years has each graduate taught?
4. How many different areas (subjects) are being taught by each graduate?
5. How many graduates began teaching immediately after graduation?
6. How many graduates are doing work other than in the educational field?
7. How many graduates left the teaching field to work in another occupation?
8. What reasons were given by the graduates for not entering or for leaving the teaching field?
9. How many graduates have completed some study at the graduate level?
10. What were the reasons given for not doing graduate study?
11. How many graduates have earned degrees beyond the bachelor level?
12. What type of degree was earned and from what school?
13. How many graduates would consider graduate study if Emporia State University offered weekend or extension courses in their residential area?
14. How many graduates would consider doing on-campus study at the graduate level in the evenings or on Saturdays?
15. If weekend or on-campus courses could be arranged, what courses would be preferred by the graduates?

In addition to the questions listed above, each graduate was asked to confirm the year in which he graduated from Emporia State University so that departmental records could be verified.

LIMITATIONS OF THE STUDY

The study was limited to the graduates of Emporia State University who majored in industrial education from 1965-1975. The initial list consisted of the names of 260 graduates who had earned a Bachelor of Science in Education degree with either a major or a minor in industrial arts. This list was reduced to 189 graduates who had earned a teaching degree in industrial arts only. It was discovered that two graduates were deceased, which further reduced the number of prospective respondents to 187. The final list consisted of the names of 187 graduates who had received a teaching degree in industrial arts from Emporia State University from 1965-1975.

DEFINITIONS OF TERMS USED

Some terms used in the study may not be familiar to all readers. To preclude the possibility of misinterpretation, the investigator has defined some of the more frequently used terms.

Teacher

The term teacher as used in this study means any person who is qualified for a teaching certificate in a specific subject(s) which he is teaching or will teach in the state of Kansas.⁵

Industrial arts

Industrial arts is defined as the phase of general education

⁵Charles L. Bell, Industrial Arts in the Public Secondary Schools of Kansas in 1962-1963 (Emporia State Research Studies, Vol. 13, No. 3, Kansas State Teachers College, Emporia, March, 1965), p. 8.

which deals with contemporary American industry. This includes the study of industrial organization, materials, processes, and occupations . . . and problems involving man and his technological society.⁶

Industrial education

The term industrial education is a generic term used to encompass all types of education dealing with industry and technology in our society.⁷

Teacher preparation institution

Teacher preparation institution as used in this study, means any four-year college or university in Kansas which prepares students to meet the teacher certification requirements of Kansas for an industrial arts teaching position.⁸

Population

The word population refers to any group of individuals that have one or more characteristics in common that are of interest to the investigator.⁹

Follow-up study

A follow-up study is a survey to determine what occupations the

⁶Ronald J. Baird, Contemporary Industrial Teaching (South Holland, Ill.: The Goodheart-Willcox Co., 1972), p. 6.

⁷Ibid. ⁸Bell, op. cit. p. 8.

⁹George J. Mouly, The Science of Educational Research (New York: American Book Company, 1963), p. 257.

students and graduates of an institution have entered and the effectiveness of their training in relationship to the actual need on the job.¹⁰

METHOD OF DATA COLLECTION

The success of any research study depends largely upon the number of returns received; therefore, this investigator thought that it would be advantageous to design an instrument that would yield the greatest number of returns. After considerable research and planning, the final instrument used to collect the data for the survey was a simple four-page questionnaire (See Appendix A).

Questionnaire construction

In their book, The Sample Survey: Theory and Practice, Donald P. Warwick and Charles A. Lininger stated, "There are two basic goals in questionnaire construction: (1) to obtain information relevant to the study and (2) to obtain that information with maximum reliability and validity."¹¹

In his book, The Science of Educational Research, George J. Mouly pointed out, although the mail questionnaire has many faults, it is still the most widely used research tool.¹² Mouly relates that

¹⁰Harold G. Silvius and Estell H. Curry, Managing Multiple Activities in Industrial Education (Bloomington, Ill.: McKnight and McKnight Publishing Company, 1971), p. 591.

¹¹Donald P. Warwick and Charles A. Lininger, The Sample Survey: Theory and Practice (New York: McGraw-Hill Book Company, 1975), p. 127.

¹²Mouly, op. cit. p. 246.

some of the short-comings of the mail questionnaire can be eliminated by scholarly construction. Mouly considered the following construction factors conducive to high returns:

1. Select a worth-while topic.
2. Select an appropriate population for the topic. Only those persons who are able to make a significant contribution to the success of the survey should be selected.
3. The questionnaire length, as a general rule, should take no longer than thirty minutes of the respondent's time.
4. Each questionnaire should have a coverletter that is separate from the questionnaire and addressed to the individual by name.
5. Be prepared to send follow-up letters. In any survey there are always individuals who fail to respond to the first questionnaire; therefore, follow-up letters need to be sent.
6. A stamped return envelope addressed to the investigator should be included with the questionnaire.¹³

In another book, Professional Mail Surveys, Paul L. Erdos made the following suggestions regarding the quality and appearance of the questionnaire: To avoid resemblance to junk mail, colored paper should not be used. In addition, the paper should be pleasant to look at, substantial to handle, light-weight for mailing, thick enough to be printed on both sides, and suitable for writing on with a pen or pencil. Furthermore, the questionnaire should be printed rather than mimeographed in order to give it a professional look.¹⁴

By following, rather closely, the recommendations of Erdos,¹⁵

¹³Mouly, op. cit. p.p. 238-259

¹⁴Paul L. Erdos, Professional Mail Surveys (New York: McGraw-Hill Book Company, 1970), p.p. 40-42.

¹⁵Ibid.

Mouly,¹⁶ Warwick and Lininger,¹⁷ and faculty members, the investigator constructed a questionnaire which yielded high returns.

PROCEDURE FOLLOWED

The population for the study was selected from the graduates of Emporia State University from 1965-1975 and who received a teaching degree in industrial education. The initial list of graduates was obtained from the files of the Department of Industrial Education and verified and updated by the placement office and the office of the Alumni Association. The finalized list consisted of the names of 187 graduates. The initial letter and questionnaire was sent to the graduates August 15, 1976 and the first follow-up letter was mailed September 22, 1976. Three subsequent follow-up letters were sent to those graduates who did not respond to the first two letters.

Only 47 graduates, 25.1 percent, responded to the initial letter. Twenty graduates, 10.7 percent, answered the first follow-up letter and 21 graduates, 11.2 percent, replied to the second follow-up. Twenty-eight graduates, 14.9 percent, answered the third follow-up and 34 graduates, 18.1 percent, acknowledged the fourth follow-up letter. Thirty-seven graduates, 20.0 percent, did not respond to any of the letters. Table I, page 10, reveals how the graduates responded to the questionnaire and follow-up letters.

¹⁶Mouly, op. cit. pp. 238-259.

