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A STUDY OF THE IN-PLANT TRAINING
PROGRAMS IN KANSAS

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

PORTER LIBRARY

By

Charles A. Campbell

KANSAS STATE COLLEGE OF PITTSBURG
Pittsburg, Kansas
August, 1961

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The writer would also like to extend his deepest appreciation to his wife, Peg, for her never-ending patience and understanding during the writing of this study, and to his parents for their encouragement and help in obtaining this degree.

ABSTRACT

This study has been made for the purpose of gaining general knowledge and understanding of the industrial in-plant training programs in Kansas.

Information gathered concerning Kansas industrial training programs was obtained by the use of a questionnaire sent to one hundred Kansas industries.

It was found there is a very wide range of in-plant training programs operated by the various industries. Each plant, due to its nature of work, was responsible for this variation in training programs. Of the eight basic training programs set up by this study, on-the-job training was most used by the companies contacted.

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CHAPTER I

INTRODUCTION

Statement of the Problem

This study was concerned with the industries in Kansas which offered some type of in-plant training to their employees.

The study has dealt primarily with the organization and administration of these various programs.

Industry today with its advanced methods and high rate of production must meet these needs with qualified personnel. These needs are met to a certain extent by having an in-plant training program.

Purpose of the Study

The writer has endeavored to gather material and interpret the findings to gain a general knowledge concerning the organization and administration of the in-plant training programs in Kansas industries.

Subordinate questions answered in this study:

1. The type or kind of training programs offered by the companies.
2. The purpose of various programs.
3. The length of various programs.

4. The cost of the programs.
5. The instructors.

Need for the Study

The subject of in-plant training programs has very little written information concerning the organization and administration of this type of program. Due to the lack of information the writer feels that a study of this topic is in need.

In this age of rapid industrial advancement millions of dollars are spent by a single company to train its employees. Charles R. Reagon wrote:¹

As a general principle, we feel it to be our responsibility to give any employee the training needed to adequately equip him to fulfill any job we assign him. This training is given him on company time and at no cost to him.

Limitations of the Study

This study is limited to the various industries in Kansas. The various in-plant training programs offered in these industries cover a wide range. This is due to the fact that no one certain industry is singled out for its program.

¹Personal letter from Charles R. Reagon, Training Specialist, E. I. DuPont de Nemours and Co., Inc., Topeka, Kansas. May 1, 1961.

Kansas now has production in 375 of the 448 industrial categories recognized by the Standard Industrial Classification of the U. S. Bureau of the Budget. There is a listing of 3,677 Kansas industries.²

Definition of Terms Used

In-plant Training program: In-plant training is a term referring to training programs set up by a company to give employees the opportunity for self-improvement to better qualify the trainee for his work.

²John H. Sticher. A Directory of Kansas Manufacturers and Their Products (1960-61 edition: Topeka: The Economics Research Division of the Kansas Industrial Development Commission, State Office Building).

CHAPTER II

GENERAL BACKGROUND OF IN-PLANT TRAINING

Background

In-plant training is not a new phase of education. Training of this nature extends back in history as far as the apprenticeship type of schooling. During this time the training was on a much smaller scale than it is today, but nevertheless this was one form of in-plant training.

In Germany, during the seventeenth century, individual continuation schools were established with the employers paying part of the expenses for the training of the employees. This type of program benefited the smaller industries which could not afford to operate a training program in their plants. The larger industries which could afford such a program had their own apprentice schools for purposes of technical education.

At the turn of the eighteenth century, American public schools had very little concern for industrial education. This caused many of the large industries to develop and operate apprenticeship schools.¹ These apprenticeship schools and many other types of industrial training programs have

¹George M. Price, M.D., The Modern Factory (New York: John Wiley & Sons, Inc., 1914), p. 340.

developed into very modern and expensive in-plant training programs.

Industrial training today is most important because of the decrease in unskilled workers and the rapid increase of skilled and semi-skilled workers.

