OCCUPATIONAL TITLES IN OKLAHOMA AGRICULTURAL MACHINERY DEALERSHIPS FOR WHICH HIGH SCHOOL GRADUATES MAY QUALIFY

By

MICHAEL DALE WILLIAMS

Bachelor of Science

Oklahoma State University

Stillwater, Oklahoma

1971

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
MASTER OF SCIENCE
May, 1972

Thesis
1972
W725o
Cop. 2

OKLAHOMA
STATE UNIVERS
LIBRARY

NOV 13 197

OCCUPATIONAL TITLES IN OKLAHOMA AGRICULTURAL MACHINERY DEALERSHIPS FOR WHICH HIGH SCHOOL GRADUATES MAY QUALIFY

Thesis Approved:

Robert Terry
Thesis Adviser

James P. Key

Jack Pritchard

D. Kluckman
Dean of the Graduate College

830953

ACKNOWLEDGEMENTS

The author wishes to express his sincere and deep appreciation to Dr. Robert Terry for his confident inspiration and counsel as major advisor for this study. If it were not for Dr. Terry's wise counsel, practical suggestions, and personal friendship, this study would not have been possible.

Appreciation is also expressed to Dr. Robert Price, Professor and Head, Agriculture Education Department.

Special acknowledgement is expressed to Dr. James Key for his interest and advise rendered in the initial phases of this study.

Special indebtedness is extended to the Agriculture Machinery Dealerships who made this a successful research effort.

To Miss Susan Carol Hight, for her interest, assistance, and encouragement, I express my sincere gratitude.

The writer wishes to express recognition to Mr. Louis Chenault, whose encouragement, willingness to allow the writer to work part-time to pay expenses incurred, and personal friendship, had much to do with the success of this study.

This acknowledgement would be incomplete without recognition of the sustaining encouragement, interest, and assistance rendered by my mother and father, Warren Edwin Dale and Virginia Ruth Williams.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

There is currently a social-economic trend in Agriculture toward fewer farms, expanded farm mechanization programs, and specialized farming. Many leaders in vocational education in agriculture are raising questions relative to the position and the role of Vocational Agriculture in the establishment of young men in related agriculture occupations.

Related agriculture occupations have greatly increased in significance over the past few years. At one time, farming and ranching were the only groups of agriculture occupations. Now there are also many off-farm agricultural occupations. People in these occupations supply the goods and services to farmers who use them in producing and marketing their products. Agriculture involves a large percent of the labor force in the United States, it is not just farming.

The application of machines to agricultural production has been one of the outstanding developments in American agriculture during the past century. Farm mechanization has released millions of agricultural workers to other industries.

As the trend continues, from small farms to large cooperations and partnership type farms, agriculture machinery concerns will be forced to provide better services. These services will require more highly trained employees. Since the chances of a student returning to the farm after high school graduation are becoming fewer every year, it

will be most imperative to train high school age students for those particular off-farm agricultural occupations that exist in the labor market.

In response to this broadening of off-farm agriculture, the farm machinery dealership could play a vital role in employment in the near future. Most studies reveal that the current age of most employees at agricultural machinery dealerships is in a range of 45 to 60 years. It is evident from these studies that someone will be needed to fill the many occupational titles that will be left vacant.

Need of the Study

Most studies and surveys reveal that on the average, farm machinery service and repair personnel are near fifty years of age. These studies also reveal that too few young men are being trained to replace the older personnel, let alone fill the new demands that the newer mechanized machinery requires.

In reference to the range of age of farm machinery service and repair personnel, it would seem logical that agriculture machinery dealers should be taking a long hard look at prospects for new employees. As colleges and vocational schools are filled to capacity, employment of the high school graduate will be most imperative.

There is a need for instruction in farm power and machinery. The trend to larger farms coupled with the demand for bigger and more complicated machinery has brought about an increased volume of business for farm machinery dealers. The demand for immediate delivery of new machines and for quick repair and servicing of old machines has increased the need for more skilled workers in the area of farm power and

machinery.

Primary Problem and Purpose of the Study

The primary purpose of the study was to identify and describe those occupational titles that exist at agriculture machinery dealerships for which high school graduates would qualify. It was hoped that results of the study would provide instructors at area vocational schools and vocational agriculture instructors of Oklahoma with information that would be of assistance in setting up instructional programs and in guiding their students.

There is a need for instruction in farm power and machinery. The trend to larger farms coupled with the demand for bigger and more complicated machinery has brought about an increased volume of business for farm machinery dealers. The demand for immediate delivery of new machines and for quick repair and servicing of old machines has increased the need for more skilled workers in the area of farm power and machinery.

As in all types of industry, there are those businesses that are successful, and there are those that are not. Only the larger and more progressive dealerships in the state of Oklahoma were considered in this study and they are referred to in the study as "Pacesetter Dealerships".

The "pacesetter dealership" referred to above were thought to be more capable of offering a wider range of occupational titles than the smaller dealerships in the state. It was felt that this study needed to concern itself with those dealerships which were capable of employing a variety of occupational titles, and not to concern itself with the

smaller, one man, unstable type of operation which are most likely not to remain in business for a great length of time and, therefore, would offer only limited employment opportunities in the future.

Objectives of the Study

The specific objectives of the study were as follows:

1) To identify those occupational titles that exist at agriculture machinery dealerships for which a high school graduate would qualify.

2) To describe those occupational titles that exist as to the basic skills required for successful employment.

3) To determine characteristics of these occupational titles such as salary, physical requirements, and other qualities desired in the employee.

4) To determine present and anticipated numbers of employees in these occupational titles.

5) To determine what fringe benefits each particular occupational title may have.

Assumptions

Basic assumptions accepted by the Investigator at the outset of the study included:

1) That there were in existence at the time of the study dealerships which were representative of the types likely to exist in the future, and that these could be classified as dealerships of the future or "pacesetter dealerships".

2) That the pacesetter dealerships representing seven manufacturers used in study, located in Oklahoma, were generally typical of other

manufacturers which could be classified similary and, thus, would constitute an appropriate population for the study.

3) That the executive director of the Oklahoma Hardware and Implement Association could make valid identification of the "Pacesetter Dealership" located in the State of Oklahoma.

4) That the seven manufacturers of agricultural machinery used, making up a total of seventeen dealerships, were generally typical of the dealerships of other manufacturers which could be classified similar and, thus, would constitute an appropriate population for the study.

Limitations of the Study

The following limitations, which specified the general boundaries of the study, were recognized by the investigator.

1) Personnel chosen for the study were from a purposive smaple of farm machinery dealerships in the State of Oklahoma which were selected as being representative of the type likely to remain in operation into the future.

2) Dealership personnel studied included only those employers who were present in their place of business on the day data was collected at each dealership.

Definition of Terms

Certain words and terms used in this study need to be defined in accordance with the way they were used.

Agriculture Machinery Dealership - A retail business establishment, the principle functions of which are sales and service of machinery and

equipment used in farm field operations and other operations associated with the production and or processing of agriculture commodities.(4).

Dealership of the Future or "Pacesetter Dealerships" - A business establishment of the foregoing description, in operation at the time of the study, which was considered by the Executive Director of the Oklahoma Hardware and Implement Association to be typical of the type most likely to continue in operation in the future.

Occupational Title - Classifications in the Agricultural Machinery Dealership which designate the employee's major area of occupational responsibility.

Off-Farm Agricultural Occupations - Means the position or job within an agency, business, or industry which requires the employee to have a certain level of agricultural competency, and is performed primarily in a location other than a farm. It is not considered to be a farm production type position or job.

Competency - ability, knowledge or skill.

CHAPTER II

REVIEW OF LITERATURE

The purpose of this chapter is to present some of the recent research related to employment opportunties at Farm Machinery Dealerships. It is meant to present a practical review of related materials. This chapter is divided into sub-topics of related subject matter.

Related Studies and Investigations

Most of the useful material reported herein appeared in studies dealing with employment opportunities in related off-farm agriculture, and studies dealing with competencies needed for employment at agricultural machinery dealerships.

