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A FOLLOW-UP OF WICHITA UNIVERSITY'S INDUSTRIAL
EDUCATION GRADUATES, FROM 1952-1961

A Thesis Submitted to the Graduate Division in Partial
Fulfillment of the Requirements for the
Degree of Master of Science

PORTER LIBRARY

By

Derold Wayne Becker

KANSAS STATE COLLEGE OF PITTSBURG

Pittsburg, Kansas

June, 1962

WITHDRAWN

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ABSTRACT

This study was planned to ascertain the occupations of Wichita University's industrial education graduates from 1952 through 1961, to discover strengths and weaknesses of the graduates, and to present goals which the department might strive to reach.

Data for this study were obtained from the graduates by use of a written questionnaire. The survey pointed out that many graduates worked, had athletic scholarships, or had Veterans' Administration benefits while attending Wichita University. Sixty per cent of the respondents became industrial education teachers and nearly all of these have remained in the teaching profession. The graduates have shown an interest in graduate work; many are working towards an advanced degree and six have obtained such a degree. Teaching graduates have taught a variety of subjects in addition to industrial education subjects. Non-teaching graduates are quite happy with their industrial training and many of them are working in industry. Better opportunities in industry and poor salaries in the teaching profession were important causes of graduates accepting positions outside the teaching profession. Industrial education courses were rated by the graduates; some of these courses need more emphasis. The department has done a commendable job according to the graduates; the lack of adequate

facillities have been a hindrance but the department has grown in spite of this obstacle.

Conclusions and recommendations were formulated from ideas that grew out of the study.

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CHAPTER I

INTRODUCTION

Statement of the problem. In order to evaluate the effectiveness of any program of education, every institution needs to know the degree of success, adjustment, and opinions of its graduates. Some type of study should be made of the graduates to ascertain their strengths and weaknesses. By using the results of such a study, the institution can keep its program in step with the best educational theory and practice.¹

It was the purpose of this study to find what the occupations of Wichita University's Industrial Education Graduates have been, and what implications these occupations hold for the Industrial Education Department at Wichita University and similar departments of other institutions.

Origin of the problem. Industrial education is "new" at Wichita University and as such needed to be "checked out." This study was of special interest to the department and it was hoped that this report would present future aims and goals that the department might strive to reach. This study should be of educational value to officials of Wichita University

¹ Martin E. Gonsler, "A Follow-Up Study of Graduates with Majors in Industrial Education from 1935-1949." (Master's Thesis, Kansas State College, Pittsburg, August, 1950), p. 1.

because they can better plan their offerings if they are aware of the needs of the industrial education teachers they serve.

A review of the research and literature of the field shows that industrial arts teachers in service during the past two decades have been faced with the two-fold problem of (1) the modification and expansion of his concepts and understanding of the basic educational philosophy within which he was working, and (2) the problem of keeping pace with a rapidly changing and ever more complex industrial society which he is supposed to interpret to his students.²

It was felt, in view of the retirement of the developer and chairman of the Industrial Education Department, that it would be appropriate to point out the many accomplishments of the department.

This type of study has been done relative to other schools. It was felt that a successful study could be made in reference to Wichita University. Miranda³ and Gonser⁴ have made similar studies of the graduates of Kansas State College of Pittsburg.

Previous research concerning the program of industrial education at Wichita University. A program of industrial

²James R. Hastings, Ed. D., "An In-Service Education Program for Teachers of Industrial Arts in New York State" (Doctor's Dissertation, New York University, 1953), p. 2.

³Jess Miranda, "A Study of Teaching and Non-Teaching Graduates in Industrial Arts of Kansas State Teachers College, Pittsburg, from 1950-1955" (Master's Problem, Kansas State College, Pittsburg, July, 1958).

⁴Gonser, op. cit.

education for the Municipal University of Wichita was proposed by William Nagel in June, 1948.⁵ Nagel reviewed the programs of industrial education in the state tax supported Colleges in Kansas and he also investigated industrial education programs in the Municipal Universities throughout the United States before making his proposal. Each program of industrial education was designed to meet the needs of that institution. No attempt was made to pattern a program of industrial education for Wichita University after that of any other school but ideas were gained which were helpful in formulating a proposed program for Wichita University.

To enable the College of Education to fulfill its stated purposes the writer proposes a program of industrial education that could, in part or as a whole, serve as a small beginning for the Municipal University of Wichita.⁶

The purposes of the College of Education of Wichita University were stated in the Biennial Catalog as follows:

The College of Education of the Municipal University of Wichita was established by the regents June 1, 1926. This College prepares teachers for the public school systems of Kansas and aids those already in systems by affording an opportunity for further study. Its further purpose is to afford students who wish to enter teaching as a profession a training in keeping with the demands of the profession and equivalent to that of kindred professions.⁷

⁵William Edward Nagel, "A Program of Industrial Education for the Municipal University of Wichita" (Master's Thesis, University of Wichita, June, 1948)

⁶Ibid., p. 1-2.

⁷The Municipal University of Wichita, Biennial Catalog 1946-47; 1947-48, p. 69.

The proposed curriculum was confined to one of teacher training for industrial arts. The curriculum in industrial arts was limited to a maximum of fifty-one semester hours. The total proposed curriculum amounted to a minimum of 130 credit hours. Of the 130 hours only thirty hours were constituted of courses not offered by other departments, and of this thirty hours, nine hours were of a specialized nature dealing with educational procedures of industrial education that would be suitable for students in other fields within the College of Education. This left twenty-one hours of courses to be inaugurated as new courses in setting up the new program. The curriculum as was proposed is shown on pages five, six, and seven.

It was proposed that the University use the Wichita Public High School shops and equipment during the hours when not being used by the high school program. The University was to employ the teachers already working with those shop facilities. Use of high school facilities was suggested to cut expenses and to inaugurate the program as quickly as possible. This industrial education program was also to make use of laboratory facilities in the engineering department.

Five part-time high school teachers were needed to operate this program.

- one - Woodwork teacher
- one - Architectural drawing teacher
- one - Printing teacher
- one - Auto mechanics teacher
- one - Electricity teacher

The three professional courses were to be taught by one full-time instructor on campus. These courses were: Problems of Industrial Education, History and Organization of Industrial Education, and Methods of Shop Instruction.

Proposed Budget:

One full-time instructor (9 months).....	\$3600.00
(Summer).....	600.00
Five part-time teachers	2000.00
Utilities	250.00
Rental for equipment in shops	250.00
Janitorial service	500.00
Office expense and student help	\$1200.00-1500.00
Total Budget	<u>\$8400.00-8700.00</u>

Nagel also suggested possible industrial education publications to be placed in the library on the campus.

