

COMPETENCY LEVELS OF AND PRE-SERVICE TRAINING
RECEIVED BY COUNTY COOPERATIVE EXTENSION
SERVICE AGRICULTURE AGENTS IN
OKLAHOMA RELATIVE TO
LIGHT HORSES

By

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CHAPTER I

INTRODUCTION

Oklahoma has been a leader in the horse industry in the past due to the presence of large horse breeding farms, pari-mutuel racing, national horse shows, environmental conditions, and geographical location. In order for Oklahoma to continue to be a leader in the horse industry it must expand the educational programs in existence today. This expansion can only take place if the individuals responsible for these programs are competent with light horses related materials.

The demand for individuals having practical experiences along with theories of horse management that are sound has greatly altered the approach to training professionals in the various aspects of horse science. Fortunately, the need for instruction in these areas is being realized by many colleges and universities which are starting to offer horse management courses with increasing frequency.

In 1984 a study completed by Parli (1) entitled, "Competency Levels of and Pre-Service Training Received by Vocational Agriculture Teachers in the Central District of Oklahoma Relative to Light Horses" recommended that further research be conducted, especially among Cooperative Extension Service (C.E.S.) Agriculture Agents, to determine their competencies relative to light horses. Therefore, the focus of this research will deal exclusively with determining the C.E.S. Agriculture Agents competency levels and degree of pre-service training

as it relates to light horses.

Statement of the Problem

Although county C.E.S. Agriculture Agents in Oklahoma may be conducting programs on light horse related subject matter, the degree of competency possessed by those county C.E.S. Agriculture Agents is unknown to the university Animal Science and Agricultural Education Departments. Additionally, the nature of pre-service training the county C.E.S. Agriculture Agents received in the area of light horses is unknown.

Purpose of the Study

The purpose of this study was to determine the county C.E.S. Agriculture Agents in Oklahoma degree of competency and pre-service training relative to light horse related subject matter.

Objectives of the Study

To meet the purpose of this study, the following objectives were established:

1. To acquire sufficient demographic data in order to characterize the county C.E.S. Agriculture Agents in Oklahoma.
2. To determine the pre-service experiences gained by the county C.E.S. Agriculture Agents in Oklahoma, relative to light horses.
3. To determine the competencies possessed by the county C.E.S. Agriculture Agents in Oklahoma, relative to light horse subject matter.

Scope of the Study

The scope of the study includes all 69 of the county C.E.S. Agriculture Agents employed in Oklahoma.

Assumptions of the Study

In order to accomplish the objectives of the study the following assumptions were made:

1. All of the county C.E.S. Agriculture Agents surveyed would report accurate information to the best of their ability.
2. The survey instrument would assess sufficient data to meet the needs of the objectives of this study.
3. The competencies included in the survey instrument would be representative of the competencies required to conduct programs on light horse related subject matter.

Definition of Terms

The following are terms defined as used in this study:

County C.E.S. Agriculture Agent - An individual employed by the Oklahoma Cooperative Extension Service to disseminate agriculture subject matter on a county basis.

Light Horse - Equine measuring 14.2 hands or more at the withers, weighing 900 to 1400 pounds, used for riding, driving, racing, or general utility purposes (2).

Competency - Includes the personal abilities and skills needed to complete a task (3).

Pre-Service Training - Training or education received by individuals

prior to becoming employed as a county C.E.S. Agriculture Agent.

Equine - Pertaining to a horse (4).

Equitation - The art of riding (5).

Respondents - County C.E.S. Agriculture Agents that completed and returned the questionnaire.

Post-Secondary - Educational institutions beyond the high school level. Usually referred to as two or four year programs at junior colleges, community colleges, state colleges, and universities (1).

In-Service - Continuing update of information relative to light horses (1).

CHAPTER II

REVIEW OF LITERATURE

Introduction

In the past several years the horse population has experienced a tremendous increase due to the increase in the traditional horse industry and the increase of new horse owners. This phenomenon has led to an overwhelming demand for equine educational programs dealing with light horses. As a result of this demand more competent individuals are needed to teach or conduct programs dealing with light horse related materials.