Employment Opportunities

The United States Department of Labor reported in 1963 that the average age of farm equipment dealership personnel was approximately 55. Another national survey showed that there was an immediate need for at least twenty-thousand farm equipment mechanics. Stevenson (3) in a study of Job Title Profiles in Off-Farm Agricultural Occupations in Oklahoma showed the need for 49 Managers for Agricultural Machinery Dealerships for the year 1969. This number is anticipated to increase in 1970 and 1971.

Occupational Titles

In a study of agricultural equipment dealerships in Ohio, Stitt found six job titles were quite characteristic for the industry. The job titles were set-up man, shop foreman, equipment mechanic, partsman, equipment salesman, and truck driver-delivery man. Stitt concluded that the relative importance of abilities and understandings varies with each of the six job titles in agriculture equipment dealerships (2).

It's fairly obvious that the occupational title used at any one particular dealership would vary from dealer to dealer. This can be supported by reviewing literature in this field. For instance, Terry (4) found the following occupational titles, in a study conducted in Ohio of 10 outstanding dealerships: Manager, Shop Foreman, Bookkeeper, Set-Up Man, Diesel Mechanic, Regular Mechanic, Partsman, Repairman, Small Engine,Tractor Mechanic, Tractor Mechanic Helper, and Yardman.

Educational Levels

Stevenson (3), in "A Survey of Agricultural Occupations in Oklahoma" interviewed 719 employees in off-farm agriculture. He found that 50% of the jobs available in off-farm agricultural business may be filled by persons with a high school education. Forty-eight percent of the employees need education above the high school level, a mere two percent require less than a high school education. Stevenson stated the following:

> "The greatest increase in number of employees with agricultural training is expected in the Ornamental Horticulture, Agricultural Machinery, and Agricultural Supplies Business."

Mitchell (5) conducted a study titled, "Employment Opportunities and Educational Need in Off-Farm Agri-Business Occupations in Oklahoma,"

and made the following statement:

> "An analysis of the data reveals that there were 510 interviews in agricultural machinery and equipment manufacturing, and distribution type of organization. Ninety percent of those interviewed stated that they would hire an 18 year old if he was qualified and only 25 percent indicated that they were currently employing high school students on a part-time basis."

When looking at the above figures, it is most interesting that 90 percent of the employers would be willing to hire these 18 year old boys but only 25 percent indicated that they were currently employing high school students on a part-time basis. More employers should be hiring and training these 18 year old boys. At least it would appear that employers are willing to hire high school students in a training capacity.

Mitchell had 23,306 employees identified in his population. The educational level desired by all employers interviewed were (1) grade school, 1141 employees; (2) high school, 12,056 employees; (3) vocational agriculture training, 3,457 employees; (4) vocational and technical training, 3025 employees; (5) two years of college training, 2029 employees; (6) four years of training, 1598 employees.

For agricultural machinery and equipment businesses, it was noted that the high school level and vocational technical training was desired for the occupational titles of partsman, small engine repairman, tractor and implement salesman and tractor mechanic.

Competencies Needed

Many studies have been conducted on competencies needed by males for employment in related off-farm agricultural occupations. In a recent survey conducted by Charles SaLoutos, fifty agri-business

employers indicated the following competencies as necessary for successful employment (6). The employee should be able to:

-- accept and carry out responsibility

-- have a good attitude toward customers

-- be honest

-- have enthusiasm

-- write legibly

-- take orders over the telephone

-- use cash register and office equipment

-- fill out purchase orders and sales slips

-- follow instructions

-- make effective use of work time

-- understand agriculture products and use

-- practice safety

-- be thoughtful, not forgetful

-- make mathematical calculations accurately.

A study conducted in Oklahoma by Morton (1) provided a descriptive appraisal of competencies needed in off farm agricultural occupations. The findings indicated that employees needed competencies in human relations, salesmanship and customers relations, job applications and interviews, communications, safety, and some competencies in mathematics.

One can see that the competencies found by SaLoutos were very similar to those listed above by Morton. It seems reasonable that educators should know what competencies employers require and what competencies that the employer is willing to teach the employee.

Thus far in the study, only general competencies have been discussed. What about those competencies in agriculture? Stevenson (3)

said there were several reasons given by employers for their preferences for young men with a farm background when they said,

> "The farm youth is more able and willing to work hard. Rural youth are punctual, have orderly work habits, and accept responsibility. Young men with a farm background know how to talk the farmer's language. They respect farmers and are sympathetic to farm problems."

Stevenson's study showed that the residential background preferred for persons working in agricultural machinery was 85 percent for farm background, rural non-farm was 3 percent and 12 percent cited no preference (3).

The main reason listed by Stevenson was that the farm youth has a store of knowledge which saves valuable training time. There are 320 agricultural machinery dealers in the State of Oklahoma which employs some 2550 employees. Stevenson (3) pointed out that 77 percent of those particular people doing those jobs need agriculture competencies.

Farm machinery and equipment is a major product and service area in the agri-business community. Emphasis should be placed in this area of the vocational agriculture curriculum. Loreen (7) concluded in his study that over 1/3 of the people employed in non-farm agricultural business needed education in agriculture. Many of the agriculture subjects taught to students preparing for production farming will be needed by persons who enter non-farm agriculture occupations.

A Guide to the Development of Curriculum

The major objective of agricultural machinery classes in a high school should be, "to send the student away capable of performing satisfactorily on the job" (8). To achieve this goal, Mager and Beach contended:

> . . . it is necessary to know what the job consists of, what one needs to do to perform each of the tasks, and how frequently each of the tasks is performed. The student must be provided with practice in performing these tasks under conditions as much like the job as possible.

The major strength of such an approach to instructional program development is the orientation to performance rather than to subject matter: "The strategy is to use the job as the basis for deciding what will be taught and in what order and depth, rather than simply to present as much subject matter as possible in the allotted time." In order to utilize a strategy such as this for developing effective programs of instruction for the agricultural machinery occupations, it will be necessary to begin with the job itself rather than the content of the program. "The first step is describing in general terms that which someone does when performing the job." Therefore, determining the duties normally associated with a job and the amount of time devoted to these duties becomes a logical initial step toward utilizing a systematic procedure for development of instructional programs which will improve the occupational competence of prospective agricultural machinery service employees.

In general, educational research efforts in the agricultural machinery field have focused primarily on occupational needs such as employment opportunities, competencies needed and employee traits. Although these findings have provided considerable data which could be utilized for establishing properly-directed instructional programs, there would appear to be areas in which additional research could enhance future program development and expansion. Before effective training programs can be developed for the emerging specialized occupations, there is a need to determine the true nature of the jobs.

Careful job analysis should make it possible to determine the major tasks and duties associated with each job (4). This, in turn, "would shed light on the kind of skills and knowledges to be written into a course of study" (4). This technique could provide guidelines for utilizing the comprehensive lists of competencies developed through previous research efforts in the formulation of instructional programs for the new and emerging occupations.

CHAPTER III

DESIGN AND CONDUCT OF THE STUDY

The main purpose of this chapter is to describe the methods and procedures used in conducting this study. These were dictated by the central purpose of the study which was to identify and describe those particular occupational titles that exist at farm machinery dealers for which high school graduates would qualify. Specific objectives of the study also provided guidance for the design and conduct of the investigation.

These objectives were:

1) To identify those occupational titles that exist at an agriculture machinery dealership for which a high school graduate may qualify.

2) To describe those occupational titles that do exist as to the basic skills required for successful employment at that particular occupational title.

3) To determine present and anticipated numbers of employees in these occupational titles.

4) To determine characteristics of these occupational titles such as salary, physical requirements, and other qualities desired in the employee, and fringe benefits connected with the job.

In order to collect and analyze data pertaining to the purpose and objectives for guidance of the study effort, it was necessary to ac-

complish the following tasks:

1) Determine the study population.

2) Develop instruments for data collection.

3) Select methods of data analysis.

The Study Sample

The investigator sought information from the Executive Director of the Oklahoma Hardware and Implement Association as to the 20 most progressive dealers in the State of Oklahoma. The Executive Director, Mr. Peters, was contacted by telephone on January 29, 1972. In the interim of the conversation, Mr. Peters pointed out that there were in existence in Oklahoma, dealerships which were representative of the types likely to exist in the future and that those particular dealerships could be classified as dealerships of the future or "Pacesetter Dealerships".