Proposed Curriculum:

Freshman Year

1st Semester

Industrial Education I - First course in wood.....	3-4 hours
English 111 - Elements of composition.....	3
Speech 111 - Extemporaneous speaking.....	2
Mathematics 113 - College algebra.....	3
Foreign Language.....	3
Physical Education.....	1
Total	<u>15-16</u>

2nd Semester

Industrial Education 2 - Advanced wood.....	3-4
English 112 - Elements of composition.....	3
Chemistry 111 - General chemistry.....	5
Engineering 111 - Engineering drawing 1.....	2
Foreign Language.....	3
Physical Education.....	1
Total	<u>17-18</u>

Sophomore Year

1st Semester

Industrial Education 3 - Machine tool laboratory...	3-4 hours
Engineering 113 - Engineering drawing 11.....	2
Engineering 116 - Descriptive geometry.....	3
Mathematics 112 - Plane trigonometry.....	2
Political Science 201 - Introduction to citizenship	3
Architectural Drawing.....	3
Physical Education.....	1
	<u>17-18</u>

2nd Semester

Industrial Education 4 - General metals shop.....	3-4
Journalism 120 - Fundamentals of printing.....	3
Engineering 231 - Welding and heat treating	1
Psychology 225 - General psychology.....	3
Political Science 221 - American Government.....	3
Physical Education.....	1
Electives.....	2-3
	<u>16-18</u>

Junior Year

1st Semester

Industrial Education 5 - Gas engines.....	3
Physics 223 - General college physics.....	5
Industrial Education 100 - Problems of Ind. Ed.....	3
Education 331 - Educational psychology.....	3
History 221 - History of the United States.....	3
	<u>17</u>

2nd Semester

Industrial Education 6 - Electricity.....	3
Economics 219 - Elements of economics.....	3
Education 332 - Introduction to education.....	3
Physics 224 - General college physics.....	5
Electives.....	3
	<u>17</u>

Senior Year

1st Semester

Industrial Education 101 - History & Organ. of I. A..	3 hours
Economics 350 - Labor problems	3
Education 460 - High school methods	3
Art 127 - Art appreciation	3
or	
Music 331 - History of music	2
Electives.....	2-4
	<hr/> 16-18

2nd Semester

Industrial Education 102 - Methods of shop instruction	3
Education 461 - Supervised teaching	4
Education 452 - Principles of voc. & ed. guidance....	3
Electives.....	5-8
	<hr/> 15-18

Grand Total 130-140 hours

Ideas gained from previous studies on related topics.

Previous studies have been reviewed and some items found in those studies have been incorporated into this study. The written questionnaire forms used in the studies of Miranda,⁸ Ensmann,⁹ and Conser¹⁰ contained ideas which were used in the questionnaire form of this study. The follow-up card used to remind graduates to return the completed questionnaire was prepared after ideas were borrowed from the reminder card

⁸Miranda, op. cit.

⁹Leo M. Ensmann, "An Investigation on Trends in Industrial Education in Junior and Senior High Schools of Kansas Since 1944" (Master's Thesis, Kansas State College, Pittsburg, May, 1950)

¹⁰Conser, op. cit.

used by Forbes¹¹ in his study. Previous studies which involved industrial education curriculum requirements of Junior Colleges, Colleges, and Universities were read. These were interesting and indirectly may have influenced the composition of the study. Such studies were made by Atteberry,¹² Starkey,¹³ and Walker.¹⁴

Limitations of the study. This study is limited to those graduates of Wichita University who received a degree with a major or minor in industrial education in the years from 1952 through 1961.

Method of procedure. Information for this study was gained by the use of a written questionnaire, a copy of which appears in the appendix. The following items were observed

¹¹Howard Denman Forbes, "An Examination of the Professional Education Program for Elementary Teachers at Kansas State Teachers College Pittsburg, Kansas" (Master's Thesis, Kansas State College, Pittsburg, May, 1949)

¹²Pat Herman Atteberry, "The Status of Industrial Education in the Junior Colleges of the United States" (Master's Thesis, Kansas State College, Pittsburg, August, 1952)

¹³Harry Arthur Starkey, "A Survey of the Industrial Arts Programs of the Colleges and Junior Colleges of Kansas" (Master's Problem, Kansas State College, Pittsburg, July, 1941)

¹⁴Dempsey Logan Walker, "Requirements for the Baccalaureate Degree in Industrial Arts Education in Twenty-Five Colleges and Universities" (Master's Thesis, Kansas State College, Pittsburg, July, 1955)

in formulating the questionnaire sheet:

1. Items should be stated as briefly and concisely as possible.
2. Items should require as little writing as possible. Provisions for replying through use of check marks should be made whenever possible.
3. Provide adequate space for replying to each item.
4. Avoid questions which might embarrass respondents. (Don't ask for reasons for divorces, causes of illness, etc.)
5. Don't require respondents to give their names. (Code the blanks before sending them out so they can be identified.)
6. Avoid unnecessary items. (Don't include items just because they "might be useful.")
7. Keep in mind that there is usually an inverse ratio between the length of the form and the percentage of returns.¹⁵

The names of all men graduates (1952-1961) of the College of Education were obtained from the Office of the Registrar. These names were examined by the chairman of the industrial education department to see if the names of any minors could be recalled which may not have been placed in departmental records. A list of ninety-two industrial education graduates were obtained for the ten year period.

Addresses were located from the files of the Teacher Placement Bureau and Alumni Office at the University of Wichita. The Kansas Industrial Arts and Vocational Education Directory was also checked for the addresses of graduates who

¹⁵Superintendent of Public Instruction, Lansing, Michigan, Determining Occupational Training Needs through Occupational Surveys and Follow-Up Studies (Published by Office of Vocational Education Department of Public Instruction, Lansing, Michigan, 1948), p. 30.

accepted teaching positions in Kansas. Correct addresses were found for eighty-two graduates. Incorrect or no address could be found for ten graduates.

The questionnaires were sent to the graduates the latter part of August with a request to have them returned by October 1st if possible. A reminder card was sent to all graduates who had not returned their completed questionnaire by October 1st. A second copy of the questionnaire was later mailed to some of the graduates in an attempt to obtain the highest percentage-return possible. There were fifty-eight returns from the eighty-two possible, making a 70.73 per cent return. Table I, page 11, indicates by a yearly basis the number of majors and minors that have received degrees in industrial education. This table also shows the number that returned the questionnaire and the number of graduates for which addresses were not found.

Chapter II presents the type or nature of the industrial education graduate from Wichita University. Chapter III gives the positions and occupations the graduates have held. Chapter IV contains ratings the graduates have placed upon their course work in industrial education. Chapter V lists comments made by graduates concerning the industrial education department at Wichita University. These comments fall into the categories of complimentary remarks, constructive criticism, or suggestions. Chapter VI is composed of a summary of findings, conclusions, and recommendations growing out of the report.

TABLE I

NUMBER OF GRADUATES AND QUESTIONNAIRE RETURNS

Year &	Major or Minor	Number of Graduates	Questionnaire return	Address not available
1952	Major	0	0	0
	Minor	3	2	0
1953	Major	2	2	0
	Minor	2	1	1
1954	Major	5	2	2
	Minor	0	0	0
1955	Major	2	0	0
	Minor	4	1	0
1956	Major	3	3	0
	Minor	5	5	0
1957	Major	6	2	0
	Minor	6	2	1
1958	Major	11	7	3
	Minor	2	2	0
1959	Major	11	7	0
	Minor	3	2	0
1960	Major	11	8	1
	Minor	0	0	0
1961	Major	15	11	2
	Minor	1	1	0
Total	Major	66	42	8
	Minor	26	16	2
Grand Totals		92	58	10

CHAPTER II

NATURE OF THE GRADUATE

Means used to obtain financial support while attending Wichita University. Many industrial education graduates have worked their way through school. A good many have worked a forty-hour-week or more. Nearly half of those who worked were working at some job closely related to industrial education. The data found in Table II, page 13, shows that forty-five out of fifty-eight (77.6 per cent) worked while attending Wichita University. Some of the graduates had athletic scholarships which paid part or all of their college expenses. Still others were receiving Veterans' Administration benefits because of previous military experience.