With the present challenge to industry, the rapid advancement of technical knowledge, and the fast moving pace of product output, industry is trying to meet this challenge by means of training its employees to adjust to this challenge. This can only be done by developing a well organized and administered in-plant training program. If a company can cut down on material waste, save time, gain better relationships with its employees, and produce better products at less expense, then in-plant training programs are partially meeting the challenge of this modern industrial age.

Responsibilities of the Training Director

The in-plant training program is usually set up by a company training director. The training director usually has professional teaching experience and performs four major functions:

1. He determines the needs for training by helping to decide which skills each trainee should acquire.
2. He teaches or supervises teaching both on and off the job.

3. He encourages the whole organization to develop a willingness to learn.
4. He reviews the training results and reshapes the program to fit company needs.

In the smaller companies a training committee may be set up to take the place of the full time training director. Help and advice may be received from outside sources, such as colleges and other industries. After much planning and organization the in-plant training program will be put in operation.²

During the war years in-plant training programs were developed to meet the pace of war production. Short intensive in-plant training courses were set up to meet the needs of the industries. Industry needed a vast amount of workers for war production, and the only way to train the new workers was by means of the in-plant training program. Most of these programs were organized to develop machine operators. This type of training was provided in different ways depending upon the size, needs, and desires of the industry.

²Lawrence L. Bethel, Franklin S. Atwater, George H. E. Smith and Harvey A. Stackman, Jr., Industrial Organization and Management (New York: McGraw-Hill Book Company, Inc., 1956), p. 430.

Employee Training Group

A program for training employees for industrial occupations according to Cushman may be divided into three major groups:

1. Those who have neither the knowledge nor the skill necessary to do the work required on the jobs for which they are employed.
2. Those who have a portion of the knowledge or skill necessary to meet the requirements of their jobs.
3. Those who have at least the minimum knowledge and skill necessary to come up to a passable standard of performance in their work.³

Evaluation of Training

In evaluating the results of training which employees were given, the following facts were established by Ariss and Sutton:

1. It is found that without training a very large percentage of workers make no creative efforts and even attempt to avoid normal responsibilities. With training, creative efforts appear and in many cases there is an assumption of responsibility.
2. Training provides an excellent vehicle whereby interested and ambitious men may obtain accurate information regarding the company's policies and general methods of conducting operations.

³Frank Cushman, Foremanship and Supervision (New York: John Wiley & Sons, Inc., 1927), p. 79.

3. Training helps to develop a good attitude or morale in a department.
4. Training eliminates difficulties in maintaining proper production.
5. Training improves and clarifies understanding between employees and management.
6. Training improves the supervisor's opportunity for advancement.
7. Training enables a supervisor to have trained men available when needed. It is thus possible to build up a reserve of men who know the requirements of the department.
8. Training is of strategic importance in the attempts to adjust to the present-day social changes.
9. Men who have received training think about the company's activities beyond the limitations of their particular job.
10. It enables a supervisor after his men have been trained to spend more of his time managing and supervising.
11. Good training helps to reduce accidents. Training calls attention to safety measures.
12. Training helps to lower production costs and to decrease the amount of waste.
13. Training helps to develop men in the departments. In every department there are men who have the personal qualifications for advancement to supervisory work but who lack an understanding and appreciation of production problems that come from practical experience.
14. Training develops confidence in the worker.
15. Training develops a flexible organization.

16. Training develops loyalty to and appreciation of the company policies; this reduces turnover.
17. Training improves quality of product.⁴

National Cooperative Refinery Association
Supervisory Development Program

To indicate what one modern training program is doing, the writer would like to review the in-plant training program which the National Cooperative Refinery Association has developed for its supervisory department.

The purpose of this in-plant training program is to review with National Cooperative Refinery Association supervisors the factors involved in effective supervision. The program reviews briefly the economic fundamentals of business and competition in a capitalistic form of government and the organization structure of National Cooperative Refinery Association. Time is also spent studying human relations problems and how they affect products.