Fortunately, the need for instruction in horse care has been identified by the educational community. More educational institutions are developing equine education programs and many are attempting to expand their existing programs.

This increase in the popularity of the horse can only continue if more individuals receive technical training in the horse sciences coupled with practical experiences.

The Horse

Horses are generally divided into three groups: Light Horses, which are described as measuring 14.2 hands or more at the withers, weighing 900 to 1,400 pounds, used for riding, driving, racing, or

general utility purposes. Draft Horses, who range from 14.2 hands to 17.2 hands at the withers, weigh 1,400 pounds or more, and are used primarily for drawing heavy loads. And, Ponies, which are under 14.2 hands and range from 500 to 900 pounds (2). Each of these types may include several breeds, and the same breed may include more than one type.

Ensminger (6, p.223) stated: "The evolution of the horse covered a period of approximately 58,000,000 years; but that man hunted him as recently as 25,000 years ago and domesticated him a mere 5,000 years ago." This information was also confirmed by Denhardt (7, p.67) who stated, "We know that early man hunted and ate horses in Europe, for their bones have been found in campfire remains."

One of the first uses of the horse was to help man conduct his wars. As early as 2,000 B.C. the Assyrians used horses to draw chariots to transport soldiers. The horse continued to increase in importance to man as their relationship continued to grow. This was evidenced by Denhardt (7) who further stated:

Throughout the ages the horse has probably had more influence on man's destiny than any other animal. He has served as a means of transportation, a fellow soldier in battle, a most important piece of farm equipment, a symbol of power and wealth, a tax deduction, an inspiration to the artist, a trade item, a means of recreation, and an ever faithful friend (p. 69).

Horses were first brought to the Americas by Columbus and by Cortez when he invaded Mexico in 1519. From here the horse spread throughout North America where they were first used by Indians and latter by cowboys to work cattle on the range. The horse continued to play an important role in agriculture until the dawn of mechanization. The direction of the horse took a downward swing until the recent

rejuvenation of horse popularity. This was summed up by Campbell and Lasely (8) who stated:

Later horses were replaced by tractors. Horses of all kinds gradually decreased in numbers during the next few years. Recently, however, horse numbers have been increasing because of the popularity of light horses for shows, sports, racing, and pleasure riding (p. 552).

Oklahoma Agriculture 2000(9) also stated:

In 1920, there were approximately 20 million horses in the United States compared with a low of 3 million in 1960. It is estimated there will be more than 20 million horses in the U.S. by 1985. Two reports in 1975 indicated that the horse industry comprised 10 percent of the U.S. recreation expenditures of \$15 billion was spent on the horse industry alone. This figure has increased sharply since 1975 (p. 120).

Horses in Oklahoma

Parli (1) stated:

Oklahoma has played an important role in the history and development of what is now known as the 'modern stock horse.' During the settlement of the Southwest, Oklahoma residents used the horse for three basic reasons: work, transportation, and recreation. Today the horse is no longer used for transportation and less than two percent are used as work animals. The horse of the 1980's is a leisure animal used in a recreational program or as a companion animal (p. 8).

This increase in pleasure horses along with the introduction of pari-mutuel horse racing has served to strengthen the horse industry in Oklahoma. Today, many outstanding breeders, brood mare bands, sires, halter horses, and performance horses are located in Oklahoma. The American Quarter Horse is the predominant breed in the state; however, several other breeds also have reputational breeders and horses within the state. The breeding phase of the horse industry is mostly concentrated with show, performance, and race horses.

Topliff (10), Assistant Professor of Animal Science at Oklahoma State University, stated that Oklahoma now has an inventory of over 500,000 horses and that this number is increasing at the rate of approximately ten percent. Oklahoma ranks third behind Texas and California respectively among the 50 states in total horse numbers. However, the state ranks first in horses per square mile.