Industrial education at Wichita University was rather unique in that so many were working and going to school at the same time. Some, because of competitive sports, were working long hours in addition to school work.

The department seemed to have very few enrolled who had just graduated from high school. Many had worked at some trade, served in the military, etc. prior to their work in industrial education at Wichita University.

Those graduates whose work was closely related to industrial education were all majors. The class of 1960 had seven, the classes of 1958, 1959, and 1961 had three each, and the class of 1954 had two working at some field closely related to industrial education.

TABLE II

HOURS WORKED PER WEEK WHILE A STUDENT

Year	Work closely related to industrial education		Work unrelated to industrial education		Athletic scholarship	
	Major	Minor	Major	Minor	Major	Minor
1952				40 hrs.		1
1953	20 hrs.		40 hrs.	7 hrs.		1
1954	25 hrs. 40 hrs.					
1955						1
1956	40 hrs.		20 hrs.	5 hrs. 20 hrs. 32 hrs. 40 hrs.	2	2
1957	20 hrs.		12 hrs. 30 hrs.			2
1958	40 hrs. 40 hrs. 40 hrs.		20 hrs. 40 hrs.	30 hrs.	3	1
1959	40 hrs. 40 hrs. 40 hrs.		30 hrs.	50 hrs.	2	1
1960	20 hrs. 25 hrs. 30 hrs. 40 hrs. 40 hrs. 40 hrs. 40 hrs.		15 hrs.			
1961	20 hrs. 30 hrs. 30 hrs.		20 hrs. 24 hrs. 30 hrs. 35 hrs. 40 hrs. 48 hrs. 48 hrs.	20 hrs.	1	1
	21	0	15	9	8	10

Number of students working

Number of years served in the military and training received therein prior to graduation. Many graduates received valuable industrial training while in the military. Thirty-eight of the fifty-eight (65.5 per cent) returning the questionnaire served in the military. The average length of military service was slightly over three years (36.6 months). Table III, page 15, lists by years the number of years served in the military and also shows whether or not industrial training was received.

Number that pursued industrial education with the idea of becoming teachers. An attempt was made to discover how many of the graduates had teaching of industrial subjects as an objective while enrolled at Wichita University. Table IV, page 16, shows the number of graduates who were intending to teach, were undecided about teaching, or who did not anticipate entering the teaching profession. This is compared to the number who actually became industrial education teachers. These numbers of graduates are specified as majors or minors. Table IV, page 16, also indicates the total number that became industrial education teachers and how many of these became teachers immediately upon graduation.

TABLE III

NUMBER OF YEARS SERVED IN THE MILITARY
AND INDUSTRIAL TRAINING RECEIVED

Year	Years served with no Industrial Training	Years served with Industrial Training
1952	3½ yrs.	
1953	2 yrs.	3 yrs.
1954		2 yrs.
1955	2 yrs.	
1956	½ yrs. 2 yrs. 3 yrs. 4 yrs. 4 yrs. 5 yrs.	
1957	2 yrs. ½ yrs.	
1958	½ yrs. 1 yrs. 2 yrs. 4 yrs.	4 yrs.
1959	4 yrs. 2 yrs.	4 yrs. 4 yrs. 2 yrs. 2 yrs.
1960	2 yrs. 4 yrs.	2 yrs. 4 yrs. 4 yrs. 4 yrs. 4 yrs.
1961	3 yrs. 6 yrs.	2 yrs. 4 yrs. 4 yrs. 4 yrs. 5½ yrs.
21		17
Number of students represented		

TABLE IV

NUMBER INTENDING TO TEACH COMPARED
WITH THOSE WHO DID TEACH

Year	Number Intending	Have Taught	Number Undecided	Have Taught	No. Not Intending	Have Taught
Major 1952						
Minor			1	1	1	1
Major 1953	1	1			1	
Minor	1	1				
Major 1954			2	1		
Minor						
Major 1955						
Minor	1					
Major 1956	2	2	1			
Minor	2	1	2	2	1	1
Major 1957			1		1	
Minor	1	1	1			
Major 1958	6	6	1			
Minor			2	2		
Major 1959	5	3	2	1		
Minor	2	1				
Major 1960	6	4	2			
Minor						
Major 1961	7	5	2	1	2	
Minor	1					
Majors Total	27	21	11	3	4	0
Minors	8	4	6	5	2	2

Thirty-five of the fifty-eight graduates questioned became teachers of industrial education subjects. Twenty-five of the thirty-five (71.4 per cent) intending to teach actually became teachers while eight of the seventeen (47 per cent) undecided graduates became teachers. Two of the six (33 per cent) who did not intend to teach became teachers of industrial education subjects.

Twenty-seven of the thirty-five (77 per cent) became teachers immediately upon graduation. Teaching majors in the classes of 1959, 1960, and 1961 all took teaching positions immediately upon graduation. This may have little meaning because of how recent these classes are. It is still very probable that some of the non-teaching graduates may take teaching positions in the future.

Number that have pursued graduate work. Information regarding the number of graduates who have pursued graduate work and in what fields was requested in the questionnaire. The number of graduates who have pursued graduate work, the hours or degrees completed, and the field pursued are shown in Table V, page 19. Twenty-five of the fifty-eight in this study have pursued some graduate work. Eight graduates have completed master's degrees or are working toward such a degree in industrial education, five graduates have completed or are working towards a degree in school administration, and

four graduates are working toward a master's degree in education. Other fields pursued are physical education, mathematics, business, and guidance. One graduate indicated that he was not pursuing any particular field and one graduate did not tell what field he was pursuing. Three graduates failed to indicate how many hours of graduate work they had completed.

A total of six graduates have master's degrees in some field. Five of these are industrial education teachers at present and one holds an administrative position in the State Office for Vocational Education. Table VI, page 20, indicates the number of graduates who have obtained a master's degree, the number who are pursuing a master's degree, and the number of graduates in this study.

TABLE V
NUMBER OF GRADUATE HOURS RECEIVED
AND FIELD PURSUED

Year	Graduate field pursued and number of hours completed	
	Majors	Minors
1952		
1953	Administration (M.A.)	Education (23)
1954	Ind. Ed. & Adm. (M.A.)	
1955		Education (18)
1956	Education (26)	Education & Adm. (32)
		Education (6)
1957		None (9)
1958	Industrial Arts (M.S.)	Field not given (?)
	Industrial Ed. T&I (M.S.)	
	Administration (M.A.)	
	Administration (9)	
	Administration (?)	
1959	Industrial Ed. T&I (M.S.)	Guidance (7)
	Industrial Ed. T&I (24)	
	Industrial Arts (5)	
	Physical Education (4)	
1960	Industrial Arts (9)	
	Industrial Arts (3)	
	Math (3)	
	Business (?)	
1961	Industrial Arts (21)	
	Administration (3)	

Number of majors pursuing graduate work: 18

Number of minors pursuing graduate work: $\frac{7}{25}$

Number of teaching graduates pursuing graduate work: 24

TABLE VI
NUMBER OF GRADUATES WHO HAVE PURSUED
OR COMPLETED GRADUATE WORK

Year	Number that have pursued graduate work	Number that have a master's degree	Number of graduates in this study
1952			2
1953	1	1	3
1954		1	2
1955	1		1
1956	3		8
1957	1		4
1958	3	3	9
1959	4	1	9
1960	4		8
1961	2		12
10 yr. total	19	6	58

CHAPTER III

OCCUPATIONS OR POSITIONS

GRADUATES HAVE HELD

Number of graduates who have taught. Table VII contains the number of graduates in this study, the number that have taught, and the number who are now teaching. The number who have taught industrial education subjects is also shown.