A letter (see Appendix B) and postcard were sent to each of the 20 dealers identified. The letter explained the purpose for the study and asked the dealer if he desired to participate in the study. Seventeen dealers expressed, via postcard, a desire to participate in the study. Those dealers willing to participate in the study were from the following locales: Guymon, Woodward, Altus, Hobart, Carnegie, El Reno, Duncan, Pauls Valley, Ponca City, Stillwater, Chandler, Tulsa, and Okmulgee.

There was evidence that the sample was typical of the number and kind of manufacturers found in the state. For example, Mr. Peters indicated that John Deere dealerships made up approximately 42 percent of the dealerships in the state. Accordingly, approximately 40 percent

of the dealerships surveyed represented the John Deere line. The remaining numbers and percentages of dealerships studied corresponded closely with actual distributions of dealerships and manufacturers across the state.

The different manufacturers used in the study were as follows: John Deere, Case, Massy Ferguson, Versatile, International, and Ford. Several of the dealerships were found to be representing more than one manufacturer.

Of the seventeen dealers interviewed, two indicated that they would not hire a high school graduate. Reasons given were in reference to experience and technical training.

Development of the Instruments

Only one instrument was designed by the investigator to secure information needed for the study. The instrument was an interview schedule administered to the manager of the "pacesetter dealers". A draft of the instrument was developed by the investigator. The draft was submitted to the fellow graduate students and the staff of the Agricultural Education Department at Oklahoma State University. Revisions and refinements suggested by these reviewers were utilized in developing the final drafts of the instrument.

The interview schedule administered to the Manager of the pacesetter dealers was intended to find out what jobs were in existence at that particular dealership for which the dealer would be willing to hire a high school graduate and to determine selected characteristics of the occupations. A copy of the instrument is exhibited in Appendix A.

Collection of the Data

Only one technique of collection was considered efficient for the study by this investigator. That was the interview schedule administered to the manager of the agriculture machinery dealership.

Most of the dealers in the study had elaborate, well lighted, comfortable offices. The first question that was asked of the managers was, "What occupational titles do you have in existence here at your dealership for which you would be willing to hire a high school graduate?"

After the occupational title, or titles, was identified, the rest of the questionnaire was filled out in its entirety. Each question was asked with each occupational title specifically in mind. When the interview was completed, the investigator asked the managers the following question, "What, if anything, would you like to relate to the educators in this state?"

For all practical purposes, the interview was over, but the investigator found almost all managers very interested and quite eager to give the investigator a first class tour of the facilities.

Analysis of the Data

Following completion of the interviews, the data was compiled and tabulated in a manner designed to fulfill the purpose and objectives of the study. Since this research effort was primarily of a descriptive nature, statistics such as arithmetic averages and percentages were selected as appropriate means of describing the findings. Chapter IV, which follows, provides specific information relative to analysis and presentation of the findings.

CHAPTER IV

PRESENTATION OF DISCUSSION OF THE DATA

The major purpose of the study was to identify and describe those occupational titles in existence at farm machinery dealerships for which high school graduates may qualify. The data presented in the chapter were obtained from seventeen selected agriculture machinery dealerships which were considered to be among the most progressive dealers in the State of Oklahoma. After data were collected through the previously outlined procedures and techniques, they were tabulated and analyzed by appropriate descriptive techniques to describe the findings. The information presented was summarized in tabular form. The following sections of this chapter were designed to present a summary and analysis of the findings.

One of the objectives of the study was to identify the occupational titles in existence at farm machinery dealerships for which high school graduates could qualify. It can be determined from Table I that there were twelve occupational titles found to exist for which high school graduates could qualify. Of the 17 dealers interviewed, the occupational title of set-up man was identified by 12 dealers (70.5 percent). Assistant partsman and mechanic's helper followed next with 10 (58.8 percent) and 8 (47.0 percent) of the dealers respectively identifying these as job titles suitable for a high school graduate. There were three job titles that were only identified one time, these were Service Manager,

TABLE I

OCCUPATIONAL TITLES IDENTIFIED

DISTRIBUTION OF DEALERS BY OCCUPATIONAL TITLE

Occupational Title	N	Percent
Set-up Man	12	70.5
Assistant Partsman	10	58.8
Mechanic's Helper	8	47.0
Partsman	3	17.6
Salesman	3	17.6
Truck Driver	2	11.7
Janitor	2	11.7
Mechanic	2	11.7
Secretary	2	11.7
Service Manager	1	5.8
Reconditioning Man	1	5.8
General Helper	1	5.8
None	2	11.7

NOTE: Total N = 17

Reconditioning Man, and General Helper. It is interesting to note that 2 (11.7 percent) of the dealers indicated that they would not employ a high school graduate. These indicated that they desired men with experience and/or some post high school training.

Table II is a summary of starting salaries for the occupational titles identified in the selected dealerships. In reference to the occupational title identified the most often, that of set-up man, 5 dealerships (41.6 percent) indicated a new employee would be paid from $251 - $300 per month. The modal salary for the assistant partsman was in the category of $251 - $300 per month, the same was true for the job title of mechanics helper.

One of the occupational titles had a starting salary that was considered to be highly variable, that was the job title of Salesman. This is primarily due to the fact that salesmen work on a commission basis as indicated by the two dealers.

The occupational title of service manager had the highest starting salary, which totaled over $600 in one dealership. The lowest starting salary identified fell in a range of $251 - $300, and this applied to 5 occupational titles.

Two categories of salaries were identified more often than any other, those were the $251 - $300 and $351 - $400 categories.

The data presented in Table III indicate the degree of physical exertion required in each of the occupational titles identified. The table indicates the number and percentage of dealer responses by amount of physical exertion required for each one of the occupational titles recognized at each dealership. The categories were Much, Some, Occasional, and None respectively. Most of the dealers thought that

TABLE II

STARTING SALARY INFORMATION

DISTRIBUTION BY STARTING SALARY CATEGORY

Occupational Title	251-300		301-350		351-400		401-450		451-500		501-550		551-600		Over 600		Highly Variable	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Set-up Man(N=12)	5	41.6	2	16.6	3	25.0	2	16.6	-	-	-	-	-	-	-	-	-	-
Assistant Partsman(N=10)	4	40.0	2	20.0	1	10.0	3	30.0	-	-	-	-	-	-	-	-	-	-
Mechanic's Helper(N=8)	4	50.0	1	12.5	3	37.5	-	-	-	-	-	-	-	-	-	-	-	-
Partsman(N=3)	1	33.3	-	-	-	-	1	33.3	-	-	1	33.3	-	-	-	-	-	-
Salesman(N=3)	-	-	-	-	-	-	-	-	-	-	-	-	1	33.3	-	-	2	66.6
Truck Driver(N=2)	-	-	-	-	2	100.0	-	-	-	-	-	-	-	-	-	-	-	-
Janitor(N=2)	1	50.0	-	-	1	50.0	-	-	-	-	-	-	-	-	-	-	-	-
Mechanic(N=2)	-	-	-	-	1	50.0	1	50.0	-	-	-	-	-	-	-	-	-	-
Secretary(N=2)	-	-	-	-	2	100.0	-	-	-	-	-	-	-	-	-	-	-	-
Service Manager(N=1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	100.0	-	-
Reconditioning Man(N=1)	-	-	1	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
General Helper(N=1)	-	-	-	-	1	100.0	-	-	-	-	-	-	-	-	-	-	-	-

TABLE III

AMOUNT OF PHYSICAL EXERTION REQUIRED

Occupational Title	Distribution Of Responses By Amount Of Physical Exertion Required							
	Much		Some		Occasional		None	
	N	%	N	%	N	%	N	%
Set-up Man (N=12)	12	100.0	-	-	-	-	-	-
Assistant Partsman (N=10)	6	60.0	3	30.0	1	10.0	-	-
Mechanic's Helper (N=8)	6	75.0	2	25.0	-	-	-	-
Partsman (N=3)	2	66.7	1	33.3	-	-	-	-
Salesman (N=3)	1	33.3	1	33.3	1	33.3	-	-
Truck Driver (N=2)	2	100.0	-	-	-	-	-	-
Janitor (N=2)	2	100.0	-	-	-	-	-	-
Mechanic (N=2)	1	50.0	1	50.0	-	-	-	-
Secretary (N=2)	-	-	-	-	2	100.0	-	-
Service Manager (N=1)	1	100.0	-	-	-	-	-	-
Reconditioning Man (N=1)	1	100.0	-	-	-	-	-	-
General Helper (N=1)	-	-	1	100.0	-	-	-	-

there was much physical exertion needed in a majority of the occupations. It can be seen that only three of the occupational titles were placed in the occasional category, these were Assistant Partsman, Salesman, and Secretary.