This increase in horse interest is evidenced by Oklahoma Agriculture 2000 (9) which stated:

The youth horse program is growing rapidly, and many of the new owners, riders, and exhibitors are 4-H and Future Farmers of America (FFA) members. The current 4-H horse project enrollment includes 11,500 members, and 1,300 FFA members have horses in their supervised livestock programs (p. 121).

A Need for Horse Related Educational Programs

The increase in the interest of the light horse has caught the attention of many educators, as well as commercial and industrial companies. Ensminger (6) points out that nine million horses in the United States represent an estimated \$13 billion investment. Annual expenditures for horse feed, drugs, tack and equipment average around \$1,000 per horse, grossing a total of \$9 billion per year. In 1966, 4-H club horse projects exceeded beef cattle projects for the first time and have continued this trend during recent years. Horse shows and saddle clubs have increased in size and numbers and horse racing continues to be America's leading spectator sport. With the increase in economics of the horse industry, horse production courses again started showing up as part of many college and university curriculums in the late 1960's and early 1970's.

This increased need for equine education programs has also been felt by the Cooperative Extension Service. Oklahoma Agriculture 2000 (9) states:

The need for extension educational programs and assistance expands with the Oklahoma horse industry. The number of requests for educational programs continues to increase. Horse owners are hungry for factual information on how to select, feed, manage, train, and ride horses. They want to know what constitutes a healthy horse and how to keep him healthy. Horse breeders want information on balanced rations, herd health problems, how to improve conception rates in mares, and new techniques and developments in artificial insemination. Young people want to know how to judge horses, how to select tack, and how to properly ride and exhibit horses (p. 121).

Rodgers (11) believes there are many career opportunities in and around the horse industry which do not require a degree in horse training. He sees the growth in the horse industry and the horse as a recreational product as an opportunity for more young people to seek careers in the horse field and he believes experience is a prerequisite for success.

This attitude is shared by others who feel that experience is sometimes overlooked by educational institutions. Lillibridge (12) pointed out that many riding schools have set courses from which students may choose from. These schools give students instruction, information, and expose them to many different techniques but, many times the schools do not satisfy the requirements for extensive first hand experience.

Potter (13) feels that for an individual to enter into a career in the horse industry they must have two kinds of educational backgrounds. First, if an individual decides to go into upper level management, whether it be for a breeding farm, equestrian center, or

a private training stable they should attend a college or university where they can obtain technical training in the horse sciences. They must be informed about the principles of horse behavior, nutrition, feeding, genetics, physiology of reproduction, and disease control. Secondly, the individual must have some practical horse husbandry. In other words, they must have some horsemanship abilities.

Borton (14) also shares this belief. He would like to see schools start to develop horse science programs with internships or programs worked out with breeders and horse people where students can apprentice to gain some practical experience to go along with the technical skills they learn in college. He feels that many programs are not relating to the industry enough right now, but, he feels confident that institutions in the future will develop curriculums for a horse science or horse management major in the future.

McElroy (15) reported that the American Horse Council estimated that nationally there are 200,000 full-time employees working in the horse industry. He also stated that "employers have a real need for individuals with knowledge of different breeds of horses, of feeding, grooming, exercising, and the care of broodmares, stallions, and yearlings" (p. 112). He also revealed that a study by the Kentucky Department of Economic Security verified the need for qualified workers in the industry which ultimately led to the development of the Kentucky Equine Education program.

Related Studies

The following review of literature includes selected references which address light horse educational programs in institutions of

learning. It was discovered there were three studies which dealt with post-secondary education in the United States. A study which dealt with the competency levels of and pre-service training received by vocational education teachers was also reviewed.

Rudolph's (16) study completed in 1979, surveyed by questionnaire 88 colleges and universities in the United States. The main objective of his study was to determine characteristics of equine programs in colleges and universities.

Some of his major findings were: horses ranked third in overall economic importance in the livestock industry. Beef and dairy cattle preceeded horses and swine, poultry, and sheep were ranked below horses in that order.