TABLE VII

NUMBER OF GRADUATES THAT HAVE ENTERED
THE TEACHING PROFESSION

Year	Number having taught	Number now teaching	Number having taught I.E.	Number in the study
1952	2	1	2	2
1953	2	2	2	3
1954	1	1	1	2
1955	1	1	0	1
1956	7	6	6	8
1957	2	2	1	4
1958	8	8	8	9
1959	6	6	5	9
1960	5	5	4	8
1961	8	8	6	12
10 yr. total	42	40	35	58

It may be noted from Table VII, page 21, that forty-two of the fifty-eight studied have been in the teaching profession and all but two of these graduates are teaching at the present time. Thirty-five of the forty-two teachers (83.3 per cent) have taught industrial education subjects.

Fields taught by industrial education graduates. Table VIII, page 23, lists the fields taught by industrial education graduates. Yearly teaching assignments have often included industrial arts plus one or two other fields. Table VIII, page 23, does not mean to infer, however, that the graduate has taught in all the fields shown during one school year. Teaching experience in the various fields shown may have been spread over a period of more than one year. Six cases are shown where graduates share similar teaching experience in that the teaching combinations were the same.

Industrial education graduates from Wichita University included in this study have taught within thirteen different fields. These fields, with the number of graduates that have mentioned them as being part of their teaching experience, are listed in Table IX, page 23.

In regard to the fields taught by the graduates, only five have taught solely in the field of industrial education.

TABLE VIII

TEACHING COMBINATIONS TAUGHT BY THE GRADUATES

Frequency	Field or Fields taught
5	Industrial Arts
7	Industrial Arts-Physical Education
4	Industrial Arts-Math
2	Industrial Arts-Science
1	Industrial Arts-Math-Science
1	Industrial Arts-Math-Science-Physical Education
1	Industrial Arts-Math-Social Studies-P. E.
1	Industrial Arts-Math-Social St.-P.E.-History-English
1	Industrial Arts-Math-History-P. E.-Deaf Oral
1	Industrial Arts-Science-History-P. E.
2	Industrial Arts-Drivers Ed.-P. E.
1	Industrial Arts-P. E.-Social Studies
1	Industrial Arts-History
1	Industrial Arts-Social Science
1	Industrial Arts-History-English-Reading
1	Industrial Arts-Business
1	Industrial Education (teacher preparation)
1	Industrial Education (vocational & teacher prep.)
1	Substitute Teacher (all fields)
1	History-Physical Education
1	Grades 7 & 8-Physical Education
3	Physical Education
1	Physical Education-Math
1	Math
1	Industrial Ed. (T&I "Coop" program coordinator)

TABLE IX

NUMBER OF GRADUATES THAT HAVE TAUGHT
IN THE MENTIONED FIELDS

Number	Teaching Field	Number	Teaching Field
35	Industrial Arts	2	Drivers Education
21	Physical Education	1	All 7&8 grade subjects
11	Math	1	Deaf Oral
6	History	1	Social Science
5	Science	1	Reading
3	Social Studies	1	Business
2	English		

Teaching experience in fields other than industrial education most mentioned are in the fields of physical education (mentioned twenty-one times), mathematics (mentioned eleven times), history (mentioned six times), science (mentioned five times), social studies (mentioned three times), English (mentioned two times), and drivers education (mentioned two times).

Teaching experience, for the most part, has been in the secondary schools. The exceptions being in the cases of those who have taught in teacher-training programs on the college level and the one who has taught grades seven and eight.

Type of industrial education program taught by the graduates. Industrial education is composed of industrial arts and vocational education. The two are similar in content but differ in purpose. Industrial arts is part of general education and vocational education exists for the purpose of preparing one for a specific job.

A large majority of the graduates have taught in the industrial arts program. Thirty-two have taught industrial arts subjects and three have taught industrial education subjects with a vocational emphasis.

Administrative positions held by the graduates. Two graduates have held administrative positions in the field of education. One graduate served as coordinator in a co-operative program in a vocational high school for three years. He then

accepted a position as Assistant State Supervisor of Trade and Industrial Education in Kansas. Another graduate has been coordinator of a technical program at the University of Wichita.

Non-teaching jobs (full time) held since graduation.

Table X, page 26, contains a list of occupations and positions held by the graduates other than teaching. These graduates did not enter the teaching profession immediately upon graduation, abandoned the teaching profession, or did not enter the teaching profession at all.

Seven of the graduates have accepted positions with one of the three aircraft factories in Wichita, Kansas (Beech, Cessna, or Boeing). Four have entered upon a military career. Two have played professional football and three have become insurance salesmen.

Very few graduates in this study having entered the teaching profession have left the profession for other employment. Only two have abandoned teaching to enter some other field. Five graduates took positions other than teaching after graduation but later became teachers.

Sixteen graduates, in this study, have not taught up to the present time but have chosen other positions or occupations.

Reasons for not entering or for leaving the teaching profession. Table XI, page 29, shows the reasons non-teaching graduates gave for abandoning or not entering the teaching

TABLE X

NON-TEACHING JOBS (full time) HELD SINCE GRADUATION

Date Held	Occupation or position	When held in relationship to teaching experience
1954-present	Ind. Engineering (Boeing)	After entering
1953-1954	Aircraft assembly (Beech)	Before entering
1953	Machinist (Beech)	
1953-present	Tool & production Eng. (Boeing)	Instead of entering
1954-present	Engineering department (Boeing)	Instead of entering
1956-present	B-47 Navigator (U.S.A.F.)	Instead of entering
1956-1958	Lab. Technician (Boeing)	Before entering
1956-1958	Pro. Football player-coach	Before entering
1958-present	Hospital recreation specialist	After entering
1960-present	Licensed funeral director	Instead of entering
1957-present	Assistant manager, Western Auto.	Instead of entering
1958-1960	Recreation Adm. (Cessna Aircraft)	
1960-present	Merchandiser for Dockum Drugs	Instead of entering
1958-1960	Pro. Football	Before entering
1959-present	Pilot in U.S.A.F.	Instead of entering
1959-present	Regular Army Officer	Instead of entering
1959-1960	Punch press operator	
1960-present	Assistant Manager of super market	Instead of entering
1960-present	Draftsman (State Highway Comm.)	Instead of entering
1960	Inspector (Cessna Aircraft)	
1960-present	U. S. Army Officer	Instead of entering
1960-1961	Tool Engineer (Boeing)	
1961-present	Insurance Salesman	Instead of entering
1961-present	Department manager (Davids)	Instead of entering

(continued on next page)

TABLE X (continued)

Date held	Occupation or position	When held in relationship to teaching experience
1961-present	Insurance salesman	Instead of entering
1961-present	Chesney Ranch	Instead of entering
1961-present	Insurance salesman	Instead of entering
1959-1961	Camping & Physical Director (YMCA)	Before entering

Number of graduates accepting full time
non-teaching occupations or positions 23

Number of graduates accepting full time
non-teaching occupations or positions
after having been in the teaching profession 2

Number of graduates accepting full time
non-teaching occupations or positions
before entering the teaching profession 5

Number of graduates accepting full time
non-teaching occupations or positions
instead of entering the teaching profession 16

field according to relative importance. Each non-teaching graduate was asked to check the reasons submitted in the questionnaire which were under the following headings: most important, fairly important, and not important.