¹⁷Warwick and Lininger, op. cit. p. 127.

TABLE I

QUESTIONNAIRE RETURNS FROM INDUSTRIAL EDUCATION
GRADUATES OF EMPORIA STATE UNIVERSITY

Responses	Number	Percentage
Responded to initial letter	47	25.1
Responded to first follow-up	20	10.7
Responded to second follow-up	21	11.2
Responded to third follow-up	28	14.9
Responded to fourth follow-up	34	18.1
Did not respond	37	20.0
Total	187	100.0

Chapter 2

INTRODUCTION

Educators and administrators generally agree that continuous evaluation, revision and updating of programs of instruction are necessary in order to keep pace with the latest changes.¹ One of the most effective methods used to evaluate an institution's program of instructions is to conduct follow-up studies of the graduates. What individual is in a better position to evaluate the quality and quantity of instructional courses than the graduate who recently completed these courses and is presently teaching.

Dr. Charles L. Bell, in his investigation of industrial arts in the public schools of Kansas, said the following about evaluation in respect to industrial arts: "As a phase of public education, industrial arts, like other subjects, must be evaluated from time to time if it is to maintain its rightful place in the school program."²

This chapter was devoted to review and comparison of related industrial art follow-up studies.

¹Robert D. Hogan, "A Follow-up Study of 1948-1963 Graduates of Kansas State Teachers College, Emporia, With Twenty or More Hours in Industrial Arts" (unpublished Field Study, Department of Industrial Arts, Kansas State Teachers College of Emporia, 1965), p. 22.

²Charles L. Bell, Industrial Arts in the Public Secondary Schools of Kansas in 1962-1963. (Emporia State Research Studies, Vol. 13, No. 3, Kansas State Teachers College, Emporia, March, 1965), p. 5.

REVIEW OF FOLLOW-UP STUDIES

Numerous follow-up studies have been conducted by many institutions concerning various aspects of its graduates. This researcher reviewed many such studies and is indebted to other researchers for their contributions.

In a follow-up study of industrial arts graduates of Kansas State Teachers College of Pittsburg, Martin E. Gonser maintained that most graduates felt they could evaluate their college courses and provide information that would be of value to the school.³

In another follow-up study of graduates of Southern State College, Springfield, South Dakota, Keith C. Birks found that graduates are frequently called upon to evaluate programs of instruction and to make suggestions and criticisms that will be of value in improving the institution's curriculum.⁴ Birks further summarized an article by Robert Pace, which pertained to follow-up studies of college graduates and made the following conclusion: The follow-up study tries to measure the educational product after the individual has left school. While precise measurements of success are not available, much can be learned by officials of an institution about its whole education system

³Martin E. Gonser, "A Follow-up Study of Graduates With Majors in Industrial Education from 1935-1949" (unpublished Masters Thesis, Department of Industrial Arts, Kansas State Teachers College, Pittsburg, 1950), p. 22.

⁴Keith C. Birks, "A Follow-up Study of the Graduates in Industrial Arts from Southern State College, Springfield, South Dakota, from 1961 to 1967" (unpublished Masters Thesis, Department of Industrial Arts, Kansas State Teachers College, Pittsburg, 1968), p. 3.

by a thorough study of what is happening to its graduates.⁵

In his follow-up study, Gonser found that 75.0 percent of the respondents were living in Kansas and the remaining 25.0 percent living in 15 other states and Alaska. Eighty-three percent of the graduates were engaged in educational work and 17.0 percent of graduates had taken jobs in occupations other than education. Gonser failed to indicate how many graduates had completed study beyond the bachelor level, but he did reflect that 44.0 percent of the graduates had accomplished additional study outside the state of Kansas.⁶

In his study, Birks found that 59.0 percent of the respondents were residing in the state of South Dakota and 72.0 percent of the remaining respondents lived in adjacent states. Eighty percent of the respondents were employed in some type of educational work, while 20.0 percent were engaged in occupations other than educational.

Graduates who had not entered or who left the educational field for employment in other occupations, stated that "poor salary" and "better opportunities in industry" were the two major reasons for leaving the educational field. Forty-seven percent of the graduates had realized educational study beyond the bachelor level and five and five tenths percent had received advanced degrees.⁷

In another follow-up study of industrial education graduates of Wichita State University, Derold W. Becker, concluded that 72.4 percent of the graduates were engaged in the teaching profession and 27.6 percent were doing non-educational work. Forty-three and one tenth percent

⁵ Birks, op. cit. p. 10. ⁶ Gonser, op. cit. p. 9-27.

⁷ Birks, p. 17-30.

of the graduates had pursued graduate study beyond the bachelor level and 10.3 percent had earned a Masters degree.

Once again, the two most important reasons given by graduates for not entering or for leaving the teaching field were "poor salary" and "better opportunities in industry." Becker did not indicate the number of graduates who remained in Kansas or how many had migrated to other states to seek employment.⁸

In an earlier follow-up study of industrial arts graduates of Kansas State Teachers College of Emporia, from 1946-1955, William G. Nelson established that 65.4 percent of the graduates were employed in the field of education and 34.6 percent of the graduates were working in non-educational fields. Seventy-nine percent of the teacher graduates were employed in the state of Kansas.

In his study, Nelson noted that 75.5 percent of the graduates had accomplished educational study beyond the bachelor level and 43.0 percent of this study was completed at Kansas State Teachers College of Emporia.⁹

In the most recent follow-up study of industrial arts graduates of Kansas State Teachers College of Emporia, Robert D. Hogan established that 75.0 percent of the graduates were living and working in the state of Kansas. Sixty-six and eight tenths percent of the

⁸Derold W. Becker, "A Follow-up of Wichita University's Industrial Education Graduates, from 1952-1961" (unpublished Masters Thesis, Department of Industrial Arts, Kansas State Teachers College, Pittsburg, 1962), p. 17-28.

⁹William G. Nelson, "A Follow-up Study of 1946-1955 Graduates of Kansas State Teachers College, Emporia, With Twenty or More Hours in Industrial Arts" (unpublished Masters Thesis, Department of Industrial Arts, Kansas State Teachers College of Emporia, 1957), p. 19-38.

graduates had continued their education beyond the bachelor level. Fifty-three and eight tenths percent of the graduates who had accomplished advanced study had received their education in Kansas schools with 43.1 percent being completed at the Kansas State Teachers College of Emporia.

Hogan, in his study, indicated that 28.7 percent of the graduates had taken jobs in non-teaching fields. As previously cited, the major reasons given for not entering or for leaving the teaching profession were "poor salary" and "better opportunities in industry."¹⁰

¹⁰Hogan, op. cit. pp. 25-52.

Chapter 3

ANALYSIS OF THE DATA

As previously stated in chapter I, the purpose of this investigation was to gather data pertaining to industrial education graduates of Emporia State University from 1965-1975.