Illustrated in Table IV is the number of full-time, part-time, and summer and/or student employees for each occupational title identified. Analysis of the data contained in the table shows that the occupational title of set-up man had the greatest number of employees, a total of 19. The rank order of occupational titles regarding current employment status are as follows: set-up man, assistant partsman, mechanic's helper, partsman, salesman, mechanic, reconditioning man, truck driver, janitor, secretary, service manager and general helper. It is interesting to note that there were no part-time or student employees for the following occupational titles: partsman, truck driver, janitor, service manager, and general helper.

Most of the occupational titles identified require full-time employment. Something rather noteworthy is that the dealers who identified the occupational title of Secretary had women doing this job. A few dealers indicated that they would employ girls during the summer to help out in the office. A total of 72 persons were currently employed in the occupations which could be filled by high school graduates and were distributed as follows: 54 full-time, 11 part-time and 6 summer and/or student employees.

Analysis of the data presented in Table V indicates a strong preference by dealers for employees with a farm background, of the 12 dealers that identified the occupational title of set-up man, 10 (83.3 percent) desired a farm background. It is interesting to note that

TABLE IV

MANPOWER DISTRIBUTION WITHIN IDENTIFIED OCCUPATIONAL TITLES

		Number Employees By Type of Employment			
Occupational Title	Number Dealerships	Full Time	Part Time	Summer And/Or Students	Total
Set-up Man	12	15	3	1	19
Assistant Partsman	10	6	2	3	11
Mechanic's Helper	8	6	1	1	8
Partsman	3	7	-	-	7
Salesman	3	6	1	-	7
Truck Driver	2	3	-	-	3
Janitor	2	2	-	-	2
Mechanic	2	5	1	-	6
Secretary	2	1	-	1	2
Service Manager	1	1	-	-	1
Reconditioning Man	1	2	3	-	5
General Helper	1	1	-	-	1
Total		54	11	6	72

TABLE V

EMPLOYEE BACKGROUND PREFERRED FOR OCCUPATIONAL TITLES IDENTIFIED

Occupational Titles	Distribution By Type Background Preferred			
	Farm Background		No Preference	
	N	%	N	%
Set-up Man (N=12)	10	83.3	2	16.7
Assistant Partsman (N=10)	9	90.0	1	10.0
Mechanics Helper (N=8)	7	87.5	1	12.5
Partsman (N=3)	3	100.0	-	-
Salesman (N=3)	3	100.0	-	-
Truck Driver (N=2)	1	50.0	1	50.0
Janitor (N=2)	1	50.0	1	50.0
Mechanic (N=2)	2	100.0	-	-
Secretary (N=2)	2	100.0	-	-
Service Manager (N=1)	1	100.0	-	-
Reconditioning Man (N=1)	1	100.0	-	-
General Helper (N=1)	1	100.0	-	-

there are dealers who feel a farm background is not essential, but these are definitely in the minority.

One hundred percent of the dealers who would employ persons in the occupational titles of partsman, salesman, mechanic, secretary, service manager, reconditioning man, and general helper indicated that the persons filling these jobs must have a farm background.

Table VI indicates whether or not the dealers anticipated a turnover, an increase, a reduction, or no change in the employment outlook for the titles identified. A significant finding in the table is that no dealers anticipated a reduction in any of the occupational titles identified in the study. One hundred percent of the dealers who identified the occupational titles of salesman, truck driver, janitor, mechanic, reconditioning man, and general helper, indicated an increase in employment over the next 5 years.

Table VII was compiled to reveal employers perceptions of the importance of certain basic competences to each occupational title identified. Each dealer was queried as to the importance of each of these competences in relation to the occupational title being discussed. If the dealer felt the competency was very important he would give the competency a rating of ten (10). If he felt the competency was of little importance to the occupational title in question, a rating of one (1) was recorded. Each competency, therefore, could be rated anywhere between a high of 10 to a low of 1.

For the occupational title of set-up man, two competences received extremely high ratings, that of "Knowing and Following Safe Working Procedures" and "Following Directions". The 12 dealers that identified

TABLE VI

EMPLOYMENT OUTLOOK DURING NEXT FIVE YEARS
FOR IDENTIFIED OCCUPATIONAL TITLES

Occupational Titles	Distribution By 5-Year Employment Outlook							
	Increase		Turnover		Reduction		No Change	
	N	%	N	%	N	%	N	%
Set-up Man (N=12)	8	66.7	3	25.0	-	-	1	8.3
Assistant Partsman (N=10)	8	80.0	-	-	-	-	2	20.0
Mechanic's Helper (N=8)	5	62.5	3	37.5	-	-	-	-
Partsman (N=3)	2	66.7	-	-	-	-	1	33.3
Salesman (N=3)	3	100.0	-	-	-	-	-	-
Truck Driver (N=2)	2	100.0	-	-	-	-	-	-
Janitor (N=2)	2	100.0	-	-	-	-	-	-
Mechanic (N=2)	2	100.0	-	-	-	-	-	-
Secretary (N=2)	1	50.0	1	50.0	-	-	-	-
Service Manager	-	-	1	100.0	-	-	-	-
Reconditioning Man (N=1)	1	100.0	-	-	-	-	-	-
General Helper (N=1)	1	100.0	-	-	-	-	-	-

TABLE VII

EMPLOYER RATINGS ON VALUE OF SELECTED COMPETENCES FOR OCCUPATIONAL TITLES IDENTIFIED

Ratings of Competences by Occupational Titles

Basic Competences	Set-up Man (N=12)		Assistant Partsman (N=10)		Mechanic's Helper (N=8)		Partsman (N=3)		Salesman (N=3)		Truck Driver (N=2)		Janitor (N=2)		Mechanic (N=2)		Secretary (N=2)		Service Manager (N=1)		Reconditioning Man (N=1)		General Helper (N=1)		Overall Rating	
	Total Rating	AV Rating	Total Rating	AV Rating	Total Rating	AV Rating	Total Rating	AV Rating	Total Rating	AV Rating	Total Rating	Av Rating	Total Rating	AV Rating	Total Rating	AV Rating	Total Rating	AV Rating	Total Rating	AV Rating	Total Rating	AV Rating	Total Rating	AV Rating	Total Rating	Average
Relations With Other Employers	108	9.0	96	9.60	80	10.0	24	8.0	28	9.33	15	7.50	20	10.0	18	9.0	20	10.0	10	10.0	10	10.0	10	10.0	439	9.24
Relations With Customers	94	7.83	98	9.80	77	9.62	27	9.0	30	10.0	17	8.50	20	10.0	16	8.0	20	10.0	10	10.0	10	10.0	7	7.0	426	9.06
Relations With Supervisor	113	9.41	89	8.90	74	9.25	30	10.0	30	10.0	16	8.0	20	10.0	16	8.0	20	10.0	10	10.0	10	10.0	9	9.0	437	9.29
Communication	103	8.58	90	9.0	72	9.0	30	10.0	30	10.0	15	7.50	17	8.50	18	9.0	20	10.0	10	10.0	5	5.0	7	7.0	417	8.87
Knowing and Following Safe Working Conditions	115	9.58	88	8.80	74	9.25	29	9.66	28	9.33	19	9.50	20	10.0	18	9.0	20	10.0	10	10.0	10	10.0	9	9.0	440	9.36
Following Directions	115	9.58	97	9.70	79	9.87	29	9.66	27	9.0	20	10.0	17	8.50	18	9.0	20	10.0	9	9.0	10	10.0	9	9.0	450	9.57
Accepts and Carries Out Responsibility	111	9.25	95	9.50	80	10.0	27	9.0	28	9.33	14	7.0	17	8.50	18	9.0	20	10.0	9	9.0	10	10.0	10	10.0	439	9.34
Meets and Gets Along Well With People	105	8.75	90	9.0	72	9.0	25	8.33	30	10.0	17	8.50	18	9.0	18	9.0	20	10.0	10	10.0	10	10.0	7	7.0	422	8.97
Neat and Well Groomed	107	8.91	83	8.30	69	8.62	27	9.0	30	10.0	16	8.0	20	10.0	16	8.0	20	10.0	10	10.0	10	10.0	6	6.0	414	8.80
Checking Quality of Work	109	9.08	94	9.40	77	9.62	30	10.0	28	9.33	16	8.0	18	9.0	18	9.0	20	10.0	10	10.0	10	10.0	10	10.0	440	9.36
Ability to Handle Routine Mathematical Problems	83	6.91	75	7.50	59	7.37	28	9.33	28	9.33	12	6.0	15	7.50	15	7.50	20	10.0	10	10.0	5	5.0	7	7.0	357	7.59

NOTE: Highest AV Rating Attainable was (10)

this occupational title felt that "Ability to Handle Routine Mathematical Problems" was not too important as it received the lowest rating of all, a 6.91.