This training program consists of eight hours, one hour per week for a period of eight weeks. The subject material to be presented covers essentially three elements of business and supervision: (1) basic economics,

⁴John M. Amiss and Traver C. Sutton, The Industrial Supervisor (New York: The Ronald Press Company, 1944), pp. 52-54.

(2) effective supervision, and (3) human relations in industry. This material is compiled into a brief, well integrated course by Vocafilm Inc. of New York City. This same material is being used by Esso, Sinclair, Cities Service, Standard Oil of Indiana, Caltex and American Refining Companies.

It has been said that a man is known by the company he keeps. It is just as true that a company is known by the employees it keeps.⁵ With this in mind the National Cooperative Refinery Association feels that with a good supervisory in-plant training program set up to develop good supervisors the company will be able to attract and keep a higher caliber of employees.

⁵ Brochure, "Supervisory Development Program," National Cooperative Refinery Association, Kansas City, Missouri, 1961.

CHAPTER III

IN-PLANT TRAINING IN KANSAS INDUSTRIES

A total of 100 industries were contacted by way of a questionnaire. A return of 64 questionnaires was received for a 64 per cent total return. Of the 64 per cent, 46 per cent had some type of in-plant training program.

The bulk of the returns came from the central and eastern part of the state as indicated in Figure I. The reason for this is that most of the larger industries are located in this section of the state.

The various companies are divided into industrial classifications and are listed below:

FOOD & KINDRED PRODUCTS

Meat Packing Plants

1. Cudahy Packing Company
Wichita
2. Swift & Company
Kansas City
3. Williams Meat Company
Kansas City

Bakery Plants

1. Sunshine Biscuits, Inc.
Kansas City

Grainery Plants

1. Archer-Daniel-Midland Company
(W. J. Small Co., Div.)
Topeka

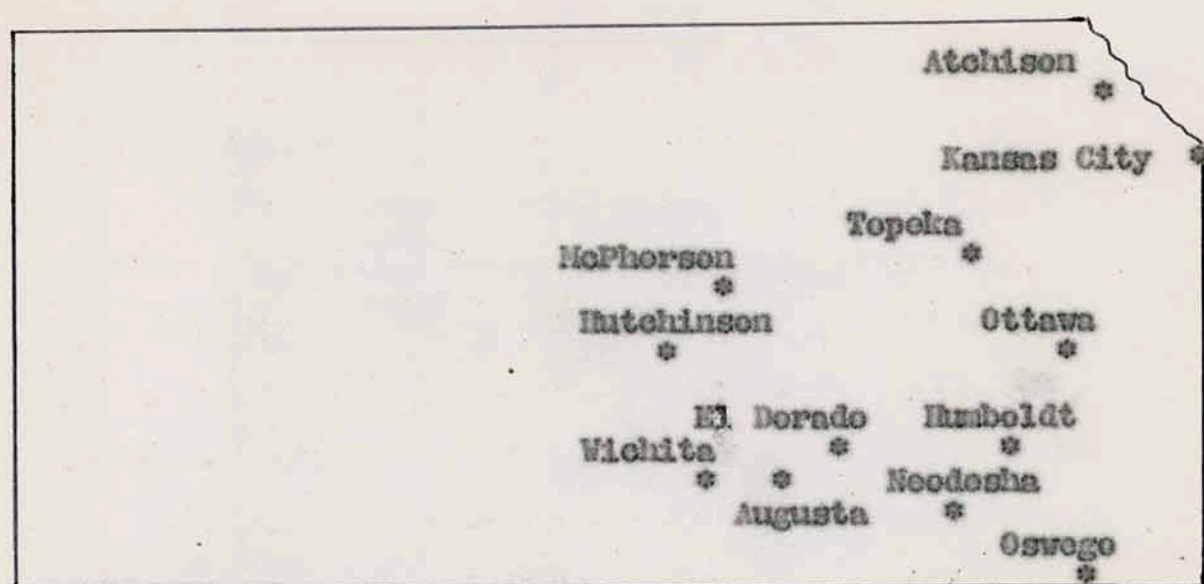


FIGURE 1

LOCATION OF TOWNS THAT HAVE INDUSTRIES WITH IN-PLANT TRAINING

The number of industries in each town that have in-plant training programs are as follows:

Kansas City	8
Wichita	6
Topeka	3
Atchison	2
Augusta	2
Hutchinson	2
Ottawa	1
McPherson	1
El Dorado	1
Needesha	1
Oswego	1
Humboldt	1

APPAREL AND FABRICS MATERIAL

Garment Plants

1. Horton Garment Company
Atchison
2. Glenn Berry Manufacturing Inc.
Oswego
3. Bruce Company Inc.
Ottawa

CHEMICALS AND ALLIED PRODUCTS

Chemical Plants

1. Thompson-Mayward Chemical Company
Kansas City
2. Frontier Chemical Company
Wichita
3. Lindo Company
Wichita

Salt Products Plants

1. Barton Salt Company
Hutchinson
2. Morton Salt Company
Hutchinson
3. E. I. DuPont de Nemours & Co., Inc.
Topeka
4. Colgate-Palmolive Company
Kansas City
5. Procter & Gamble Manufacturing Company
Kansas City

PETROLEUM REFINING INDUSTRIES

Refining Plants

1. Mobil Oil Company
Augusta
2. National Cooperative Refinery Association
McPherson
3. Shelly Oil Company
El Dorado

RUBBER PRODUCTS

Tire Plant

1. Goodyear Tire & Rubber Company
Topeka

STONE, CLAY AND GLASS PRODUCTS

Cement Plant

1. Monarch Cement Company
Humboldt

PRIMARY METAL INDUSTRIES

Steel Foundries Plants

1. L. F. M. Manufacturing Company
Atchison

TRANSPORTATION EQUIPMENT

Railroad Equipment Plants

1. A. T. & S. F. Railway Company
Wichita

Aircraft & Parts Plants

1. Beech Aircraft Corporation
Wichita
2. Boeing Airplane Company
Wichita
3. Cessna Aircraft Company
Wichita

FABRICATED METAL PRODUCTS

Fabricated Structural Steel Plants

1. Kansas City Structural Steel Company
Kansas City

MACHINERY INDUSTRIES

Machine Work Plants

1. Spencer-Safford Loadcraft
Augusta
2. Fairbanks Morse & Company
Kansas City

GENERAL INFORMATION

General information concerning the plant name, plant location, plant employment, training enrollment, cost of program and age of program may be found in Table I.

Some companies did not know the exact cost of their training program or the exact number of trainees in their programs. This was due to the wide range in the programs.

Oran W. Shearer wrote:¹

Based on your definition of in-plant training, less than 5 per cent of our employees participate. Based upon the availability of "course" provided locally by others, about 15 per cent participation is a good average.

Charles R. Reagon wrote:²

It is very difficult, however, for us to be very explicit on many of the answers for we do not have a single program, nor does our program stay the same from month to month or year to year.

¹Comments from questionnaire by Oran W. Shearer, Personnel Administration Manager, Cessna Aircraft Company.

²Personal letter from Charles R. Reagon, Training Specialist, E. I. DuPont de Nemours and Company, Inc., Topeka, Kansas. May 1, 1961.