Data for the study was gathered by means of a mail questionnaire (see Appendix A). The analysis was based on information received from 150 questionnaire returns which represented 80.2 percent of the selected population of 187 graduates.

Location and type of employment of the graduates of Emporia State University from 1965-1975

After reviewing the data, it was found that 91 respondents, 60.7 percent, were employed in some type of educational work. Fifty-nine of those who responded, 39.3 percent, were engaged in non-educational occupations. The study also revealed that 114 graduates, 76.0 percent, lived and worked in Kansas. Of this number, 67 graduates, 58.8 percent, were teaching or involved in some phase of educational work and 47 graduates, 41.2 percent, were doing non-educational work. Thirty-six graduates, 24.0 percent, had left the state of Kansas to live and work in 14 other states and a territorial possession. Twenty-four graduates, 66.7 percent, who left Kansas, were doing educational work, while 12 graduates, 33.3 percent, were involved in non-educational occupations.

Table II, page 17, indicates by state, the number of graduates

TABLE II

LOCATION AND TYPE OF EMPLOYMENT OF
THE GRADUATES OF EMPORIA STATE
UNIVERSITY FROM 1965-1975

Location	Teaching	Non-teaching	Total
Kansas	61	53	114
Missouri	6	1	7
New York	4	2	6
Colorado	3	2	5
Iowa	3	1	4
Arizona	1	1	2
Hawaii	2	0	2
Oklahoma	0	2	2
Alaska	1	0	1
California	1	0	1
Kentucky	0	1	1
Pennsylvania	0	1	1
Idaho	0	1	1
South Dakota	0	1	1
New Mexico	1	0	1
Guam	1	0	1
Total	84	66	150

involved in teaching and other occupations. It was interesting to note that two of the graduates were located in Hawaii, one graduate was located in Alaska and one graduate was teaching in the territory of Guam.

Grade level taught by graduates
of Emporia State University

The respondents were asked to indicate the grade level and the courses they were teaching. As was expected, a large variety of industrial education courses were being taught at three different grade levels. Twenty-three graduates were teaching at the junior high level and 55 graduates were teaching at the senior high level. Five graduates indicated they were teaching at vocational-technical schools and four teachers failed to indicate at which level they taught. Four graduates indicated they were not teaching, but were involved in educational work. One graduate reported he was employed as the Dean of Students of a college, one graduate reported he was the principal of an elementary school and two graduates indicated they were high school counselors.

Table III, page 19, indicates the grade level taught by the graduates of Emporia State University.

Industrial education subjects taught
by graduates of Emporia State
University

A wide variety of industrial education courses were taught by the graduates with woodworking, drafting, and metals and processes being taught by most teachers. Sixty graduates, 69.0 percent, were teaching woodworking; 54 graduates, 62.1 percent, were teaching drafting; and 32 graduates or 37.2 percent were teaching metals and processes. It was interesting to find that welding ranked fourth and was taught by

TABLE III

GRADE LEVEL TAUGHT BY GRADUATES
OF EMPORIA STATE UNIVERSITY

Grade level	Number	Percentage
Junior High School	24	27.3 %
Senior High School	54	61.4 %
Vocational-Technical School	4	4.5 %
Counselor	2	2.3 %
Principal	1	1.1 %
Dean of Students	1	1.1 %
Did not report level taught	2	2.3 %
Total	88	100.0 %

27 teachers, 31.3 percent of the graduates. Auto mechanics ranked fifth and was taught by 20 teachers, 23.3 percent of the graduates.

The graduates listed twenty industrial education areas which were taught. Table IV, page 21, indicates the number and percentage of graduates teaching in these areas.

Number of years taught by industrial
education graduates of Emporia
State University from 1965-1975

The graduates of Emporia State University were asked to report the number of years each had taught industrial education subjects. The 84 respondents who were teaching at the time the survey was conducted, reported they had taught a total of 419 years, an average of five years for each graduate. One graduate failed to indicate the number of years he had taught. Table V, page 22, reflects the number of years taught by the graduates.

Occupations of non-teaching graduates
of Emporia State University

Sixty-two graduates indicated they were not teaching. Eight graduates, the largest number, were listed as farmers. Four graduates indicated they were owners of small furniture shops. Three graduates gave their occupations as carpenters and three other graduates reported they were working as draftsmen. Two graduates each were engaged in the following occupations: department store managers, lumber company salesmen, mechanics, self-employed and graduate students.

A total of 34 different occupations were reported by one graduate each. Table VI, page 23, depicts the wide variety of occupations in which the graduates were engaged.

TABLE IV
INDUSTRIAL EDUCATION SUBJECTS TAUGHT BY
GRADUATES OF EMPORIA STATE UNIVERSITY

Subjects	Number	Percentage
Woodworking	60	71.4 %
Drafting	54	64.3 %
Metals and Processes	32	38.1 %
Welding and Foundry	27	32.1 %
Auto Mechanics	20	23.8 %
Plastics and Processes	16	19.0 %
Materials and Processes	16	19.0 %
Power and Energy	15	17.8 %
Carpentry	13	15.4 %
General Crafts	13	15.4 %
World of Construction	10	11.9 %
Electrical Construction	9	10.7 %
Visual Communications	9	10.7 %
Graphic Arts	4	4.7 %
General Shop	2	2.4 %
Furniture Refinishing	2	2.4 %
Small Engine Repair	2	2.4 %
World of Work	1	1.2 %
Power Mechanics	1	1.2 %
Upholstery	1	1.2 %

TABLE V
 NUMBER OF YEARS TAUGHT BY INDUSTRIAL EDUCATION
 GRADUATES OF EMPORIA STATE UNIVERSITY
 FROM 1965-1975

Years taught	Number of graduates	Total
1	14	14
2	4	8
3	9	27
4	13	52
5	6	30
6	9	54
7	9	63
8	7	56
9	6	54
10	6	60
Did not specify	1	0
Total	84	419

Note: The table is read thus: Line three, nine graduates
 taught three years for a total of twenty-seven years.