As shown in Table XI, page 29, of the study, "better opportunities in industry" is the primary reason the largest number of graduates abandoned or did not enter the teaching profession. This response seems to indicate Industrial Education has been helpful in giving the non-teacher these industrial opportunities. "Poor salary" seems to be next as the most important reason graduates are not in the teaching profession. The findings in this study were very similar to those found by Miranda in his study concerning graduates from Kansas State College of Pittsburg.¹⁶ In Miranda's study "better opportunities in industry" and "poor salary" were also the most important reasons why graduates had not entered or had left the teaching profession.

Reasons: "over worked," "poor tenure," and "insufficient training" seem to be of little importance for the graduate's not now teaching.

Each reason was to be checked as to relative importance by the graduate not now teaching. This was not done however by all of the non-teaching graduates.

¹⁶Miranda, op. cit., pp. 11-16.

Three reasons listed in Table XI were written in by the non-teaching graduates.

TABLE XI

REASONS FOR NOT ENTERING OR LEAVING
THE TEACHING PROFESSION

Reason	Most important	Fairly important	Not important
Better opportunities in industry	10	1	2
*Career in USAF	3	0	0
Dislike teaching	3	3	6
*Greater professional service elsewhere	1	0	0
Insufficient training	1	1	7
Lack of advancement	3	1	4
*More experience in business	2	0	0
Over worked	0	1	8
Poor salary	8	4	1
Poor tenure	1	1	7
Teaching position not available	2	2	7

* Written in by the respondents.

CHAPTER IV

EVALUATION OF COURSE WORK

Rating of courses taken by graduates as compared to those courses which have been taught. Fifty-eight graduates rated the courses taken in terms of helpfulness to them. The four most helpful courses were drafting, woodwork, methods, and practice teaching. Most of the returns indicate, in general, the courses are helpful regardless of what occupation or position the graduate obtained. This is particularly true of the laboratory courses.

The courses that have been taught by the graduates and the ratings they have given courses taken at Wichita University are shown in Table XII, page 31.

The individual graduate tended to be fairly consistent in rating the courses he took at Wichita University. If, for example, he rated drafting as "very helpful" he tended to rate the other courses high also. Some rated nearly all courses as "little help" while others rated nearly all courses as "very helpful."

There seem to be mixed feelings about the value of a few courses. Among them are History and Philosophy of Industrial Education, Introduction to Industrial Education, and Organization and Administration of Industrial Education. In rating the helpfulness of Introduction to Industrial Education fourteen rated it as "very helpful," fourteen rated it as

TABLE XII

RATING OF COURSES TAKEN BY GRADUATES
AND COURSES THEY HAVE TAUGHT

Very helpful	Some help	Little help	Course	Taught
34	15	1	Drafting	22
18	18	6	Design	3
			Unit woodwork	
29	13	4	-Hand woodwork	17
27	8	3	-Machine woodwork	14
24	16	3	-Wood finishing	12
12	7	2	-Cabinet making	4
6	6	3	Thermal metals	
			-Welding *	4
			-Forging *	2
			-Foundry *	3
10	7	3	Unit machine shop	5
			Unit bench metal *	5
7	11	3	Unit sheet metal	5
5	4	1	Unit art metal	2
			Unit plastics *	
			Electronics *	5
			Carpentry *	
			General woodwork *	11
			General metalwork *	4
			General printing *	1
10	6	5	General electricity	9
5	3	3	General auto mechanics	4
			General crafts *	
			General composite shop *	2
19	19	4	Shop maintenance	
18	12	7	Technology of materials	
14	14	15	Introduction to Industrial Ed.	
18	14	8	Organization & adm. of ind. ed.	
10	15	15	History & Philosophy of ind. ed.	
24	9	5	Methods	
32	7	3	Practice teaching	

* Not offered at Wichita University

"some help," and fifteen rated it as "little help." History and Philosophy of Industrial Education was rated by ten graduates as "very helpful," fifteen graduates as "some help," and by fifteen graduates as "little help." Organization and Administration of Industrial Education was rated by eighteen as "very helpful," by fourteen as "some help," and by eight graduates as "little help." Graduates that became teachers rated these three courses higher than the non-teaching graduate. Tabulation of teacher and non-teacher response to these three courses is shown in Table XIII, page 33.

Not all graduates checked the middle page of the questionnaire sheet which was concerning course rating. Perhaps some flipped two pages instead of one when turning the pages of the three page questionnaire. Two indicated that they did not check the value of the course because they were not teaching and one said that even though he was not teaching he felt that all courses he had taken were very helpful to him.

The graduates had some difficulty differentiating between the terms "general shop," "unit shop," and "general composite shop" even though definitions of these terms were given on the questionnaire sheet. Only two indicated they had taught a "general composite shop" but many tried to fill in section "K" of the questionnaire which asked for the general composite shop areas in which they had taught. Because of this misunderstanding section "K" is omitted in this report.

TABLE XIII

TEACHER AND NON-TEACHER COMPARATIVE RATINGS OF INTRODUCTION,
ORGANIZATION AND ADMINISTRATION, AND HISTORY
AND PHILOSOPHY OF INDUSTRIAL EDUCATION

		Very Helpful	Some Help	Little Help
Introduction to Industrial Education	Teacher	14	9	7
	Non-teacher	0	5	8
Organization and Administration	Teacher	17	12	2
	Non-teacher	1	2	6
History and Philosophy	Teacher	9	12	9
	Non-teacher	1	3	6

Difficulty of graduates' finding available employment in areas (wood, metal, etc.) in which they had been trained. An attempt was made to find if the graduates were being trained properly for the jobs that were available and if some courses were being over emphasized at Wichita University. Thirty-three of forty-one (80.5 per cent) answering this item stated they had no difficulty in obtaining positions in the areas in which they had been trained and eight of forty-one (19.5 per cent) said they had difficulty.

The graduates seem to have little or no regrets as to the course areas they pursued while at Wichita University. They do, however, give expression to the idea that some courses should be added to the curriculum, some should possibly be dropped, while others need more emphasis. These notions will be discussed in the following chapter.

CHAPTER V

COMMENTS MADE BY GRADUATES

Industrial education courses that need to be taught or emphasized more at Wichita University. Graduates were asked to list courses they felt were needed in the course of instruction in the industrial education department at Wichita University. They were also asked to list any courses needing more emphasis. Graduate response to this request was quite varied but certain subject matter areas were mentioned often. Metalwork, electricity, plastics, and teaching methods were among subject matter areas most mentioned by graduates as needing more emphasis. There have been no courses in plastics at Wichita University.

Table XIV, page 36, indicates graduate response concerning courses needing more emphasis or courses that should be inserted into the curriculum. The number of graduates making a particular response is shown for each of the ten years. The total making such a response is also given.