TABLE I

GENERAL INFORMATION

PLANT	Location	Employment	Training Enrollment	Cost of Program	Age of Program
Beech Aircraft Corp.	Wichita	5,000	Varies	Varies	26 yrs.
A.T. & S.F. Railway	Wichita	130	12	\$1,000.	Unknown
Cessna Aircraft Co.	Wichita	3,600	50	Not available	19 yrs.
Boeing Aircraft Co.	Wichita	20,000	26,000	1½ million dollars	20 yrs.
Frontier Chemical Co.	Wichita	380	50	\$3.750	2 yrs.
Colgate Palmolive Co.	Kansas City	260	Varies	Not available	Unknown
Williams Meat Co.	Kansas City	150	4	Varies	10 yrs.
Fairbanks, Morse & Co.	Kansas City	700	60	Not available	8 yrs.
Procter & Gamble Manufacturing Co.	Kansas City	750	Varies	Not available	5 yrs.
Sunshine Biscuit Inc.	Kansas City	750	Varies	Varies	10 yrs.
Swift & Co.	Kansas City	1,800	Varies	Varies	30 yrs.
Thompson-Hayward Chemical Co.	Kansas City	100	Varies	Not available	Unknown
Monarch Cement Co.	Humboldt	233	36	Not available	7 yrs.
Horton Garment Co.	Atchison	103	10	Varies	2 weeks

TABLE I (Continued)

PLANT	Location	Employment	Training Enrollment	Cost of Program	Age of Program
L.F.M. Manufacturing Co.	Atchison	860	Varies	Not available	25 yrs.
Shelly Oil Co.	El Dorado	588	60	\$1,000. per course	1 yr.
Barton Salt Co.	Hutchinson	Unknown	6	Not available	Unknown
Morton Salt Co.	Hutchinson	180	6	\$1,638.	2 months
Bruce Co., Inc.	Ottawa	16	Varies	Not available	Unknown
Glenn Berry Mfg., Inc.	Oswego	114	10	\$60.	7 yrs.
Spencer-Safford Loadercraft	Augusta	59	38	\$100.	2 yrs.
Mobil Oil Co.	Augusta	390	Varies	Varies	15 yrs.
Archer-Daniel-Midland Co.	Topeka	24	5	Varies	6 yrs.
E.I. DuPont de Nemours Co., Inc.	Topeka	512	Varies	Varies	3 yrs.
National Cooperative Refinery Association	McPherson	474	48	\$2,700.	Unknown
Linde Co.	Wichita	13	Varies	Not available	10 yrs.
Cudahy Packing Co.	Wichita	1,200	Varies	Not available	Unknown
Goodyear Rubber Co.	Topeka	2,000	150	Varies	Unknown
Kansas City Structural Steel Co.	Kansas City	320	4	Not available	2 yrs.

J. W. Gillen wrote:³

Figures on the cost of the program such as we have have never been analyzed which would be almost an impossible task due to the nature of our operation.

The enrollment in the program varies from time to time due to shifting of employees between departments.

Other training such as safety and first aid are given on a periodic basis, mostly as refresher courses.

³ Personal letter from J. W. Gillen, Manager, Employee Relations Department, Mobil Oil Company, Augusta, Kansas. May 1, 1961.

In order to have a more complete overview of the information gathered dealing with the various programs, the writer has broken down the type and kind of training programs into eight basic titles. From the information obtained from the questionnaire the following table was made:

TABLE II

NUMBER OF PLANTS OFFERING THE BASIC TITLES

Type and Kind of Program	Number of Plants
1. Orientation of new employees	20
2. Technical knowledge	11
3. On-the-job training	24
4. Safety	17
5. First-aid	13
6. Occupational refresher courses	3
7. Apprenticeship training courses	7
8. Others:	
Supervisory	5
Administrative work	1
Human relations	1
Economics	1
Maintenance	1
Lectures	1
Photography	1
Management	1
Basic physics	1

There are several companies that have informal type training programs. This consists mostly of on-the-job instruction in which the new employee is instructed what to do and then left alone to do his work. This type of program seems to be the type which most of the small plants operate. Plants that have many unskilled and semi-skilled jobs will operate this kind of program.

The Funk Aircraft Company which builds power transmission devices stated that they have no formal type of training program, but the company reimburses the employee for the courses he completes as furnished by the local trade school. In the questionnaire, the company did not state if the employee took the training on his time or on company time.⁴

G. A. Krause of the Colgate Palmolive Company comments that they have a four-year craft apprentice program (full-time) open to hourly applicants. They have orientation programs for both hourly and salaried new employees. They have on-the-job training in almost all areas of plant work. They offer first-aid and safety programs periodically. For salaried employees they stress a variety of types of meetings for better understanding of all phases of their business.