TABLE VI
OCCUPATIONS OF NON-TEACHING GRADUATES
OF EMPORIA STATE UNIVERSITY

Occupation	Number
Farming	8
Furniture Shop Owner	4
Carpenter	3
Draftsman	3
Lumber Company Salesman	2
Department Store Manager	2
Graduate Student	2
Mechanic	2
Self-employed	2
Air Force Pilot	1
Beef Packing Company	1
Captain of a Schooner	1
Carpentry Apprenticeship Coordinator	1
Claim Agent Santa Fe Railroad	1
Contractor	1
Construction Firm Estimator	1
Construction Foreman	1
Did not indicate Occupation	1
Director of Vocational Education	1
Elevator Repair Mechanic	1
Engineer	1
Excavation Work	1

TABLE VI (CONTINUED)

Occupation	Number
General Construction	1
Insurance Salesman	1
Machinist	1
Maintenance	1
Manager Auto Body Shop	1
Personnel Employment Manager	1
Pilot and Salesman	1
Product Research and Development	1
Purchasing Agent Automotive Supply	1
Quality Assurance Manager	1
Reformatory Vocational Supervisor	1
Roofing Estimator and Supervisor	1
Sales Representative Paint Company	1
Security Policeman	1
Service Representative (Motorcycle)	1
Service Manager (Mobile Home Dealer)	1
Service Station Dealer	1
Supervisor (Goodyear Tire and Rubber)	1
Technical Writer	1
US Army Officer	1
Woodworker	1
Total	62

Job opportunities for industrial education
graduates of Emporia State University
after graduation

Frequently students are concerned regarding their opportunities for employment once they have graduated. In recent years, job placement for industrial education teachers has been excellent. Analysis of the data received from industrial education graduates of Emporia State University from 1965-1975 indicated that of the 150 respondents, 107, 71.3 percent, received teaching jobs immediately after graduation. This fact clearly verifies that job placement opportunities for industrial education teachers continues to be excellent.

Reasons for not entering or leaving
teaching reported by graduates
of Emporia State University

Sixty-two graduates, 41.3 percent, reported they were not teaching. When asked to give reasons why they had not entered or why they had left the teaching profession, several graduates replied with more than one reason. The greatest number, 45 graduates, 72.6 percent, reported "higher salary in other occupation" as the major reason for not teaching. Dissatisfied with teaching was given by eleven, 17.7 percent of the graduates and ten graduates, 16.1 percent, listed difficulties with administrators as the prime reason for leaving teaching.

Nine other graduates, 14.5 percent, listed the following reasons for not entering or for leaving teaching. Three graduates indicated they never did teach since they preferred other occupations, two graduates preferred self-employment, two graduates reported difficulties with students, one graduate indicated he was tired of school and one graduate reported that teaching was too time consuming. Table VII,

TABLE VII
 REASONS FOR NOT ENTERING OR LEAVING
 TEACHING REPORTED BY GRADUATES
 OF EMPORIA STATE UNIVERSITY

Reason	Number	Percentage
Higher salary	45	72.6
Dissatisfied with teaching	11	17.7
Difficulties with administrators	10	16.1
Never did teach (preferred other occupations)	3	4.8
Preferred self-employment	2	3.2
Difficulties with students	2	3.2
Too time consuming	1	1.6
Tired of school	1	1.6

Note: Some graduates gave more than one reason.

page 26, shows the reasons given by the graduates for not entering or for leaving teaching.

Degrees earned by graduates of
Emporia State University

One hundred and one, 67.3 percent of the 150 graduates who participated in this study had accomplished study beyond the bachelor level. The 150 graduates had earned a total of 189 degrees. Of the 101 graduates who completed study beyond the bachelor level, 39 had earned the following degrees: Thirty-seven graduates had earned the Master of Science in Education degree, one graduate had earned the degree Specialist in Education and one graduate had earned a Doctoral degree.

Table VIII, page 28, indicates the number of degrees earned by the graduates from 1965-1975. The table is read thus: Of the twenty graduates who earned a Bachelor of Science degree in 1970, seven had earned a Masters degree, one had earned a Specialist in Education degree and one graduate had earned a Doctoral degree. The twenty graduates had earned a total of 29 degrees.

Colleges and Universities attended
by graduates of Emporia State
University

According to the data received from the study, 101 graduates, 67.3 percent of those who responded, had continued their education beyond the bachelor level. The respondents listed 32 schools located in 14 states as institutions where they had accomplished graduate study. Eighty-eight of the graduates, 69.8 percent, continued their education in Kansas schools and the remainder of the graduates attended schools located in 13 other states. As might be expected, 45 graduates elected

TABLE VIII
 DEGREES EARNED BY GRADUATES OF
 EMPORIA STATE UNIVERSITY
 FROM 1965-1975

Year	Degree Received				Total
	Bachelor	Master	Specialist	Doctorate	
1965	8	4	0	0	12
1966	8	5	0	0	13
1967	16	7	0	0	23
1968	16	5	0	0	21
1969	15	7	0	0	22
1970	20	7	1	1	29
1971	10	0	0	0	10
1972	15	2	0	0	17
1973	17	0	0	0	17
1974	8	0	0	0	8
1975	17	0	0	0	17
Total	150	37	1	1	189

to continue their education at Emporia State University and 21 graduates attended Pittsburg State University for their advanced education. Colorado State University, Wichita State University and Kansas State University were third with seven graduates each attending these schools. In fourth place, with four graduates each, were the University of Kansas and Fort Hays State University. The fifth ranking school attended by the graduates for advanced study was Bemidji State College, Minnesota, which was attended by three graduates. The following universities were attended by two graduates each and ranked sixth in attendance by the graduates; University of Hawaii, New York State University, New York City University and Adelphi University of Garden City, New York. Twenty other institutions located in nine states were listed by one graduate each as schools attended for advanced study. Some graduates reported they had attended more than one school. Table IX, pages 30, 31 and 32, indicates the schools attended by the graduates of Emporia State University from 1965-1975.

Reasons for not pursuing graduate
study given by graduates of
Emporia State University

Forty-nine of the 150 graduates responding to the study had not accomplished study beyond the bachelor level and gave the following reasons: Seventeen graduates indicated they did not have enough time for graduate study, another seventeen graduates were not interested in graduate study and nine graduates reported further education not required in their current occupations. Six graduates indicated that a graduate school offering graduate level industrial education courses not available to them. Four graduates listed financial problems as reasons for

TABLE IX

COLLEGES AND UNIVERSITIES ATTENDED BY GRADUATES
OF EMPORIA STATE UNIVERSITY

Schools attended	Number of graduates
Emporia State University Emporia, Kansas	45
Pittsburg State university Pittsburg, Kansas	21
Colorado State University Fort Collins, Colorado	7
Wichita State University Wichita, Kansas	7
Kansas State University Manhattan, Kansas	7
University of Kansas Lawrence, Kansas	4
Fort Hays State University Fort Hays, Kansas	4
Bemidji State College Bemidji, Minnesota	3
University of Hawaii Honolulu, Hawaii	2
Adelphi University Garden City, New York	2
State University of New York Stoneybrook, New York	2
New York City University New York, New York	2
Adams State University Alamosa, Colorado	1
Brigham Young University Honolulu, Hawaii	1
Central Missouri State University Warrensburg, Missouri	1

TABLE IX (CONTINUED)

Schools attended	Number of graduates
Hawaii Pacific College Honolulu, Hawaii	1
Hofstra University Hempstead, New York	1
California State University Los Angeles, California	1
Pepperdine University Malibu, California	1
Southwest Missouri State University Springfield, Missouri	1
Southeast Missouri State University Cape Girardeau, Missouri	1
Northwest Missouri State University Marysville, Missouri	1
Northwest Oklahoma University Alva, Oklahoma	1
Southern Illinois University Carbondale, Illinois	1
University of Alaska Fairbanks, Alaska	1
University of Northern Colorado Greely, Colorado	1
University of Northern Iowa Cedar Falls, Iowa	1
University of Missouri Columbia, Missouri	1
University of Omaha Omaha, Nebraska	1

TABLE IX (CONTINUED)

Schools attended	Number of graduates
New Mexico State University Las Cruces, New Mexico	1
Northern Arizona University Flagstaff, Arizona	1
Western State University Gunnison, Colorado	1
Total	126

Note: Some graduates had attended more than one institution.

not pursuing graduate study and three graduates did not specify a reason for not continuing their education.