Comments on the value of industrial education training completed by the graduates. The graduates were asked to respond to the following request: "In view of your past accomplishments and present position, please comment on the value of the program completed by you at the University of Wichita in the field of industrial education." Thirty-five

TABLE XIV

COURSES WHICH NEED TO BE TAUGHT OR EMPHASIZED
MORE AT WICHITA UNIVERSITY

Course	52	53	54	55	56	57	58	59	60	61	Total
Metalwork			1				3	5	3	2	14
Welding					1		1				2
Foundry						1					1
Machine drawing								1			1
Electricity					2		2	2	1	3	10
Electronics			1				3	1	1	1	7
Appliance repair							1				1
Plastics			1		1	1	2	1	2	1	9
Hand crafts							1			1	2
Teaching methods	1	1			1	1		2	2		8
Problems of the classroom									1		1
Educational psychology						1					1
Auto mechanics					1		2		2		5
Drafting			1		1		1	2			5
Design				1				1	1		3
Shop maintenance	1				1			1		2	5
Org. & Administration		1					1	1	1		4
Printing					1				1	1	3
Woodwork					1			1		1	3
Wood finishing	1				2			1			4
Wood sources (study of)	1										1
Furniture renovation										1	1
All courses except wood							1	1		1	3
Graduate courses							2	1			3
General composite shop							1	1			2
Math for majors						1					1
Shop safety	1										1
Layout & planning of shop	1										1
Practical work					1						1
Relate arts to science						1					1
Jig making (all areas)							1				1
Technology of materials										1	1
Clerical work in ind. arts										1	1

Number of teachers commenting on this section - 33

Number of non-teachers commenting on this section - 6

teaching graduates made such comments and thirteen non-teaching graduates commented. These comments are grouped into (1) non-teacher comments and (2) teacher comments.

(1) Non-teacher comments: The non-teaching graduates seem to be quite happy with their industrial education training. Only two graduates failed to say anything favorable about the course completed. A 1954 graduate stated; "At the time I attended W.U. the I.E. Dept. was floundering to keep alive with one instructor, it was in its infancy and lacked the planning and curriculum necessary for a full fledged degree in I.E." Another graduate (1958) commented; "To date it hasn't been of much value because of my work to date. I have had no relation to the course completed." A 1961 graduate states; "All of the shop I had is a help to me in my farming operation. However I do not think that the classes taught in some areas such as auto mechanics and electricity really give enough background to teach the subject. Woodwork seems to be the only subject which is really well taught at W.U."

Most of the non-teaching graduates made statements which are complimentary to the department. A 1959 graduate made the following statement: "Although I have not used my training in the teaching field, I think that the University of Wichita has an excellent industrial arts program.", and another 1959 graduate said; "Very beneficial to me and I assume to anyone

who has intentions to pursue a career in the teaching field. . . ." Two non-teaching graduates stated industrial education was of great interest to them and as such would always be valuable to them.

Several non-teaching graduates have obtained jobs in the industrial field and are thankful for their industrial education training at Wichita University. One states; "The courses I took in drafting helped me to obtain a job with the Highway Commission. . . ." Another comments; "In my present position what I learned was of great value. I work as mgr. of an hardware dept. . . ." A machinist said; "In my estimation, the courses which were most helpful to me in the field of industry were those courses which dealt with the machining of metal, forming of metals, and general properties of metals."

Two life insurance salesmen indicated appreciation for their completed industrial training. Both stated their training helps them to communicate with their clients. They work with people from all walks of life.

One non-teaching graduate gave a very detailed statement of why he thought industrial education at W. U. was valuable. "I believe the value of the industrial education program at W. U. has its own significance. It gives you a better outlook on the industrial field, enables you to work not only as a

teacher but as a laborer in a factory. It gives you a better chance for a factory foreman's job. The classes of drafting, design, etc. help you in your home workshop and in selecting your own home and furniture."

(2) Teacher comments: Seven teaching graduates in this study are teaching in some field other than industrial education. Five of these graduates commented on the value of their industrial education training. One, who has been unable to find an industrial education teaching position, said his industrial education training at W. U. was "Very shant." Another graduate not teaching industrial arts said the training he had received was "Very beneficial." A grade school teacher said he had not used any information acquired in industrial education. One graduate expressed the idea that courses in wood, metal, etc. should be taught as methods courses rather than courses in how to construct something. He said that a course in teaching techniques is more beneficial than a course in construction methods. His ideas stem from graduate work in another institution. Industrial education at W. U. was valuable to another because; "By the University having industrial ed. available for me, it gave me an interest in college. . . ."

A major portion of the graduates in this study were teachers of industrial education subjects. All but four

Industrial education teachers commented on the value of their industrial education training. Most of these seem to have spent a great deal of time and thought in the preparation of their statements. In commenting on the program the graduates included thoughts concerning the following:

- (1) Finances and facilities of the department.
- (2) W. U. Industrial Education staff.
- (3) Course emphasis at Wichita University.
- (4) Graduates desire to continue Industrial Education training.
- (5) Complimentary statements concerning the Industrial Education program at Wichita University.

(1) Finances and facilities of the department. Graduates often expressed the idea that the industrial education department was undermanned and poorly financed. Some stated that facilities were poor and there was a lack of adequate equipment. An early graduate said; "The program at the University could be strengthened by the administration of the school. Its status should be on an equal with engineering rather than subordinate to it."

(2) W. U. industrial education staff. Most comments concerning the industrial education staff centered around Mr. Cox. Mr. Cox has been chairman of the department since its beginning in 1952. Graduates throughout the past ten years have expressed admiration for Mr. Cox. A graduate of 1952 stated; "Mr. Cox, the instructor at that time made many impressions on me, which I did carry into teaching. His methods of teaching were informal, which I liked very much and

I feel I did learn much more that way. . . ." Near the close of Mr. Cox's chairmanship (1961) one graduate seemed to express the thought of many. He said; "Mr. Cox is the heart of W. U.'s industrial education dept. and will be hard to replace." A graduate of 1958 comments; ". . .the most value I received from the program was not the subject matter but the reaction with Mr. Cox. In him I found a friend as well as a professor at a time when I needed that kind of relationship most."

Some graduates made comments concerning other members of the staff. Some were glad that a youthful, dedicated, and qualified person had been added (1959) to the staff. One graduate said Mr. Cox had been a hard worker and had accomplished very much. Knowing that Mr. Cox had nearly reached retirement age, this graduate believed a younger man with youthful ambition and ideas was needed as Head of the Department.

(3) Course emphasis. Graduates, in general, have the opinion that courses at Wichita University are not given equal emphasis. The thought is not that some courses are over emphasized but that some courses are under emphasized. A typical statement was made by a 1961 graduate. "The program was excellent in the wood field, however, all other fields were neglected somewhat. As I was not a woods man the program wasn't as useful as it could have been." Courses in metalwork,

electricity, auto mechanics, drafting, and others have not covered the field well enough according to some graduates. A graduate of 1960 made the following comment and suggestion: "The present program is very good, but might be improved to give a little more overall picture and understanding in all ind. ed. teachers graduating. In other words require all to take some basic course in woodwork, general metals, technical drawing, electricity, auto information, etc. Then would come the specialization."

(4) Graduate's desire to continue industrial education training. Several teaching graduates wish they had obtained a major rather than a minor in industrial education. Others who majored in industrial education are looking forward to graduate work in this field. Some were hoping that graduate work in industrial education would soon be available at Wichita University.

(5) Complimentary statements concerning the industrial education program at Wichita University. A partial list of complimentary remarks made by graduates is given below.

The Wichita University industrial education department, although small as compared to many universities and colleges, is covering almost all of the subjects in the field and is doing a very good job.

I do not feel that W. U. Ind. Arts men need take the back seat to those of others schools. However, I do think that the men from some of the other schools. . . receive better job opportunities.