⁴Comment from questionnaire by the Funk Aircraft Company of Coffeyville, Kansas.

Other than the apprentice program, most of the in-plant training can be classified as informal.⁵

The Barton Salt Company does not have a formal in-plant training program. They have on-the-job type training. When an employee is assigned to a new job he is trained either by the previous holder of the particular job or by the departmental supervisor. They try to keep relief operators trained for the various operating jobs so that when the regular operator is absent for any reason, the relief operator can step in to fill his place. Then if in the course of events the regular operator leaves or advances to a better job, they have a trained man to move into the job. These relief operators are given training in from one to four jobs depending on the department involved. The company endeavors to have about six employees in training or trained for relief operators for the various jobs. They normally figure that a man should have two-hundred and forty hours of training to be competent enough for the full rate, though in exceptional cases he is paid the full rate sooner than this. In general the training is part-time training.⁶

⁵Comments from questionnaire by G. A. Krause, Supervisor Employee Relations, Colgate Palmolive Co., Kansas City, Kansas.

⁶Comments from questionnaire by R. S. Humphreys, The Barton Salt Company, Hutchinson, Kansas.

William L. Harrison of Procter & Gamble Manufacturing Company comments:⁷

Our plant is small enough, and our company policy is such that we do not train in groups; rather we stress individualized training methods. Because of this we have no "courses" as such. We train individuals for individual jobs with individualized training programs.

William H. Jepson of Continental Can Company, Inc., wrote:⁸

Despite the fact that we are not engaging in technical programs at this time, we always maintain our safety training programs for supervision and hourly employees. This training consists of training meetings conducted by the Personnel Department and our supervision.

R. D. McCrum of Cooperative Refinery Association wrote:⁹

We do not have an in-plant training program for company employees, as such. We do offer safety and first-aid training programs and, of course, provide orientation for new employees. Due to our union contracts, it is rather difficult for us to provide training programs for technical knowledge, on-the-job training, occupational refresher courses, and apprenticeship training courses. Therefore, our on-the-job training is usually accomplished after the man has been promoted to the top craftsman classification.

⁷Comments from questionnaire by William L. Harrison, Training Specialist, Procter & Gamble Manufacturing Company, Kansas City, Kansas.

⁸Personal letter from William H. Jepson, Employment Supervisor, Continental Can Company, Inc., Coffeyville, Kansas, May 1, 1961.

⁹Personal letter from R. D. McCrum, Director of Refining, Cooperative Refinery Association, Coffeyville Refinery, Kansas City, Missouri, May 17, 1961.

W. O. Howard of the Ozark Smelting & Mining Company,
wrote:¹⁰

We are sorry to advise that we cannot give you the information you desire, as we do not have any in-plant training program for our employees. The necessary experience needed by our employees is acquired while working on the job under the direction of our supervisors.

George C. Christopher, II of George C. Christopher & Son, Inc., wrote:¹¹

Our Wichita plant and office, employing approximately 130 persons, does not have nor has it ever had a specifically organized in-plant training program.

It is necessary, of course, in our business as in any other to orientate any personnel in the methods of procedure and production with which he will be concerned. Also, in many instances specific employees are given definite tasks which will enable them to develop the experience which will be acquired in an ultimate position for which they were actually hired, with the underlying thought that on-the-job training of this type would be required. This is true of both office and production personnel.

Of the plants having some type of in-plant training program, Table III was developed. It should be noted that the wide range in qualifications is due to the fact that the various industries have different training programs.

¹⁰Personal letter from W. O. Howard, Personnel Manager, The Ozark Smelting & Mining Company, Coffeyville, Kansas, April 28, 1961.