Pleasure/hobby was the highest ranking category for horse enterprises composing the industry, followed by showing, breeding and management, and racing respectively.

The greatest demand for equine education was dominated by post-secondary level education programs and 4-H programs.

Parmenter (17) at the University of California at Northridge studied by questionnaire 86 colleges and universities throughout the United States in 1978. The primary objective of her study was to determine the nature and scope of equine education programs offered in colleges and universities and the attitudes of specialists toward these programs.

Some of the major findings were as follows: animal husbandry departments were responsible for the largest percentage of equine education programs. The major reason for establishing riding programs was community, student, and staff interest. The majority of activity

courses offered balanced, hunt, and stock seat styles of riding with most students receiving one to two hours of activity per week. Farm management training, nutrition and judging were more frequently taught, but many new and innovative courses were also being offered.

Inadequate funding and obtaining suitable horses and facilities were the most common problems encountered by equine education programs. Most programs were relatively new having only been in operation from zero to five years.

The findings of this study indicates that many colleges and universities are developing new programs to keep up with the growing demand for knowledge in equine education.

The major findings of this study were reported for two categories, state colleges and universities, and private colleges and were as follows: All of the private institutions had riding programs compared to one-half of the state institutions. Approximately three-fourths of the state institutions had breeding programs or research programs while nine of the private institutions did. The private and state horse programs appeared to have the common problems of financial support of the riding programs and inadequate facilities.

Borton (14) further revealed that he felt many institutions did not anticipate equine education growing at the rate it has. Many of the Animal Science departments may have felt the horse business was not on the same economics as the cattle business and were afraid to become involved in this new discipline. He, like many others, would like to see equine education programs expand and explains his philosophy in the following manner:

What I'd like to see develop is a situation where schools start to actually develop horse science programs with internships or programs worked out with breeders and horse people where students can apprentice and gain some practical experience to go along with the technical skills they learn in college. I think the time will come when these institutions will develop curriculums such as for a horse management major or a horse science major and things like that. Right now most programs aren't relating to the industry enough (p. 78).

Parli (1) surveyed by questionnaire 92 vocational agriculture teachers in the central district of Oklahoma in 1984. The primary objectives of his study were to determine the competency levels of and pre-service training received by those teachers.

Parli (1) calculated the competency levels of the vocational agriculture teachers by utilizing a five-point Likert scale. To be classified as outstanding the mean response had to be in the range of 4.5 to 5.0; to be classified as above average the mean response had to be in the range of 3.50 to 4.49; to be classified as average the mean response had to be in the range of 2.50 to 3.49; to be classified as below average the mean response had to be in the range of 1.50 to 2.49; and, to be classified as poor the mean response had to be in the range of 1.0 to 1.49.

The ranking of mean responses can be found in Table I. The competency with the highest mean response was deworming with 2.77. Two competencies, history of the light horse and floating teeth, had the lowest mean response of 2.07. The vocational agriculture teachers perceived themselves to be average in the competencies which received a mean response of 2.50 or better and perceived themselves to be below average in the competencies with a mean response of 2.49 or lower.

TABLE I
RANK ORDER OF MEAN RESPONSE FROM HIGHEST TO LOWEST
TEACHER COMPETENCY LEVEL

Competency	Mean Response
Deworming	2.77
Vaccinating	2.75
Internal and External Parasites	2.75
Uses of Light Horses	2.70
Health Maintenance and Disease Prevention	2.70
Basic First Aid	2.68
Fundamental of Foot Care	2.68
Color Marking	2.67
Breaking Horses to Lead	2.67
Parts of the Light Horse	2.65
Judging	2.61
Transportation	2.61
Evaluating Height	2.59
Handling Horses Safely	2.59
Nutritional Requirements	2.59
Starting the Young Horse Under Saddle	2.55
Breeds of the Light Horse	2.54
Management of Feeding Horses	2.54
Mating Procedures	2.52
Selection and Care of Tack	2.51
Distinguishing between Natural Gaits	2.49
Care of the Mare and Foal	2.45
Mouthing for Age	2.42
Physical Equipment and Stable Management	2.42
Fertility and Genetics of Reproduction	2.38
Foot Problems (shoeing)	2.36
Desirable Conformation and Disposition	2.36
Care of the Stallion	2.35
Branding	2.32
Castration	2.30
Advanced Performance Maneuvers	2.09
History of Light Horse	2.07
Floating Teeth	2.07