Table X, page 34, presents the reasons given by the graduates for not pursuing their education beyond the bachelor level.

Interest in continuing education
by graduates of Emporia State
University

The graduates were requested to respond to the following questions pertaining to continuing education: How many graduates would be interested in continuing education if the Department of Industrial Education could arrange weekend extension courses in the respondent's residential areas, and how many graduates would be interested in doing on-campus study evenings or weekends?

Eighty-five graduates, 56.7 percent, indicated they were interested in continuing education if weekend extension courses could be available in their residential areas. Forty-eight graduates, 32.0 percent, replied they were not interested in graduate study regardless of the availability of extension courses. Seventeen graduates, 11.3 percent, did not respond to the questions.

Thirty-two graduates, 21.3 percent, indicated they were interested in on-campus courses during evenings and weekends. However, 98 graduates, 65.3 percent, answered they were not interested in on-campus study evenings or weekends. Twenty graduates, 13.4 percent, did not respond to the questions.

Table XI, page 34, reveals how the graduates responded to the questions pertaining to continuing education.

TABLE X
REASONS FOR NOT PURSUING GRADUATE STUDY GIVEN
BY GRADUATES OF EMPORIA STATE UNIVERSITY

Reason given	Number of graduates
Lack of sufficient time	17
Not interested in graduate study	17
Not necessary in current occupation	9
Graduate study not available in graduate's residential area	6
Financial problems	4
No reason given	3
Total	56

Note: Some graduates gave more than one reason.

TABLE XI
INTEREST IN CONTINUING EDUCATION
BY GRADUATES OF EMPORIA
STATE UNIVERSITY

Type of course	Graduate's response			Total
	YES	NO	No response	
Weekend extension courses	85	48	17	150
On-campus study evenings or weekends	32	98	20	150

Graduate level courses requested
by graduates of Emporia State
University

The graduates who were interested in continuing education were instructed to submit a list of courses they thought would be beneficial to them and that they would like offered by Emporia State University. A list of courses in 31 different industrial education areas were submitted by 81 of the graduates.

Ten graduates, the largest number, wanted courses in plastics. Twenty-two graduates requested advanced courses in the following areas: drafting, auto mechanics, woodworking, machine shop, electronics and graphic arts. The remainder of the graduates who requested courses asked for basic courses in almost every area of industrial arts. It was interesting to note that one graduate requested a course in solar and wind energy engineering.

Table XII, pages 36 and 37, list the courses requested by the responding graduates of Emporia State University.

TABLE XII
 GRADUATE LEVEL COURSES REQUESTED
 BY GRADUATES OF EMPORIA
 STATE UNIVERSITY

Requested courses	Number of graduates desiring courses
Plastics	10
Advanced drafting	6
Advanced auto mechanics	5
Industrial arts (for general education)	5
Metals (all areas)	5
Advanced woodworking	4
Machinery and equipment repair	4
Materials and processes	4
Carpentry and building trades	4
Welding	4
Construction courses in industrial arts	3
Visual aids for shops	3
Advanced machine shop	3
Power and energy	3
Advanced electronics	2
Advanced graphics	2
World of manufacturing	2
Elementary practical arts	2

TABLE XII (CONTINUED)

Requested courses	Number of graduates desiring courses
Building construction techniques	2
Casting non-ferrous metals	1
Ceramics	1
Home budget and money management	1
Job opportunities in different fields	1
Metal spinning	1
Professional courses	1
Small engine repair	1
Safety (OSHA)	1
Solar and wind energy engineering	1
Adult motivation	1
World of work	1
Work study courses	1
Total	81

Chapter 4

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This study focused upon the graduates of Emporia State University who had earned a teaching degree in industrial education from 1965-1975. Departmental records indicated there were 187 graduates who satisfied those requirements. Information was received from 150 of those individuals.

SUMMARY

Eighty-eight of the 150 responding graduates were teaching at the time the survey was conducted. One hundred and fourteen of the graduates lived and worked in Kansas. Thirty-six of the graduates had left Kansas to live and work in 14 other states and the territory of Guam. The adjacent states of Missouri, Colorado and Iowa accounted for the largest number of graduates who had located in other states with seven, five, and four respectively. Six graduates, the largest number, had located in the state of New York with Arizona, Hawaii and Oklahoma each accounting for two graduates. Seven other states and the territory of Guam each accounted for one graduate. Of the 36 graduates who left Kansas to reside in other states, 24 were teaching or engaged in some type of educational work.

An analysis of the data revealed that a wide variety of Industrial Education courses were taught by the graduates. The three major areas taught by most graduates were woodworking, drafting and metals.

An individual break-down of these areas are as follows: Sixty graduates were teaching woodworking, fifty-four graduates were teaching drafting and thirty-two graduates were teaching metals and processes. Welding and auto mechanics ranked fourth and fifth, with 27 graduates teaching welding and 20 graduates teaching auto mechanics. Sixteen graduates each were teaching plastics and processes and materials and processes. Power and energy was taught by 15 graduates, while carpentry and general crafts were taught by 13 graduates each. Ten graduates were teaching world of construction and nine graduates each were teaching electrical construction and visual communications. Graphic arts was taught by four graduates and general shop, furniture refinishing and small engine repair were taught by two graduates each. Each of the following areas were taught by one graduate, world of work, power mechanics and upholstery. Several teachers taught in more than one area of industrial education.

Analysis of the data also revealed that 107 of the 150 graduates received teaching jobs immediately after graduation. This fact clearly substantiates that job placement opportunities for industrial education teachers continues to be excellent.

The graduates were asked to report the number of years they had been teaching. The eighty-four graduates indicated they had been teaching an average of approximately five years each. One graduate failed to indicate the number of years he had taught.

Sixty-two graduates reported they were not teaching and gave "higher salaries in other occupations" and "dissatisfied with teaching" as the prime reasons for not entering or for leaving the teaching profession.