All total ratings for each occupational title were added together to determine the overall most important competence and overall least important competence considering all occupational titles.

Data in Table VIII show the highest anticipated salary with 5 years seniority for each occupational title recognized. The majority of the salaries fell within a range of $500 - $700 per month. The lowest salary anticipated was $350 for the occupational title of "Reconditioning Man". It was difficult to determine anticipated high salaries for some jobs, because the dealers responded only "highly variable" to the salary question. Such jobs were those of: Set-up Man, Mechanic's Helper, Partsman, and Salesman. In part, these jobs were highly variable due to Partsman and Salesman working on a commission basis. In reference to "Mechanic's Helper" and "Set-up Man", the 3 dealers that indicated the "Highly Variable" category for these job titles pointed out that if a man did well at these two jobs, the Mechanic's Helper would move to a Mechanic slot, the same held true for the Set-up Man. The job title of mechanic is considered to be highly variable.

The highest average anticiapted salary of all occupational titles identified was $850 per month for the Service Manager. The modal salary for 5 years seniority considering all occupational titles was $500 per month.

The rank order of occupational titles regarding highest average anticipated salary are as follows: service manager, salesman, truck

TABLE VIII

HIGHEST ANTICIPATED SALARIES AT FIVE YEARS SENIORITY

Distribution By Salary Levels

Occupational Titles	350		400		450		500		550		600		700		800		850 & Over		Highly Variable		Average
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	Dollars/mo.
Set-up Man (N=12)	-	-	1	8.3	-	-	6	50.0	-	-	2	16.7	1	8.3	1	8.3	-	-	1	8.3	554.54
Assistant Partsman (N=10)	-	-	-	-	-	-	3	30.0	-	-	4	40.0	2	20.0	1	10.0	-	-	-	-	610.00
Mechanic's Helper (N=8)	-	-	-	-	-	-	2	25.0	-	-	3	37.5	1	12.5	-	-	-	-	2	25.0	583.33
Partsman (N=3)	-	-	-	-	-	-	-	-	-	-	1	33.3	1	33.3	-	-	-	-	1	33.3	650.00
Salesman (N=3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	33.3	-	-	2	66.7	800.00
Truck Driver (N=2)	-	-	-	-	-	-	-	-	-	-	-	-	2	100.0	-	-	-	-	-	-	700.00
Janitor (N=2)	-	-	1	50.0	1	50.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	425.00
Mechanic (N=2)	-	-	-	-	-	-	-	-	2	100.0	-	-	-	-	-	-	-	-	-	-	550.00
Secretary (N=2)	-	-	-	-	-	-	2	100.0	-	-	-	-	-	-	-	-	-	-	-	-	500.00
Service Manager (N=1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	100.0	-	-	Minimum of 850.00
Reconditioning Man (N=1)	1	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350.00
General Helper (N=1)	-	-	1	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400.00

driver, partsman, assistant partsman, mechanics helper, set-up man, mechanic, secretary, janitor, general helper, and reconditioning man.

Analysis of Table IX indicates that a majority of the basic skills were desirable for all occupational titles identified in the study.

The more general type of skill, such as knowing what type fire extinguisher to use and writing clearly and spelling correctly, were overwhelmingly placed in the desirable category by all occupational titles identified.

There were more basic skills essential to the four occupational titles of Set-up Man, Mechanic, Assistant Partsman and Partsman than any other occupational title identified in the study.

The dealers response to mechanical skills was somewhat correlated with each dealers personal philosophy. Some dealers indicated they would rather have a man that couldn't do anything initially, than one who thinks he can do everything, but in actuality can do nothing. The investigator infers that this accounts for why the mechanical skills are skewed to about a 50-50 relationship, that is, 50 percent for the desirable category and 50 percent for the unnecessary category, for the basic skills used in the study.

Table X is a listing of fringe benefits associated with the occupational titles identified in the study. It is interesting to note that nearly all occupational titles identified enjoy the same fringe benefits.

The following fringe benefits were found to be offered in varying degrees for the job titles identified: vacation, holidays off, life insurance, paid sick leave, special tools furnished, uniforms, paid training leave, and hospitilization.