Source: Parli, Gary Eugene. "Competency Levels of and Pre-Service Training Received by Vocational Agriculture Teachers in the Central district of Oklahoma." (Unpub. M.S. thesis, Oklahoma State University, Stillwater, 1984.)

The frequency distributions relative to the pre-service experiences of the vocational agriculture teachers are reported in Table II. A large majority (76.8 percent) have had not college credit hours in light horse related subject matter.

It was further evidenced that 62.3 percent of the vocational agriculture teachers had not attended any special light horse related programs. The remaining 37.7 percent had attended one or more of the following: in-service training, Vo-Tech courses, clinics, workshops, breed programs, cooperative extension programs, and other programs such as horse shoeing school and horse shows.

Parli (1) further revealed that 60.9 percent of the vocational agricultural teachers did not devote any time to teaching light horse related materials. Seventeen point four percent devoted less than one week to light horse related materials while only 5.8 percent of the vocational agriculture teachers devoted four weeks to light horse material.

It was concluded by Parli (1) that the vocational agriculture teachers had received little, if any, training in light horse related material. He further stated that:

Since most of the vocational agriculture teachers do not teach light horse related subject matter in their vocational agriculture classes or train horse judging teams, the investigator concludes this may be a result of the lack of pre-service training involving study of the light horse (p. 38).

Parli (1) concluded, based on his review of literature and findings, there is a definite need for educational programs concerning light horses.

TABLE II
PRE-SERVICE EXPERIENCE OF RESPONDENTS IN RELATION
TO LIGHT HORSES

Pre-Service Experience	Frequency Distribution of Respondents									Totals	
	No. (%)									No.	%
	No College Hours	1-3 Hours	4-6 Hours	7-9 Hours	10 or More Hours					No.	%
Completion of Higher Education Credit Hours	53 (76.0%)	12 (17.5%)	2 (2.9%)	1 (1.4%)	1 (1.4%)					69	(100.0%)
	None	In-Service	Vo-Tech	Clinics	Workshops	Breed Programs	Cooperative Extension	Other		No.	%
Participation in Various Programs	43 (62.3%)	7 (10.1%)	6 (8.7%)	10 (14.5%)	8 (11.6%)	9 (13.0%)	4 (5.8%)	8 (11.6%)		*	*
	No Time Spent	Less Than One Week	One Week	Two Weeks	Three Weeks	Four Weeks				No.	%
Time Spent Teaching Light Horse Material	42 (60.9%)	12 (17.4%)	6 (8.7%)	2 (2.9%)	3 (4.3%)	4 (5.8%)				69	(100.0%)
		Yes				No				No.	%
Teachers Training Horse Judging Teams		7 (10.1%)				62 (89.9%)				69	(100.0%)
Teachers Who have Been or are Horse Owners			52 (75.4%)			17 (24.6%)				69	(100.0%)
Teachers Who have Competed in Horse Events			33 (47.8%)			36 (52.2%)				69	(100.0%)

* Totals in this column do not total 100% because teachers could respond to more than one area.

Source: Parli, Gary Eugene. "Competency Levels of and Pre-Service Training Received by Vocational Agriculture Teachers in the Central District of Oklahoma." (Unpub. M.S. thesis, Oklahoma State University, Stillwater, 1984.)

Summary of Review of Literature

The horse has been a valuable animal to mankind throughout the ages. He served early man as a source of food and since their domestication 5,000 years ago the horse has served as a companion in battle, work, and pleasure.

The horse holds a special place in the history of Oklahoma. Today, Oklahoma ranks third nationally in total horse numbers and first in horses per square mile. The horse also has a large economic impact on the state with the introduction of pari-mutuel racing, the increase in horse shows, and the number of outstanding horse breeding farms.