¹¹Personal letter from George C. Christopher, II, George C. Christopher & Son, Inc., Wichita, Kansas, April 27, 1961.

TABLE III

QUALIFICATIONS OF INSTRUCTORS

Plant	Education	Skill	Experience
Monarch Cement Co.	M.S. in Bus. Educ.	Teaching	3 yrs. in public schools
Thompson-Hayward Chemical Co.	*	*	Ability to perform job being taught
A.T. & S.F. Railway	High school graduate	Graduate of apprentice system	1-10 yrs. working at trade
Colgate Palmolive Company	College graduate (Engineering or Business)	In area covered in particular program	7 yrs.
Beech Aircraft Corporation	*	*	*
Horton Garment Co.	*	Power machine operator	*
E.F.M. Mfg. Co.	*	*	*
Skelly Oil Co.	No set qualifications	(University extension service instructors are college graduates, other instructors are merely qualified in their fields)	
Barton Salt Co.	*	*	*
Williams Meat Co.	*	*	*
Bruce Co., Inc.	*	*	*
Kansas City Structural Steel Co.	*	*	Ability to do work
Morton Salt Co.	2 yrs. of college	*	18 yrs. as master mechanic
Fairbanks, Morse & Co.	*	Top knowledge of subject	*

TABLE III (Continued)

Plant	Education	Skill	Experience
Glenn Berry Mfg. Company	*	Machine skill	1 yr. of machine operation
Goodyear Tire & Rubber Company	College degree	Job training in the plant	*
Spencer-Safford Loadcraft	High School	Shop material control; Manufacturing control methods and engineering	34 yrs. in manufacturing
Archer-Daniels-Midland Co.	College degree	Thorough knowledge of function	10 yrs. in industry
Cessna Aircraft Company	Less than high school through college	Usually journey-man in their field	5-15 yrs.
E.I. DuPont de Nemours & Co., Inc.	M.S. in Educ. plus additional graduate work	*	9 yrs.
Frontier Chemical Company	Recognized degree plus outstanding experience	Administrative supervisory craft	Recognized extra-ordinary experience in field
Mobil Oil Co.	*	*	*
National Co-operative Refinery Association	B.S. in Business Administration	Knowledge of principles of supervision & human relations	6 yrs. working in phases of industrial relations
Boeing Aircraft Co.	College & Tech-School Graduates	Airplane & missile mfg. & assembly	Average for 76 instructors is 5½ yrs.

TABLE III (Continued)

Plant	Education	Skill	Experience
Swift & Co.	High school minimum	Trained supervisors	*
Sunshine Biscuits Inc.	*	General skill	General experience
Proctor & Gamble Mfg. Company	*	*	*
Cudahy Packing Co.	*	*	*
Linde Company	B.S. in Education	*	10 yrs.

*Not stated

In regard to Table IV, question 3, concerning employee turn-over, J. W. Gillen wrote:¹²

For the past 15 years the average turnover in our plant has been so minute it would be difficult to imply whether the program we have would cut down in employee turnover. Our low turnover rate is probably due to relatively high rates of pay, generous benefit plans and enlightened management.

William H. Jepson of Continental Can Company, Inc., wrote:¹³

Due to the reduction in defense contracts our Coffeyville plant is not engaged in any extensive training programs at this time. Every new contract calls for training courses and these programs are provided at company expense for the employees involved. We use plant personnel as much as possible, and if need be, call in outside people to conduct the program.

¹²Gillen, op. cit., Letter.

¹³Jepson, op. cit., Letter.

TABLE IV

NUMBER OF COMPANIES DEALING WITH FOLLOWING
QUESTIONNAIRE QUESTION

Question	
<hr/>	
1. Who pays for the training?	
Company	24
Employee	1
Both	3
Reimbursed	2*
2. Are the training periods full or part-time?	
Full-time	14
Part-time	15
Varies	1
3. Does the program cut down on employee turn-over?	
Yes	15
No	4
Didn't know	6
4. Do you have more than one program going on at a time?	
Yes	17
No	10
5. Is the training compulsory for employees?	
Yes	13
No	13
Varies	3

*Instructors' salaries only

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study was made for the purpose of gaining general information concerning the in-plant training programs in Kansas industries.