TABLE IX

NECESSITY OF BASIC SKILLS FOR IDENTIFIED OCCUPATIONAL TITLES

Number of Dealer Responses by Occupational Title and by Response Category

Basic Skills	Set-up Man N=12			Assistant Partsman N=10			Mechanic's Helper N=8			Partsman N=3			Salesman N=3			Truck Driver N=2			Janitor N=2			Mechanic N=2			Secretary N=2			Service Manager N=1			Reconditioning Man N=1			General Helper N=1		
	E	D	U	E	D	U	E	D	U	E	D	U	E	D	U	E	D	U	E	D	U	E	D	U	E	D	U	E	D	U	E	D	U	E	D	U
Knowing Type Fire Extinguisher	2	8	2	2	6	2	-	7	1	1	2	-	2	1	-	1	1	-	2	-	-	-	2	-	-	1	1	1	-	-	-	1	-	-	1	-
Cleaning, Regaping, and Installing Spark Plugs	1	7	4	-	6	4	1	5	2	1	2	-	-	3	-	-	1	1	1	-	1	-	1	1	1	-	-	1	-	-	1	-	-	1	-
Keeping Business Records	1	6	5	1	6	3	-	5	3	2	1	-	1	2	-	1	1	-	1	-	1	-	2	-	2	-	-	1	-	-	1	-	-	1	-
Reading Parts Manual	2	5	5	5	5	-	1	6	1	3	-	-	-	3	-	-	1	1	-	-	2	-	2	-	-	1	1	1	-	-	-	1	-	-	1	-
Ordering Parts For A Repair Job	-	7	5	3	6	1	-	6	2	3	-	-	-	3	-	-	1	1	-	-	2	1	1	-	-	1	1	1	-	-	-	1	-	1	-	-
Charging A Battery	3	7	2	2	7	1	1	6	1	3	-	-	-	3	-	1	1	-	1	-	1	-	2	-	-	1	1	1	-	-	1	-	-	-	-	-
Installing and Adjusting Breaker Points	1	8	3	-	6	4	1	6	1	-	2	1	-	2	1	1	1	-	1	-	1	1	1	-	-	1	1	1	-	-	-	1	-	-	-	1
Writes Clearly and Spells Correctly	1	8	3	4	6	-	2	4	2	2	1	-	1	1	1	-	2	-	1	-	1	-	2	-	-	1	1	1	-	-	-	1	-	-	1	-
Installing New Gaskets	2	8	2	1	7	2	2	4	2	-	2	1	-	1	2	-	1	1	-	-	2	-	2	-	-	1	1	1	-	-	-	1	-	-	-	1
Servicing and Repairing Cooling Systems	2	6	4	1	6	3	1	6	1	-	2	1	-	2	1	-	1	1	-	-	2	-	2	-	-	1	1	1	-	-	-	1	-	-	-	1
Servicing and Repairing Fuel Systems	1	4	7	1	6	3	-	7	1	-	2	1	-	1	2	-	1	1	-	-	2	1	1	-	-	1	1	1	-	-	-	1	-	-	-	1
Adjusting and Repairing Farm Machinery and Equipment	3	9	-	-	8	2	-	7	1	1	1	1	1	1	1	1	-	1	-	-	2	1	1	-	-	1	1	1	-	-	-	1	-	-	-	1
Joining Metal With An Arc Welder Or Gas Welding Equipment	-	8	4	1	5	4	1	6	1	-	2	1	-	2	1	-	1	1	-	1	1	-	2	-	-	1	1	1	-	-	-	1	-	-	-	1
Using A Torque Wrench	2	8	2	1	3	6	1	6	1	-	2	1	-	2	1	-	1	1	-	-	2	1	1	-	-	1	1	1	-	-	1	-	-	-	-	1
Adjusting Valve Clearance	1	6	5	-	5	5	-	8	-	-	2	1	-	2	1	-	2	-	-	-	2	1	1	-	-	1	1	1	-	-	-	1	-	-	-	1
Installing Piston Rings, Wrist Pins, and Bearings	1	6	5	-	5	5	-	8	-	-	2	1	-	2	1	-	1	1	-	-	2	1	1	-	-	1	1	1	-	-	-	1	-	-	-	1
Checking Bearing Clearances	1	6	5	-	5	5	-	8	-	-	2	1	-	2	1	-	1	1	-	-	2	1	1	-	-	1	1	1	-	-	-	1	-	-	-	1
Testing Condensors and Coils	1	6	5	-	5	5	-	8	-	-	2	1	-	2	1	-	1	1	-	-	2	1	1	-	-	1	1	1	-	-	-	1	-	-	-	1
Checking Ignition Timing	1	6	5	-	5	5	-	8	-	-	2	1	-	2	1	-	1	1	-	-	2	1	1	-	-	1	1	1	-	-	-	1	-	-	-	1
Testing Generator Output	1	6	5	-	5	5	-	8	-	-	2	1	-	2	1	-	1	1	-	-	2	1	1	-	-	1	1	1	-	-	-	1	-	-	-	1
Locating Ignition Circuit Troubles	-	6	6	-	5	5	-	8	-	-	2	1	-	2	1	-	1	1	-	-	2	1	1	-	-	1	1	1	-	-	-	1	-	-	-	1
Service and/or Repair Of Hydraulic Units	-	8	4	-	6	4	-	8	-	-	2	1	-	2	1	-	1	1	-	-	2	1	1	-	-	1	1	1	-	-	-	1	-	-	-	1
Locating Common Engine Troubles with Electronic Test Equipment	-	5	7	-	5	5	-	7	1	-	2	1	-	1	2	-	1	1	-	-	2	1	1	-	-	1	1	1	-	-	-	1	-	-	-	1
Replacing Valves and Valve Seats	-	5	7	-	5	5	-	8	-	-	2	1	-	1	2	-	-	2	-	-	2	1	1	-	-	1	1	1	-	-	-	1	-	-	-	1
Set Up Farm Machinery and Equipment	6	6	-	-	6	4	-	7	1	-	3	-	-	2	1	-	1	1	-	1	1	-	2	-	-	1	1	1	-	-	-	1	-	-	-	1
Pre-ordering Parts For Stock	-	5	7	3	6	1	1	2	5	2	1	-	-	2	1	-	1	1	-	-	2	-	1	1	-	1	1	1	-	-	-	1	-	-	-	1
Using the Compression Tester	-	7	5	-	5	5	-	8	-	-	2	1	-	2	1	-	1	1	-	1	1	1	1	-	-	1	1	1	-	-	-	1	-	-	-	1
Removing and Installing Sleeves	-	6	6	-	5	5	-	8	-	-	2	1	-	2	1	-	1	1	-	1	1	1	1	-	-	1	1	1	-	-	-	1	-	-	-	1
Calibrating Fertilizer Applying Machinery	-	9	3	-	5	5	-	7	1	-	2	1	-	3	-	-	1	1	-	1	1	-	2	-	-	1	1	1	-	-	-	1	-	-	-	1
Identifying Parts From Customer's Description	1	6	5	3	5	2	1	6	1	3	-	-	-	3	-	-	1	1	-	1	1	1	1	-	-	1	1	1	-	-	-	1	-	1	-	-
Servicing Magnets	-	5	7	-	4	6	-	6	2	-	1	2	-	1	2	-	-	2	-	1	1	-	2	-	-	1	1	1	-	-	-	1	-	-	-	1
Preparing A Shop Order	2	6	4	2	5	3	-	8	-	3	-	-	-	2	1	1	-	1	-	1	1	1	1	-	-	1	1	1	-	-	-	1	-	-	1	-
Servicing Diesel Fuel Systems	-	7	5	-	6	4	1	5	2	-	2	1	-	2	1	-	1	1	-	1	1	1	1	-	-	1	1	1	-	-	-	1	-	-	1	-
Calibrating Planting Machines	1	7	4	-	5	5	-	6	2	-	2	1	-	2	1	-	-	2	-	1	1	1	1	-	-	1	1	1	-	-	-	1	-	-	-	1
Using The Dynamometer	-	7	5	-	6	4	-	7	7	-	2	1	-	2	1	-	1	1	-	1	1	1	1	-	-	1	1	1	-	-	-	1	-	-	-	1
Installing, Repairing, Adjusting, Servicing, and Operating Silage Equipment	-	7	5	-	4	6	-	4	4	-	2	1	-	2	1	-	1	1	-	1	1	-	2	-	-	1	1	1	-	-	1	-	-	-	-	1

NOTE: E = Essential, D = Desirable, U = Unnecessary.

TABLE X

EMPLOYMENT BENEFITS

Occupational Title	Number Of Dealers By Type Of Benefit										
	VACATION	HOLIDAYS OFF	LIFE INSURANCE	PAID SICK LEAVE	BONUS	COMMISSION	PROFIT SHARING	TOOLS FURNISHED	UNIFORMS FURNISHED	PAID TRAINING LEAVE	HOSPITILIZATION
Set-up Man (N=12)	12	12	12	12	8	-	-	12	12	12	12
Assistant Partsman (N=10)	10	10	10	10	6	-	-	10	10	10	10
Mechanic's Helper (N=8)	8	8	8	8	4	-	-	8	8	8	8
Partsman (N=3)	3	3	3	3	3	-	-	3	3	3	3
Salesman (N=3)	3	3	3	3	3	2	-	3	3	3	3
Truck Driver (N=2)	2	2	2	2	2	-	-	2	2	2	2
Janitor (N=2)	2	2	2	2	2	-	-	2	2	2	2
Mechanic (N=2)	2	2	2	2	2	-	-	2	2	2	2
Secretary (N=2)	2	2	2	2	2	-	-	2	2	2	2
Service Manager (N=1)	1	1	1	1	1	-	-	1	1	1	1
Reconditioning Man (N=1)	1	1	1	1	1	-	-	1	1	1	1
General Helper (N=1)	1	1	1	1	1	-	-	1	1	1	1

NOTE: N = Number of Dealers identifying Occupational Titles.

Profit sharing was not offered by any of the dealers in the study; however, one dealer was contemplating the use of such a benefit.

Vacations ranged anywhere from 1 to 4 weeks, and some employers let their employees off every other weekend, a rotation basis, during the slack period of the winter months.

Holidays off consisted of the following for all dealers in the study: New Years Day, Fourth of July, Labor Day, Thanksgiving, and Christmas.

Responses varied somewhat in reference to life insurance. A few of those responses received were as follows: yes; up to $10,000, but not mandatory, free of charge for employee; available at group rates; optional, dealer pay 25 percent; none; $5,000 furnished by company; pay 50 percent.

Paid sick leave was granted for an average of between 5 to 7 days. Many employers said that it would depend upon the employee, but everyone received a minimum of 5 days sick leave.

Bonuses were found to be distributed at Christmas time. There were 2 employers that offered no bonuses and 3 employers indicated that it would depend upon the company's financial condition at the close of the year.

The only occupational title identified that offered employment on a commission basis was that of salesman. One employer that identified this occupational title indicated a negative response to salesmen working on a commission.

The table indicates 100 percent of the dealers furnished tools; however, those tools furnished were only special tools. What is inferred by special tools are those tools that the manufacturer places in the

dealership that are absoutely essential for service of the product. The employee must furnish his own hand tools.