Many educational institutions are attempting to meet the rising need of competent individuals to work in the horse industry. It is the opinion of many educators that programs should be developed to not only teach technical skills but to also allow students to obtain some practical experience.

Several studies have been conducted to characterize the existing equine educational programs throughout the United States. Institutions are attempting to increase their programs but, many are unsure of how to approach this increasing need of equine education. It was further concluded that there is a growing demand to increase the competency levels of those individuals working in or with the horse industry.

In summary, the literature reviewed made evident that the horse has a definite place in today's livestock economy. It was further shown that with the increase in the horse industry a greater demand for equine educational programs exists. Colleges and universities

are attempting to meet this need through research and by developing more specialized equine programs for individuals seeking careers in the horse industry. Furthermore, it is apparent that more competent educators are needed to help those established in the horse industry continue to improve and expand with the changing times.

CHAPTER III

METHODOLOGY

Introduction

This study was designed to determine the county Cooperative Extension Service (C.E.S.) Agriculture Agents in Oklahoma degree of competency relative to conducting programs on light horse related subject matter. A further purpose was to determine the pre-service experiences the county C.E.S. Agriculture Agents gained relative to light horses.

This study is follow-up research of the study conducted by Parli (1) in 1984. The objective of his study was to determine the competency levels of and pre-service training received by vocational agricultre teachers in the central district of Oklahoma. This study was initiated from one of Parli's recommendations that his study be duplicated with C.E.S. Agriculture Agents.

Objectives of the Study

The objectives of this study were:

1. To acquire sufficient demographic data in order to characterize the county C.E.S. Agriculture Agents in Oklahoma.

2. To determine the pre-service experiences gained by the county C.E.S. Agriculture Agents in Oklahoma, relative to light horses.

3. To determine the competences possessed by the County C.E.S. Agriculture Agents in Oklahoma, relative to light horse subject matter.

Population

The population for this study consisted of 69 county C.E.S. Agriculture Agents in Oklahoma.

Table III indicates the frequency distribution of the county C.E.S. Agriculture Agents who responded to the mailed questionnaire. Of the 69 county C.E.S. Agriculture Agents surveyed, 55 (80.0 percent) responded, and 14 (20.0 percent) did not respond.

Development of the Instrument

In formulating the questions for the instrument (Appendix A), the writer made revisions to the instrument used by Parli (1) (Appendix B) in 1984. The instrument was originally designed to determine the competency levels of and pre-service experiences gained by vocational agriculture teachers, in the central district of Oklahoma relative to light horses. It was deemed necessary to make revisions to the demographic questions of the survey instrument to conduct this study on county C.E.S. Agriculture Agents in the State of Oklahoma.

The competencies selected to be included as part of the survey instrument were identical to the competencies used by Parli (1). Parli's competencies were selected as a result of his interviews with Topliff (10), Associate Professor of Equine Science, Animal Science Department at Oklahoma State University, and Harp (19), Curriculum

TABLE III
FREQUENCY DISTRIBUTION OF COUNTY C.E.S. AGRICULTURE
AGENTS RESPONDING TO THE MAILED QUESTIONNAIRE

Category	Frequency	
	Number	Percent
Respondent	55	80.0
Non-Respondents	14	20.0
Total	69	100.0

Specialist with the State Department of Vocational and Technical Education. These competencies were divided into seven categories including:

1. Orientation
2. Selection and Judging
3. Health and Foot Care
4. Nutrition
5. Reproduction
6. Facilities and Equipment
7. Training Light Horses

In addition, recommendations of related studies or texts were reviewed.

An Educational Resources Information Center (E.R.I.C.) search was conducted to locate studies that relate to light horse subject matter and follow-up of agriculture education relative to light horses. The search revealed 27 references which were reviewed but most were not relevant to this study. Other materials reviewed came from graduate surveys, books, magazines, and interviews with county C.E.S. Agriculture Agents using light horse materials.