Those graduates who were not teaching listed a wide variety of non-teaching occupations in which they were engaged. Eight graduates reported they were farmers, four graduates indicated they were owners of small furniture shops, three graduates listed their occupations as carpenters and three graduates reported they were working as draftsmen. Two graduates each were engaged in the following occupations: lumber company salesmen, department store managers, mechanics, self-employed, and graduate students. Thirty-four other different occupations were reported by one graduate each.

The graduates were requested to provide information pertaining to their educational achievements beyond the baccalaureate degree. One hundred and one of the 150 graduates who participated in this survey had accomplished study beyond the bachelor level. A total of 39 advanced degrees had been earned by the responding graduates. The Master of Science in Education degree had been earned by 37 graduates and one graduate had received the degree Specialist in Education. One graduate had earned a Doctoral degree in Education.

The 101 graduates who had accomplished study beyond the bachelor level had attended 32 schools located in 14 states. Eighty-eight of the graduates had received their advanced study in Kansas schools and 45 of these graduates elected to continue their education at Emporia State University. Twenty-one graduates attended Pittsburg State University and seven graduates attended Wichita State University and Kansas State University. The Universities of Kansas and Fort Hays State were attended by four graduates each. Colorado State University was the number one out-of-state school preferred and was attended by seven graduates. Several other out-of-state schools were attended by the former

graduates. Six graduates had attended three different schools in New York State, three graduates had attended Bemidji State College, Minnesota, and two graduates each had attended the University of Hawaii and New Mexico State University. Twenty other institutions of higher education were attended by one graduate each for graduate study.

Forty-nine of the 150 graduates reported they had not pursued study beyond the bachelor level. Several reasons were given for not pursuing graduate study. Reasons listed most frequently were the following: Seventeen graduates listed not enough time for graduate study, not interested in graduate study was given by seventeen graduates, nine graduates reported that further education was not necessary in their current occupation, six graduates noted that graduate level industrial education courses was not available to them, four graduates gave financial problems as reasons for not accomplishing graduate study and three graduates did not give reasons for not continuing their education.

The graduates were asked to respond to the following questions in regard to continuing education:

1. How many graduates would be interested in continuing education if Emporia State University offered extension courses in their residential area?
2. How many graduates would be interested in on-campus study, evenings or weekends?

Eighty-five graduates indicated they would be interested in continuing education if extension courses were available in their residential area. Forty-eight graduates reported they were not interested in graduate study if extension courses could be arranged. Seventeen graduates did not respond to the question. Thirty-two graduates indicated

they were interested in on-campus study in the evenings or on weekends. Ninety-eight graduates were not interested in on-campus study and 20 graduates failed to respond to the question.

Those graduates who were interested in continuing education were requested to list courses that would be beneficial to them and that they would like offered by the Department of Industrial Education of Emporia State University. A list of courses in 31 different areas of industrial education were submitted by 81 of the graduates. Ten graduates, the largest number, requested courses in plastics. Twenty-two graduates requested advanced courses in the following areas: auto mechanics, machine shop, woodworking, electronics, drafting and graphic arts. The remainder of the graduates requested basic courses in many areas of industrial education. It was interesting to note that one graduate requested a course in solar and wind energy engineering.

CONCLUSIONS

After analyzing the data gathered by the mail questionnaire, this investigator concluded the following:

1. More than three fourths of the respondents lived and worked in the state of Kansas. Conclusions may be made, based on the data received, that job opportunities are excellent in Kansas for industrial education teachers and other industrial related occupations.
2. Approximately 72.0 percent of the graduates were able to secure a teaching job immediately after graduation. This fact clearly verifies that job placement opportunities for industrial education teachers continues to be excellent.

3. One hundred and one of the 150 graduates who responded to the questionnaire had accomplished study beyond the bachelor level. Of this number, 82 graduates had received their advanced education in Kansas institutions. In conclusion, Kansas has quality schools that offer advanced study beyond the bachelor level in industrial education.
4. Sixty-three graduates reported they were not teaching and gave as the major reasons "higher salaries in other occupations" and "dissatisfied with teaching." It may be concluded that teachers desire the things in life commensurate with higher salaries and therefore, will seek non-teaching jobs with larger financial rewards and more benefits than those typically found in the teaching profession.
5. As expected, several graduates were teaching in more than one area of industrial education with an average teaching experience of approximately five years. In conclusion, this display of teaching versatility exemplifies the excellent teacher preparation in industrial education and reflects great credit upon the individual and the institution of preparation.
6. More than 50.0 percent of the graduates indicated that they were interested in continuing education if graduate level extension courses were available in their residential area, while only 21.3 percent of the graduates preferred on-campus study in the evenings or on weekends. Those graduates who were interested in continuing education requested basic courses in 31 industrial education areas. Advanced courses

in six major areas were requested. It may be concluded that perhaps more graduates would continue their education if graduate level industrial education courses were more readily available to them in their residential area. Another conclusion could be that on-campus study in the evenings and on weekends was unpopular with the graduates.

RECOMMENDATIONS

1. Follow-up studies should be accomplished every five years or more frequently if necessary.
2. Advanced courses in six major areas were requested by the graduates. With the exception of one area, advanced courses in these areas had been available for several years which may indicate that a communication problem existed between the graduates and the institution. The Department of Industrial Education should use a positive method of informing former graduates of current departmental activities and course offerings. This may be accomplished by continuation of a recently initiated newsletter or a similar method of disseminating information to the graduates.
3. In previous years the Department of Industrial Education has offered extension courses in various locations within the state. In many instances these programs were unsuccessful because of the lack of participation by the graduates and were discontinued. Since more than 50.0 percent of the graduates indicated they would consider continuing education if extension courses were available to them in their residential

area, the Department of Industrial Education should consider re-implementation of the extension course program.