In reference to uniforms furnished, 9 dealers offered uniforms on a 50-50 basis, 3 indicated that it was not mandatory, 1 indicated he would pay 100 percent of uniform expense, and 2 dealers said they did not offer any uniform allowance.

Paid training leave is the time allotted to employees who go to service schools, located at the various manufacturers locations. This was available to all employees.

Examples of responses to hospitalization policies were as follows: dealer pays all; yes, up to 35 days; dealer pays 25 percent; each employee carries his own; group rate for family; only if full time employee; yes; available; workmen's compensation; and pay 50 percent.

CHAPTER V

SUMMARY AND CONCLUSIONS

Agriculture is a rapidly changing industry. The agricultural machinery business is also changing. The general consensus of the dealers queried was that there would be only three manufacturers of farm tractors and equipment left in business, ten short years from now.

A large percentage of the dealers questioned indicated that they were going to have to get "big", or get "out". Tractors and farm machinery are very expensive to own in these modern times. For example, a tractor of four-plow size can cost as much money as four medium-priced automobiles.

All dealers are being forced to carry large inventories with great variability in products. Many dealers are selling large quantities of consumer products, i.e. lawnmowers, hedge trimmers, snowmobiles, toys, chainsaws, rototillers, and other such items.

The public, in general, is demanding better service. Better service requires top notch employees, employees that know what they are doing and why they are doing it. One dealer indicated that when he puts on a new man, that new man is going to have to make him some money if he expects to stay.

In view of what has been said, there is a need to develop areas of study that will train people for immediate employment. There are many post-high school programs, but what about the typical high school

graduate, what is he going to do if he cannot afford to go to a post-high school training facility. This study dealt with the occupational titles for which farm machinery dealers are willing to employ high school graduates. The study also describes those occupational titles. There is a need to teach, in high school, the subject material that will be most helpful to high school youth in their particular area of interest.

Statement of the Problem

The purpose of this study was to provide instructors at area vocational school and vocational instructors of Oklahoma with information that will be of assistance in areas to be studied. This information would help instructors at area vocational schools and vocational agriculture instructors develop a curriculum for the Set-up Man, Assistant Partsman, Mechanic's Helper, Partsman, Salesman, Truck Driver, Janitor, Mechanic, Secretary, Service Manager, Reconditioning Man, and General Helper.

The objectives of the study were to determine, for the above occupational titles, beginning salary; salary at 5 years seniority; amount of physical exertion needed; number of employees now employed; whether the dealer anticipated a turnover, increase, decrease or no change for each occupational title recognized; whether or not a farm background was preferred.

A list of basic competences was derived and each dealer rated the competences on a scale of 10 to 1 for each occupational title recognized. A rating of 10 was considered very important and the rating of 1 not important at all. Furthermore, a thorough list of 36 basic skills most likely to be encountered by employees was devised and rated as

either Essential, Desirable, or Unnecessary for each occupational title identified by each dealer. Statistics in reference to fringe benefits were also included in the interview schedule.

Procedure

The managers of the 20 selected agriculture machinery dealerships were written and appointments were requested. Seventeen of the managers or assistant managers selected for the sample were personally interviewed by the investigator. The investigator marked each data schedule item as directed by the manager or assistant manager.

Summary

A summary of the findings of the study indicate the following:

1) Occupational titles for which high school graduates may qualify in rank order of the number of times identified were as follows: set-up man, assistant partsman, mechanic's helper, partsman, salesman, truck driver, janitor, mechanic, secretary, service manager, reconditioning man, and general helper.

2) Beginning salaries ranged from a low of $251 to over $600 per month; however, the majority of the jobs had starting salaries in the ranges of $351 - $400 and $401 - $451 per month respectively.

3) There is "much" physical exertion involved in all job titles identified except that of secretary and general helper. These jobs were rated occasional and "some" respectively.

4) Relative to the manpower distribution among the occupational titles identified, it was found that there was a total of 72 positions. Of these, there were 54 full time, 11 part-time, and 6 summer and/or

student workers. Nineteen workers were employed as set-up men, 11 as assistant partsmen, 8 as mechanic's helpers, 7 in each of the jobs partsman and salesman, 6 as mechanics, 5 as reconditioning men, 3 as truck drivers, 2 each as janitor and secretary, and 1 each as service manager and general helper.

5) A farm background was preferred in all occupational titles except truck driver and janitor, these two jobs were 50-50, half the dealers that recognized these occupational titles wanted a man with a farm background and half state no preference.

6) There will be an increase in employment in the majority of the occupational titles recognized. The dealer who recognized the job title of service manager indicated that he expected a turnover in this job title within the next 5 years.

7) All basic competences listed in the study received high ratings. The competence that received the highest rating was that of "Knowing and Following Safe Working Conditions", while the competence that dealt with "Ability to Handle Routine Mathematical Problems" received the lowest ratings.

8) Relative to the highest anticipated salaries per month at 5 years seniority among the occupational titles identified, the following averages were computed: Service Manager - $850 plus, Salesman - $800, Truck Driver - $700, Partsman - $650, Assistant Partsman - $610, Mechanic's Helper - $583.33, Mechanic - $550, Set-up Man - $554.54, Secretary - $500, Janitor - $425, General Helper - $400, and Reconditioning Man - $350.

9) The majority of the basic skills listed in the study were found to be desirable. A few of the skills were considered unnecessary for certain occupational titles while others were considered very essential.

10) Employees at agriculture machinery businesses can expect anywhere from 1 week to 3 weeks vacation, 5 holidays off a year, life insurance, paid sick leave, bonuses at Christmas, uniforms furnished on a 50-50 basis, paid training leave, and hospitiliaztion. There was no profit sharing, and only the occupational titles of partsman and salesman offered a commission plus salary.

Conclusions

Based on findings of this study, the investigator felt it was appropriate to draw the following conclusions:

1) There is a wide variety of jobs available for high school students in pacesetter dealerships.

2) Jobs identified require an appreciable amount of physical exertion.

3) Farm machinery dealers prefer employees with a farm background.

4) The beginning salaries were considered appropriate and chances for advancement within 5 years to a comfortable salary quite feasible.

5) The majority of positions available are for a full-time employment basis.

6) Managers of the "pacesetter" dealerships anticipate increases in all occupational titles identified in the study.

7) Basic skills and competences used in the interview schedule, (see page 2 of Appendix A) are very important to the occupational titles identified in the study.

9) The occupational titles identified offer a wide varitey of fringe benefits.

10) Overlap of skills and competences is required; therefore, employees must be flexible.

Recommendations

Recommendations which appear to be pertinent would include the following:

1) That additional studies be conducted to determine the job titles in other areas of non-farm agriculture for which high school graduates may qualify.

2) That an increased effort be expended to cause employers to become more cognizant of the need for and benefits of employing high school graduates.

3) That educational leaders use data from the study for decision making, especially relative to formulating instructional content.

4) That educational leaders use data from the study to provide guidance services to students in the formulation of educational and career objectives in the area of agricultural machinery employment.

BIBLIOGRAPHY

(1) Morton, J. Brown. "Determination of Educational Needs of Selected Job Titles in Farm Implement Businesses in Oklahoma." (Doctoral Dissertation, Oklahoma State University), 1966.

(2) Stitt, Thomas R. "Preparing Employees for Agricultural Machinery Dealerships." Agricultural Education, (September, 1969), pp. 69-70.

(3) Stevenson, William W. "A Study of Employment Opportunities and Training Needs in Off-Farm Agricultural Occupations." (Doctoral Dissertation, Oklahoma State University), 1966.

(4) Terry, Howard Robert. "Composite Profiles of Agricultural Machinery Service Occupations as Derived from Comparative Analyses Across Incumbents." Unpublished Ph.D. Dissertation, The Ohio State University, 1969.

(5) Mitchell, Jesse B. "Employment Opportunities and Educational Needs in Off-Farm Agri-Business Occupations in Oklahoma." Unpublished Ed.D dissertation, Oklahoma State University, 1970.

(6) Saloutos, Charles. "Developing Instructional Programs in Agricultural Supplies and Services." Agricultural Education, (November, 1969), pp. 117-118.