The value of the program cannot truly be measured but if I had not obtained the training I would not have my present job. . . . Teaching is a good life. . .

The entire program at W. U. was of direct benefit to me. . . . In my estimation W. U. I. A. was a practical education that helped prepare me for the work I am now in.

I owe much to the ind. ed. department at W. U. In this dept. my greatest interests were developed and satisfied.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary. The purpose of this study was to ascertain the occupations of the 1952 through 1961 graduates' of Wichita University's industrial education department, and what implications these occupations hold for the industrial education department at Wichita University and similar departments of other institutions. To obtain the necessary information, questionnaires were sent to the graduates. There were fifty-eight returns from the eighty-two possible or 70.73 per cent of the questionnaires were returned. The following is a summary of the findings:

1. Of the fifty-eight respondents, forty-five (77.6 per cent) worked while attending Wichita University. Many of these worked a forty-hour week or more. Eighteen graduates had athletic scholarships and some were receiving Veterans' Administration benefits.
2. Thirty-eight of fifty-eight (65.5 per cent) served in the military an average of 36.6 months. Seventeen of the thirty-eight received industrial training while in the military.
3. Thirty-five of the fifty-eight graduates (60 per cent) became teachers of industrial education subjects. Twenty-five of the thirty-five (71.4 per cent) who intended to teach while in industrial education at Wichita University actually became industrial education teachers, while eight of the

seventeen (47 per cent) undecided graduates became teachers. Two of six (33 per cent) not intending to teach became teachers of industrial education subjects. Twenty-seven out of the thirty-five teachers (77 per cent) became teachers immediately upon graduation.

4. Twenty-five of fifty-eight (43.1 per cent) have pursued graduate work. A total of six graduates have master's degrees. Four of these are industrial education teachers, at present, and two hold administrative position in industrial education.

5. Forty-two of the fifty-eight studied, or 72.4 per cent have been in the teaching profession and all but two of these graduates are teaching at the present time.

6. Industrial education graduates from Wichita University have taught within thirteen different fields including industrial education. Only five have taught solely in the field of industrial education.

7. Thirty-two graduates have taught in an industrial arts program and three have taught in a vocational program.

8. Occupations and positions among the non-teaching graduates varied. Seven accepted positions with one of the three aircraft factories in Wichita, Kansas. Four have entered upon a military career. Two have played professional football and three have become insurance salesmen. These are a few of the positions listed by the non-teaching graduates.

9. The two most important reasons given by non-teaching graduates for not teaching were better opportunities in industry and poor salary in the teaching profession.

10. The graduates rated the courses taken in the industrial education department at Wichita University in terms of helpfulness to them. The four most helpful courses were drafting, woodwork, methods, and practice teaching. There were mixed feelings about the value of a few courses. Among them were History and Philosophy of Industrial Education, Introduction to Industrial Education, and Organization and Administration of Industrial Education.

11. The graduates had some difficulty differentiating between the terms "general shop," "unit shop," and "general composite shop" even though definitions of these terms were given on the questionnaire sheet. Only two indicated they had taught a general composite shop. There is reason to believe that many more have taught in a general composite shop.

12. Thirty-three of the forty-one (80.5 per cent) stated they had no difficulty in obtaining positions in the areas in which they had been trained and eight of forty-one (19.5 per cent) said they had difficulty.

13. Metalwork, electricity, plastics, and teaching methods were among subject matter areas most mentioned by graduates as needing more emphasis.

14. Thirty-five teaching graduates made comments upon the

value of the industrial education program completed by at the University of Wichita and thirteen non-teaching graduates made such comments. The non-teaching graduates seemed to be quite happy with their industrial education training. Only two non-teaching graduates failed to say anything favorable about the course completed. The teaching graduates comments involved thoughts concerning the following:

(a) Finances and facilities of the department:

Graduates often expressed the idea that the industrial education department was undermaned and poorly financed.

(b) Wichita University's industrial education staff:

Most comments concerning the staff centered around Mr. Cox, the chairman of the department since its beginning in 1952. Graduates throughout the past ten years have expressed admiration for Mr. Cox.

(c) Course emphasis at Wichita University: Graduates, in general, have the opinion that courses at Wichita University are not given equal emphasis. Woodwork was excellent but all other fields were neglected somewhat.

(d) Graduates desire to continue industrial education training: Several teaching graduates wish they had obtained a major rather than a minor in industrial education. Others who majored are looking forward to graduate work in this field, possibly at Wichita University.

(c) Complimentary statements concerning the Industrial Education program at Wichita University: Graduates in general feel indebted to the industrial education department at the University of Wichita. Many heart-warming statements were given to those responsible for the training they received.

Conclusions.

1. Many men were able to attend Wichita University rather than some other university because of the job opportunities afforded them by the industrial atmosphere of Wichita, Kansas. The industrial education department can point to many such graduates.
2. Better opportunities in industry and poor salaries in the teaching profession are keeping some qualified graduates out of the teaching profession, however, Wichita University's industrial education teaching graduates have very strong tendencies to remain in the teaching profession.
3. Industrial education graduates have often taught a variety of subjects in addition to industrial education; graduates have benefited from the broad training they received while at Wichita University.
4. Graduates desire courses in industrial plastics. Courses in metalwork, electricity, and teaching methods need greater emphasis. The industrial arts program at Wichita

University needs to be expanded.

5. Industrial education graduates seem to be unfamiliar with shop terminology. The terms unit shop, general shop, and general composite shop are not understood by some of the graduates. This is due in part to the philosophy of the department concerning types of shops.

6. In view of interest shown in graduate work and due to the write-in comments made in this regard, it can be concluded that advanced work at Wichita University leading to a master's degree in industrial education was desired by many graduates.

7. The industrial education department at Wichita University from 1952 through 1961 has done a commendable job according to the respondents. The lack of adequate finances, facilities, and equipment have been a hindrance but the department has grown in spite of these obstacles. The positions attained and the accomplishments gained by its graduates speak for the worth of industrial education at Wichita University.

Recommendations.

1. Follow-up studies of Wichita University's industrial education graduates should be made every five years or more often if possible.

2. The industrial education department should continue

to seek adequate finances so that a bigger and better job can be done. In the mean time the department should look for ways to best use existing facilities.

3. Greater emphasis should be given to metalwork, electricity, and teaching methods. Work in industrial plastics should be incorporated into the program.

4. The department should encourage students to take basic courses in more areas before they go on to advanced or specialized work in specific areas. Example: The student should take basic courses in electricity, metalwork, drafting, woodwork, etc., before taking woodwork II, cabinet making I, and cabinet making II.

5. Wichita University should study possibilities for a graduate program in industrial education.

6. The industrial education department should do everything possible to make the teaching profession attractive to its students.