4. Since teachers are important factors in molding the lives of young people, every effort should be made by school officials to acquire and retain highly qualified personnel. This investigator recommended that the initial salaries of teachers should be established by state law with future salary increases regulated by merit and tenure. Also, salaries should be commensurate with those of industrial counterparts.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Baird, Ronald J. Contemporary Industrial Teaching. South Holland, Illinois. Goodheart-Willcox, 1972.
- Becker, Derold W. "A Follow-up of Wichita University's Industrial Education Graduates, from 1952-1961." Unpublished Masters Thesis, Department of Industrial Arts, Kansas State Teachers College, Pittsburg, Kansas, 1962.
- Bell, Charles L. Industrial Arts in the Public Secondary Schools of Kansas in 1962-1963. Emporia State Research Studies, Vol. 13, No. 3. Emporia, Kansas. Emporia State College Press, 1965.
- Birks, Keith C. "A Follow-up Study of The Graduates in Industrial Arts From Southern State College, Springfield, South Dakota from 1961 to 1967." Unpublished Masters Thesis, Department of Industrial Arts, Kansas State Teachers College, Pittsburg, Kansas, 1968.
- Bryan, Harold D. "The Objectives of Industrial Arts A Study of the Relationship of Theory to Application." Unpublished Masters Thesis, Kansas State Teachers College, Emporia, Kansas, 1971.
- DeWeese, H. Dwane. "A Follow-up Study of Wichita, Kansas, Haysville Campus High School 1964-1968 Graduates With One or More Units of Auto Mechanics." Unpublished Research Problem, Department of Industrial Arts, Kansas State Teachers College, Emporia, Kansas, 1968.
- Erdos, Paul L. Professional Mail Surveys. New York. McGraw-Hill, 1970.
- Garrison, Delmer Lynn. "A Follow-up Study of Woodworking Students of Leroy Rural High School, Leroy, Kansas." Unpublished Research Problem, Department of Industrial Arts, Kansas State Teachers College, Emporia, Kansas, 1965.
- Gonser, Martin E. "A Follow-up Study of Graduates With Majors in Industrial Education from 1935-1949." Unpublished Masters Thesis, Department of Industrial Arts, Kansas State Teachers College, Pittsburg, Kansas, 1950.
- Grover, Arland L. "A Comparative Study of the Performance of Students Majoring in Industrial Arts, English, Social Science, Speech, Art, and Home Economics at the Kansas State Teachers College of Emporia." Unpublished Masters Thesis, Department of Industrial Arts, Kansas State Teachers College, Emporia, Kansas, 1962.

- Harms, Edgar H. "Background and Academic Preparation of the Industrial Arts Teachers in the Public Schools of Kansas 1968-1969." Unpublished Research Problem, Department of Industrial Arts, Kansas State Teachers College, Emporia, Kansas, 1969.
- Hogan, Robert D. "A Follow-up Study of 1948-1963 Graduates of Kansas State Teachers College, Emporia, With Twenty or More Hours in Industrial Arts." Unpublished Field Study, Department of Industrial Arts, Kansas State Teachers College, Emporia, Kansas, 1965.
- Miller, W. R., and Homer C. Rose. Instructors and Their Jobs. 3d ed. Chicago, Illinois. American Technical Society, 1975.
- Mouly, George J. The Science of Educational Research. New York. American Book Company, 1963.
- Nelson, William G. "A Follow-up Study of 1946-1955 Graduates of Kansas State Teachers College, Emporia, With Twenty or More Hours in Industrial Arts." Unpublished Masters Thesis, Department of Industrial Arts, Kansas State Teachers College, Emporia, Kansas, 1957.
- Rolf, Carl Herman. "A Study to Determine the Relationship of Grades Earned in Industrial Arts to the Grades Earned in Certain Other Subjects in Senior High School." Unpublished Masters Thesis, Department of Industrial Arts, Kansas State Teachers College, Emporia, Kansas, 1965.
- Silvius, Harold G., and Estell H. Curry. Managing Multiple Activities in Industrial Education. Bloomington, Illinois. McKnight and McKnight, 1971.
- Stahl, Robert. "A Follow-up of Drafting Students of El Dorado High School." Unpublished Research Problem, Department of Industrial Arts, Kansas State Teachers College, Emporia, Kansas, 1962.
- Warwick, Donald P., and Charles A. Lininger. The Sample Survey: Theory and Practice. New York. McGraw-Hill, 1975.

APPENDICES

APPENDIX A

EMPORIA KANSAS STATE COLLEGE

1200 COMMERCIAL / EMPORIA, KANSAS 66801 / TELEPHONE (316) 343-1200

August 16, 1976

Dear Fellow Graduate:

Once again the summer vacation is rapidly coming to a close and it's time to start thinking about the new school year. I sincerely hope that you have had a restful vacation and are eager for the new semester to start.

While you are still fresh and before you become involved with the new school year, I would appreciate it greatly if you would take a few minutes of your time to complete the enclosed questionnaire and return it to me in the addressed and stamped envelope.

This research is being conducted as a partial fulfillment for my Master of Science degree from Emporia Kansas State College and to obtain information pertaining to former graduates who majored in Industrial Arts Education.

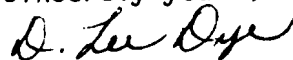
The enclosed questionnaire is being sent to all graduates of EKSC who graduated from 1965 to 1975 and who majored in Industrial Arts Education. The Department of Industrial Education wishes to upgrade its Masters program in order to better serve you, its former graduates and plans to initiate an annual newsletter which will be sent to all 1965 to 1975 graduates.

We are also asking you for suggestions about graduate courses that you believe will be of value to you in your teaching field.

As you know, a survey is only accurate if a high percentage of returns are received. I know that you will want to do your part to make the survey a success by responding immediately. All information that is received will be regarded as confidential.

Thank you for taking a few minutes of your time to assist me with this survey. I appreciate it very much.

Sincerely yours,



D. Lee Dye

Department of Industrial Education
Emporia Kansas State College
1200 Commercial Street
Emporia, Kansas 66801

EMPORIA KANSAS STATE COLLEGE

A FOLLOW-UP STUDY OF INDUSTRIAL EDUCATION GRADUATES
OF EMPORIA KANSAS STATE COLLEGE FROM 1965 TO 1975

The following questionnaire is being sent to all 1965 to 1975 graduates of Emporia Kansas State College who majored in Industrial Education and received a teaching degree.

Instructions for completing the questionnaire.

Please mark the appropriate box with an (X) or fill in the blank space. Use the reverse side if more space is required.

1. Name _____
2. Current Address: Street or apartment number _____
City _____ County _____ State _____ Zip _____
3. The year you graduated from EKSC or KSTC? _____

4. Are you presently teaching? YES NO

NOTE: If you are not teaching, omit questions 5, 6, 7, and proceed to question number 8.

5. If the answer to number 4 question is yes, give name of school and level (grade) taught.

6. How many years have you been teaching? (Circle one).

1 2 3 4 5 6 7 8 9 10 11

7. Check with an (X) the areas (subjects) taught.

- | | | | |
|--------------------------|----------------------------|--------------------------|-----------------------------|
| <input type="checkbox"/> | 1. Woodworking | <input type="checkbox"/> | 9. Power and Energy |
| <input type="checkbox"/> | 2. Metals and Processes | <input type="checkbox"/> | 10. Materials and Processes |
| <input type="checkbox"/> | 3. Auto Mechanics | <input type="checkbox"/> | 11. Visual Communications |
| <input type="checkbox"/> | 4. Drafting | <input type="checkbox"/> | 12. World of Work |
| <input type="checkbox"/> | 5. Electrical Construction | <input type="checkbox"/> | 13. Graphic Arts |
| <input type="checkbox"/> | 6. Plastics and Processes | <input type="checkbox"/> | 14. Carpentry |
| <input type="checkbox"/> | 7. Welding and Foundry | <input type="checkbox"/> | 15. General Crafts |
| <input type="checkbox"/> | 8. World of Manufacturing | | |

Other(s) Specify: _____

NOTE: If you are presently teaching, omit questions 8, 9, 10, 11 and proceed to question number 12.