(7) Loreen, C. O. "Occupational Opportunities and Training Needs for Youth for Non-Farm Agricultural Jobs." (A report of a study, Washington State University), 1967.

(8) Mager, Robert F. and Kenneth M. Beach, Jr. Developing Vocational Instruction, Palo Alto, California: Fearon Publishers, 1967.

(9) Huber, Harold D. "A Post-Secondary Program in Farm Machinery Technology." Agricultural Education, Vol. 42, No. 3, (September, 1969), pp. 64-65.

APPENDIX A

EMPLOYER INTERVIEW SCHEDULE

1. What jobs do you have at your dealership that you would be willing to hire a high school graudate to do?

1)

2)

3)

4)

5)

6)

7)

8)

9)

10)

OCCUPATIONAL TITLE OF_____

1. Place a check in the blank that comes nearest to the starting salary.

____200 to 250 dollars per month
____250 to 300 dollars per month
____300 to 350 dollars per month
____350 to 400 dollars per month
____400 to 450 dollars per month
____450 to 500 dollars per month
____500 to 550 dollars per month
____550 to 600 dollars per month
____Over 600 dollars per month, if so, how much more_____

2. What would be the highest anticipated salary during the next five years? _____ per month

3. What are the physical requirements of this particular occupational title?

____Much physical activity required
____Some physical activity
____Occasional physical activity
____No physical activity required

4. How many full-time employees do you have working at the present time?

No. of employees_____
Part-time employees_____

5. Do you anticipate a turnover, a reduction, or an increase in employees in this particular occupational title in the next 5 years?

A turnover . . . . . Yes _____ No _____

A reduction . . . . . Yes _____ No _____

An increase . . . . . Yes _____ No _____

OCCUPATIONAL TITLE OF_____

6. Rate the following competences with a (10) if they are very important and a (1) if they are not important to the occupational title in question. (circle)

RELATIONS WITH OTHER EMPLOYEES - - - - - - - - - - 10 9 8 7 6 5 4 3 2 1

RELATIONS WITH CUSTOMERS - - - - - - - - - - - - - 10 9 8 7 6 5 4 3 2 1

RELATIONS WITH SUPERVISOR - - - - - - - - - - - - 10 9 8 7 6 5 4 3 2 1

COMMUNICATION- - - - - - - - - - - - - - - - - - - 10 9 8 7 6 5 4 3 2 1

KNOWING AND FOLLOWING SAFE WORKING PROCEDURES - 10 9 8 7 6 5 4 3 2 1

FOLLOWING DIRECTIONS - - - - - - - - - - - - - - - 10 9 8 7 6 5 4 3 2 1

ACCEPTS AND CARRIES OUT RESPONSIBILITY - - - - - - 10 9 8 7 6 5 4 3 2 1

MEETS AND GETS ALONG WELL WITH PEOPLE - - - - - - 10 9 8 7 6 5 4 3 2 1

NEAT AND WELL GROOMED- - - - - - - - - - - - - - - 10 9 8 7 6 5 4 3 2 1

CHECKING QUALITY OF WORK - - - - - - - - - - - - - 10 9 8 7 6 5 4 3 2 1

ABILITY TO HANDLE ROUTINE MATHEMATICAL PROBLEMS - 10 9 8 7 6 5 4 3 2 1

Others that you as an employer think are important.

OCCUPATIONAL TITLE OF _____

7. Basic skills that high school students should know in order to be hired in the occupational title listed above.

Rate these skills in the following manner:

"E" in the left hand blank would stand for **essential**.

"D" in the left hand blank would stand for desirable.

"U" in the left hand blank would stand for undesirable.

___ 1. Knowing what type of fire extinguisher to use.

___ 2. Cleaning, regapping, and installing spark plugs.

___ 3. Keeping business records.

___ 4. Reading parts manual.

___ 5. Ordering parts for a repair job.

___ 6. Charging a battery.

___ 7. Installing and adjusting breaker points.

___ 8. Writes clearly and spells correctly.

___ 9. Installing new gaskets.

___10. Servicing and repairing cooling systems.

___11. Servicing and repairing fuel systems.

___12. Adjusting and repairing farm machinery and equipment.

___13. Joining metal with an arc welder or gas welding equipment.

___14. Using a torque wrench.

___15. Adjusting valve clearance.

___16. Installing piston rings,

___17. Checking bearing clearances.

___18. Testing condensors and coils.

___19. Checking Ignition timing.

___20. Testing generator output.

OCCUPATIONAL TITLE OF _____

___21. Locating ignition circuit troubles.

___22. Servicing and/or repair of hydraulic units.

___23. Locating common engine troubles with electronic test equipment.

___24. Replacing valves and valves seats.

___25. Set up farm machinery and equipment.

___26. Pre-ordering parts for stock.

___27. Using the compression tester.

___28. Removing and installing sleeves.

___29. Calibrating fertilizer applying machinery.

___30. Identifying parts from customer description.

___31. Servicing magnetos.

___32. Preparing a shop order.

___33. Servicing diesel fuel systems.

___34. Calibrating planting machines.

___35. Using the dynamometer.

___36. Installing, reparing, adjusting, servicing, and operating silage equipment.

List other skills below that an employee in this occupational title need to know.

EMPLOYMENT BENEFITS

EMPLOYMENT BENEFITS	OCCUPATIONAL TITLES AT THIS DEALERSHIP									
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
VACATION										
HOLIDAYS OFF										
LIFE INSURANCE										
HEALTH INSURANCE										
PAID SICK LEAVE										
BONUS										
COMMISSION										
PROFIT SHARING										
TOOLS FURNISHED										
UNIFORMS FURNISHED										
PAID TRAINING LEAVE										
OTHER (specify)										

APPENDIX B

CONFIRMATION LETTER

Michael D. Williams
Box 225 Willham South
Stillwater, OK 74074
February 12, 1972

Dear Sir:

As a graduate student at Oklahoma State University, I am planning to conduct a research study to identify and describe those occupational titles in Farm Machinery Dealerships for which high school graduates may qualify.

This study is designed to provide high school Vo-Ag instructors and instructors at Area Vocational Technical schools with information that will assist them in determining areas of study needed. Your dealership has been recommended as one of the more prominent in this state and therefore one which would provide the type of information needed.

A short interview with you will be required for this information. This interview will consist of filling out one short questionnaire.

Please fill out the enclosed post card indicating whether or not you would be willing to participate in this research. Your replies will be strictly confidential and only the compiled data with no names attached will be published.

I thank you in advance for your cooperation.

Sincerely,

Michael D. Williams
Graduate Student

MDW
Enclosure: 1

VITA 1

MICHAEL DALE WILLIAMS

Candidate for the Degree of

Master of Science

Thesis: OCCUPATIONAL TITLES IN OKLAHOMA AGRICULTURAL MACHINERY DEALERSHIPS FOR WHICH HIGH SCHOOL GRADUATES MAY QUALIFY

Major Field: Agricultural Education

Biographical:

Personal data: Born at Duncan, Oklahoma, October 6, 1948, the son of Warren Edwin Dale and Virginia Ruth Williams.

Education: Attended grade school at Duncan, Oklahoma; graduated from Duncan Senior High School in 1966; Bachelor of Science degree from Oklahoma State University with a major in Agriculture Education in January, 1971; completed requirements for the Master of Science degree in May, 1972.

Experiences: Graduate of the Army Pre-Commission Correspondence Course, Ft. Benning, Ga.; Graduate of the Personnel Specialist Course, Ft. Knox, Ky.; worked one summer in Arkansas as a lumberjack; worked in Oklahoma Oil Fields; supply clerk assistant, USPHS Indian Hospital, Lawton, Oklahoma; Four years as part-time assistant partsman at the John Deere Dealership in Duncan, Oklahoma; Joined the U.S. Army Reserve on 14 May 1966, presently pending a Direct Appointment to Second Lieutenant.

Organizations: Member of First Baptist Church, Duncan, Oklahoma; Collegiate FFA, Alpha Tau Alpha (Reporter), Oklahoma State University Alumni Association, Student member of National Vocational Agriculture Teachers Association, and Oklahoma Vocational Agriculture Teachers Association.