This information was obtained from a return of 64 per cent of the questionnaires sent out to the various industries. Of this return of 64 per cent, 46 per cent had some type or kind of in-plant training program.

Conclusions

The conclusions drawn from the interpreted data gathered in the questionnaire are as follows:

1. A very wide range in training programs is set up by the various industries.
2. The bulk of the industries answering questionnaires was from the central and eastern section of the state.
3. The most widely used type of in-plant training program is on-the-job training.
4. There is much need for a more detailed study of the in-plant training programs in Kansas.

Recommendations

Industry and colleges should work together on a graduate level, offering courses of industrial nature to Industrial Education majors during summer sessions. The student would gain first-hand information and experience concerning industry while attending the in-plant training program as a part of his work in the course.

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APPENDIX A

Questionnaire and Letter Sent to
Industries in Kansas

QUESTIONNAIRE
OF
IN-PLANT TRAINING PROGRAMS

Directions: Please answer the following questions with regard to your in-plant training program. If your company has discontinued this program, please answer the questions as if it had not been discontinued.

Definition: The in-plant training program is a training program set up by a company to give employees the opportunity for self-improvement so they will be better qualified for their work.

1. Your Name _____ Position _____
2. Name of plant or company _____
3. How many employees do you have in your plant? _____
4. Do you have an in-plant training program?
() 1. No
() 2. Yes (If yes, how long have you had it?) _____
5. Have you had an in-plant training program before?
() 1. Yes
() 2. No
6. What type or kind of training programs does your company offer?
() 1. Orientation for new employees
() 2. Technical knowledge
() 3. On-the-job training
() 4. Safety
() 5. First-aid
() 6. Occupational refresher courses
() 7. Apprenticeship training courses
() 8. Others _____
7. What is the enrollment of the program? _____
8. What is the length of the training period?
 1. _____ Hours per day
 2. _____ Hours per week
 3. _____ Days per week
 4. _____ Weeks per month

9. What is the cost of the program? _____
10. Who pays for the training?
- () 1. Company
 - () 2. Employee
 - () 3. Both
 - () 4. Reimbursed State and Vocational funds
11. Are the training periods full or part-time?
- () 1. Full-time
 - () 2. Part-time
12. Does the program cut down on employee turn-over?
- () 1. Yes
 - () 2. No
13. Do you have more than one program going on at a time?
- () 1. Yes (If yes, how many?) _____
 - () 2. No
14. Is the training compulsory for employees?
- () 1. Yes
 - () 2. No
15. Can an instructor in a public school take the courses offered?
- () 1. Yes
 - () 2. No
16. Who are the instructors in the training program?
- () 1. Personnel training supervisor
 - () 2. Staff from personnel training department
 - () 3. Supervisory personnel
 - () 4. Administrative personnel
 - () 5. Special outside instructors
 - () 6. Others
17. What are the qualifications of the instructors?
- 1. Education _____
 - 2. Skill _____
 - 3. Experience _____
18. What other duties does the instructor have besides instructing?

April 20, 1961

Mr. George C. Christopher, II
Assistant Head, Engineering Department
George C. Christopher & Son, Inc.
Wichita 1, Kansas

Dear Mr. Christopher:

A study is being made of the industrial in-plant training programs in Kansas for a Master's Thesis, and it would be greatly appreciated if you or your office would fill out the enclosed questionnaire and return it in the self-addressed envelope. It would be of great help and value if you would also send any information that you might have dealing with the training program that is offered by your company.

This study is to be completed by June 1, 1961, so would you please fill out and send the enclosed questionnaire as soon as possible.

Thank you.

Sincerely yours,

Charles A. Campbell
1130 Atchison Street
Atchison, Kansas

Enclosures