8. If you are not teaching, what is your present occupation?

9. How many years have you worked for your present employer?

10. Did you enter teaching immediately after graduation?

YES

NO

11. Place an (X) in the box for the reason you left the teaching profession.

1. Higher salary in other occupations

2. Dissatisfied with teaching

3. Too time consuming

4. Difficulties with administrators

5. Difficulties with other teachers

6. Difficulties with students

7. Other(s) (Specify) _____

12. Have you completed any graduate courses since your Bachelors degree?

YES

NO

13. If the answer to question 12 is yes, what school did you attend?

14. Have you received another degree since you first graduated from
Emporia Kansas State College? YES NO

15. If the answer to question 14 is yes, give name of school.

16. What degree was earned?

M.A.

M.S.

Ed.D.

Ed.S.

Ph.D.

17. If you have not completed any graduate courses, mark an (X) in the box near the number that best explains your reason.

- 1. My job does not require further education.
- 2. Not enough time between work hours to permit graduate study.
- 3. Graduate study not offered in my residential area.
- 4. Not interested in doing graduate study.
- 5. Financial problems will not permit further education.
- 6. Other(s): (Specify) _____

18. If Emporia Kansas State College offered evening or weekend extension courses in your residential area, would you consider doing graduate study? YES NO

19. Would you consider doing graduate study on the EKSC campus evenings or Saturdays? YES NO If yes, (Specify) _____

20. If weekend or evening courses could be arranged, what type courses would you prefer?

List name of course in order of your preference.

- 1. _____
- 2. _____
- 3. _____

Thank you for taking the time to complete and return this questionnaire. Your cooperation and assistance are greatly appreciated.

APPENDIX B



EMPORIA KANSAS STATE COLLEGE

1200 COMMERCIAL / EMPORIA, KANSAS 66801 / TELEPHONE (316) 343-1200

September 18, 1976


Dear Graduate:

About a month ago you were sent a questionnaire, requesting your assistance in a survey. As of this date I have not received your response. I'm sure your lack of compliance is an oversight and not intentional. Because of your position as a Civic Leader, I know that you will want to participate and make your contribution.

If you have already mailed your response please disregard this follow-up letter. If you have not, would you please complete the questionnaire and mail it to me in the stamped and addressed envelope. In case you have misplaced the first questionnaire, I am enclosing a second copy.

Again, information received is confidential and thank you for your assistance.

Sincerely yours,



D. Lee Dye

Department of Industrial Education
Emporia Kansas State College
1200 Commercial Street
Emporia, Kansas 66801

DLD:bh

APPENDIX C



EMPORIA KANSAS STATE COLLEGE

1200 COMMERCIAL / EMPORIA, KANSAS 66801 / TELEPHONE (316) 343-1200

October 18, 1976

Dear Graduate:

In the past 60 days you have been sent two copies of a questionnaire, each with a cover letter explaining the reason for the survey. As of this date I have not received your reply. Perhaps you did not receive either of the questionnaires because of the type of postage and mailing procedures that were used. However, I am sending you a third questionnaire, this time by first class mail, hoping that you will receive it and respond.

This research is being conducted as a partial fulfillment for my Master of Science degree at Emporia Kansas State College. The research is being conducted for the Department of Industrial Education in hopes of receiving some beneficial feedback from you, its' former graduates.

The purpose of the research is basically threefold -- to acquire the latest addresses of the graduates so that the departmental files may be updated; to inform you that the department wishes to upgrade its Masters program, and that suggestions from you will be greatly appreciated; and to inform you that the department wants to initiate an annual newsletter which will be sent to all Industrial Education graduates from 1965 to 1975.

As you know, a survey is only accurate if a high percentage of returns are received. I know that you will want to participate and do your part to make the survey a success. All information that is received will be regarded as confidential.

If you have already responded, disregard this correspondence. If you have not, would you please take a few minutes of your time to fill in the questionnaire and return it to me in the addressed envelope.

Thank you for your assistance with the survey. I appreciate it very much.

Sincerely yours,

A handwritten signature in cursive script that reads "D. Lee Dye".

D. Lee Dye

Dept. of Industrial Education
Emporia Kansas State College
1200 Commercial Street
Emporia, Kansas 66801

DLD:bh

APPENDIX D

January 24, 1977

Dear EKSC Graduate:

I am Lee Dye, a graduate student of Emporia Kansas State College, and I am conducting a followup study of EKSC graduates as a partial fulfillment for my Master of Science degree. I desperately need your assistance.

In addition to my educational requirement, the study is being conducted for the Department of Industrial Education and serves the following three purposes: to establish the latest addresses of former graduates so that departmental files may be updated, to ask for suggestions that will be beneficial in revising the Masters program, and to inform former graduates that the department wishes to initiate an annual newsletter which will be sent to all Industrial Education graduates.

The study originally began last fall when questionnaires were sent to all Industrial Education graduates of EKSC from 1965 to 1975. Apparently because of address changes and inadequate mailing procedures you did not receive the letter and questionnaire. After securing the latest addresses from another source I am again sending you a questionnaire and asking for your assistance. It would be greatly appreciated if you could complete the questionnaire and return it to me in the stamped and addressed envelope. All information received will be regarded as confidential.

As you know, a survey is only accurate if a high percentage of returns are received. I know that you will want to do your part in making the survey a success.

Thank you for giving this matter your immediate attention.

Sincerely,

D. Lee Dye
614 East 37th Street
Topeka, Kansas 66605

DLD:md
Encl.

APPENDIX E

March 25, 1977

Dear EKSC Graduate:

I am Lee Dye, a graduate student of Emporia Kansas State College. I am conducting a follow-up study of industrial arts graduates from 1965-1975 as a partial fulfillment for the Master of Science degree. I need your help in order to make the study valid and useful.

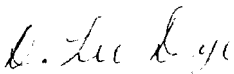
The study is being conducted for the Department of Industrial Education of Emporia Kansas State College and serves the following purposes: to update departmental files, to establish current addresses of the graduates so that an annual newsletter may be sent to all graduates, and to welcome any suggestions that you may have regarding the Masters program.

The study initially began last fall and since then several attempts have been made to contact the graduates who did not reply. Perhaps, because of poor mailing procedures, out of date addresses and other adversities you did not receive any of the questionnaires. I feel reasonably sure that you would like to participate in the study, so I am making this final attempt to contact you.

Enclosed you will find a questionnaire and a stamped return envelope. It will be greatly appreciated if you will take a few minutes of your time to complete the questionnaire and return it to me. All information will be regarded as confidential.

Thank you for giving this matter your immediate attention.

Sincerely,



D. Lee Dye

614 East 37th Street
Topeka, Kansas 66605

DLD:MD
Encl.