BIBLIOGRAPHY

Unpublished Materials

- Atteberry, Pat Herman, "The Status of Industrial Education in the Junior Colleges of the United States," Unpublished Master's Thesis, Kansas State College, Pittsburg, 1952.
- Ensmen, Leo M., "An Investigation on Trends in Industrial Education in Junior and Senior High Schools of Kansas Since 1944," Unpublished Master's Thesis, Kansas State College, Pittsburg, 1950.
- Forbes, Howard Denman, "An Examination of the Professional Education Program for Elementary Teachers at Kansas State Teachers College Pittsburg, Kansas," Unpublished Master's Thesis, Kansas State College, Pittsburg, 1949.
- Gonser, Martin E., "A Follow-Up Study of Graduates With Majors in Industrial Education from 1935-1949," Unpublished Master's Thesis, Kansas State College, Pittsburg, 1950.
- Hastings, James R., Ed. D., "An In-Service Education Program for Teachers of Industrial Arts in New York State," Unpublished Doctor's Dissertation, New York University, New York, 1953. (Mimeographed)
- Miranda, Jess, "A Study of Teaching and Non-Teaching Graduates in Industrial Arts of Kansas State Teachers College, Pittsburg, from 1950-1955," Unpublished Master's Problem, Kansas State College, Pittsburg, 1958.
- Nagel, William Edward, "A Program of Industrial Education for the Municipal University of Wichita," Unpublished Master's Thesis, University of Wichita, 1948.
- Starkey, Harry Arthur, "A Survey of the Industrial Arts Programs of the Colleges and Junior Colleges of Kansas," Unpublished Master's Problem, Kansas State College, Pittsburg, 1941.
- Walker, Dempsey Logan, "Requirements for the Baccalaureate Degree in Industrial Arts Education in Twenty-Five Colleges and Universities," Unpublished Master's Thesis, Kansas State College, Pittsburg, 1955.

Bulletins

Municipal University of Wichita, Biennial Catalog 1946-47;
1947-48.

Superintendent of Public Instruction Lansing, Michigan,
Determining Occupational Training Needs through
Occupational Surveys and Follow-Up Studies. Bulletin
291, Published by Office of Vocational Education,
Department of Public Instruction, Lansing, Michigan,
1948.

APPENDIX

August 14, 1961

Wayne Becker
633 S. Belmont
Wichita 18, Kansas

Dear Sir:

You are being contacted along with other Wichita University Industrial Education graduates to determine the occupations of Wichita University's Industrial Education graduates from 1952-1961, and the implications they hold for the industrial education department at Wichita University.

I am a Wichita University Industrial Education graduate of 1958 and am now pursuing a course leading to a Master's degree at K.S.C. of Pittsburg. This work has been approved by the Industrial Education Departments of K.S.C. Pittsburg and Wichita University.

Enclosed you will find a questionnaire and stamped, addressed envelope. Please fill out the questionnaire and return it by October 1st if possible. This will be very greatly appreciated.

Sincerely yours,

Wayne Becker

Wayne Becker

A FOLLOW-UP OF WICHITA UNIVERSITY'S INDUSTRIAL
EDUCATION GRADUATES, FROM 1952-1961

- A. Did you receive a B.A. in Education involving industrial education?
yes() no() major() minor() year received _____
- B. At the time you were pursuing college work, was it your intention to
become a teacher of industrial education? yes() undecided() no()
- C. Did you work to obtain financial support while attending W.U.?
yes() no() How many hours did you work per week? _____
Was this work closely related to industrial education? yes() no()
Were you attending W.U. on a scholarship? yes() no()
- D. Have you served in the military? yes() no() number of years _____
Did you receive any industrial training while in the military?
yes() no() list kind _____
- E. Have you taken any graduate work? yes() no() field pursued _____
_____ hours or degrees received _____
- F. Have you taught industrial education subjects? yes() no() List any
other subjects you have taught. _____
- G. Did you enter the teaching profession immediately upon graduation
from Wichita University? yes() no()
- H. Please list the teaching positions you have held since graduation.
Also list school, type of program (industrial arts, vocational trade
& industrial, or vocational agriculture), and when taught (1952-1961).

POSITION

SCHOOL

TYPE PROGRAM

YEAR

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

- I. Please list non-teaching positions you have held since graduation.

POSITION or OCCUPATION

COMPANY

LOCATION

YEAR

_____	_____	_____	_____
_____	_____	_____	_____

J. Please check the courses you have taken at W.U. in terms of helpfulness to you. Also check the courses you have taught.

VERY HELPFUL	SOME HELP	LITTLE HELP	COURSE	TAUGHT
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Drafting.....	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Design.....	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unit Woodwork*	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-hand wood.....	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-machine wood.....	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-wood finishing.....	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-cabinet making.....	<input type="checkbox"/>
			Thermal Metals	
			-welding.....	<input type="checkbox"/>
			-forging.....	<input type="checkbox"/>
			-foundry.....	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unit Machine Shop.....	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unit Bench Metal.....	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unit Sheet Metal.....	<input type="checkbox"/>
			Unit Art Metal.....	<input type="checkbox"/>
			Unit Plastics.....	<input type="checkbox"/>
			Electronics.....	<input type="checkbox"/>
			Carpentry.....	<input type="checkbox"/>
			General Woodwork**.....	<input type="checkbox"/>
			General Metalwork.....	<input type="checkbox"/>
			General Printing.....	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	General Electricity.....	<input type="checkbox"/>
			General Auto Mechanics.....	<input type="checkbox"/>
			General Crafts.....	<input type="checkbox"/>
			General Composite Shop***.....	<input type="checkbox"/>
			Shop Maintenance	
			Technology of Materials	
			Introduction to Industrial Ed.	
			Org. & Administration of Ind. Ed.	
			H & P of Industrial Ed.	
			Methods	
			Practice Teaching	
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

* The Unit Shop is confined to a single activity: Hand wood, machine wood, finishing, or turning, etc. (specialization)

** A Limited General Shop is confined to a single field of industry offering several units of a specific field. A general wood shop might consist of hand wood, machine wood, and finishing.

*** A General Composite Shop offers a variety of individual activities cutting across shop fields (as wood, metal, plastics, drafting, and electricity). This type of shop is highly exploratory in nature.

K. Please check the general composite shop areas in which you have taught.

<input type="checkbox"/> Woodwork	<input type="checkbox"/> Foundry	<input type="checkbox"/> Plastics
<input type="checkbox"/> Metalwork	<input type="checkbox"/> Drafting	<input type="checkbox"/> Crafts
<input type="checkbox"/> Machine Shop	<input type="checkbox"/> Auto Mechanics	<input type="checkbox"/> _____
<input type="checkbox"/> Welding	<input type="checkbox"/> Electricity	<input type="checkbox"/> _____

L. If you did not enter the education field or have left the field for other employment, please check the column which indicates the reason as to relative importance in your case.

REASON	most important	fairly important	not important
Over Worked.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor Tenure.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor Salary.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dislike Teaching.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of Advancement.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teaching Position not Available.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insufficient Training.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Better Opportunities in Industry.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

M. Has it been difficult for you to find available teaching positions in the areas (wood, metal, etc.) in which you have been trained?
yes() no()

N. What industrial education courses need to be taught or emphasized more at Wichita University?

1. _____	4. _____
2. _____	5. _____
3. _____	6. _____

O. In view of your past accomplishments and present position, please comment on the value of the program completed by you at the University of Wichita in the field of industrial education.

P. Do you desire a summary of the findings of this study? yes() no()

Your Address: _____

Return to: Wayne Becker
 633 S. Belmont
 Wichita 18, Kansas

COPY

REMINDER CARD

Dear Sir:

I have had excellent cooperation in the study "A Follow-up of Wichita University's Industrial Education Graduates from 1952-1961. I am quite sure that your opinion would be of great value, but as yet I have not received it.

It would facilitate this study if the questionnaire were returned at your earliest convenience. Thank you.

Sincerely yours,

Wayne Becker