It was determined that, in order to duplicate Parli's (1) study, the same questions (with the exception of the revisions to the demographic questions) would be used in order to satisfy the purpose and objectives of this study. It was determined that the forced response questions were necessary to be asked in order to characterize the county C.E.S. Agriculture Agents surveyed. Additionally, some questions were asked in such a manner to permit open responses. It was

further determined to utilize a five-point Likert scale to measure the degree of competency in particular areas of light horse subject matter, possessed by the county C.E.S. Agriculture Agents. The degree of competency was measured as follows: to be classified as Out-standing mean response had to be in the range of 4.5 to 5.0; to be classified as Above Average the mean response had to be in the range of 3.50 to 4.49; to be classified as Average the mean response had to be in the range of 2.50 to 3.49; to be classified as Below Average the mean response had to be in the range of 1.50 to 2.49; and, to be classified as Poor the mean response had to be in the range of 1.0 to 1.49.

The designed instrument was then presented to Dr. David Freeman, Extension Specialist at Oklahoma State University, and the writer's thesis committee members for review. Only a few changes were made before the instrument was put into use.

Collection of Data

On March 12, 1987 each county C.E.S. Agriculture Agent in Oklahoma was mailed a questionnaire along with a cover letter (Appendix C) from the writer. A self-addressed stamped envelope was enclosed for the agriculture agent to return the completed instrument. On March 26, 1987 a follow-up letter (Appendix D) and questionnaire was mailed to the non-respondents as well as a self-addressed stamped envelope for the return of the completed questionnaire.

Analysis of Data

The data were compiled and tabulated in a manner designed to express the findings related to the purpose and objectives of the study. Since the research effort was primarily of a descriptive nature, statistics such as frequencies, percentages, mean responses, and rankings were selected as an appropriate means of describing the findings. "The primary use of descriptive statistics is to describe information or data through the use of numbers" (Key, 18, p. 142). The data were analyzed on a computer and a print out was received containing the statistical information

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The purpose of this chapter is to present and analyze the data collected in this study.

The population for this study comprised county C.E.S. Agriculture Agents in the State of Oklahoma. The 55 respondents to the mailed questionnaire comprised 80 percent of the total 69 county C.E.S. Agriculture Agents in Oklahoma who were surveyed.

In Table IV, the frequency distributions of county C.E.S. Agriculture Agents by their level of education is presented. Of the 55 respondents, eight (14.5 percent) had a Bachelor of Science degree, 16 (29.1 percent) possessed a Bachelor of Science plus 15 hours, while 23 (41.9 percent) held the Master of Science degree and these two groups made up 70.9 percent of the respondents. Of the remaining respondents, six (10.9 percent) held the Master of Science plus 15 hours with the balance of two, (3.6 percent) respondents who held a Doctor of Education or other degree.

Table V indicates the number of years the respondents had been county C.E.S. Agriculture Agents. The categories of zero to three years each had nine (16.4 percent) respondents. Ten (18.2 percent) of the respondents had eight to 11 years of experience, while eight (14.5 percent) had 12 to 15 years experience. The largest category

TABLE IV
 FREQUENCY DISTRIBUTION OF COUNTY C.E.S. AGRICULTURE AGENTS
 BY LEVELS OF EDUCATION

Education	Frequency Distribution	
	No.	%
B.S.	8	14.5
B.S. plus 15	16	29.1
M.S.	23	41.9
M.S. plus 15	6	10.9
Ed.D.	1	1.8
Other	1	1.8
Total	55	100.0

TABLE V
 FREQUENCY DISTRIBUTION OF COUNTY C.E.S. AGRICULTURE AGENTS
 BY YEARS OF EXPERIENCE

Years Experience	Frequency Distribution	
	No.	%
0 - 3	9	16.4
4 - 7	9	16.4
8 - 11	10	18.2
12 - 15	8	14.5
16 or more	19	34.5
Total	55	100.0

of respondents, 19 (34.5 percent), had 16 or more years of experience as county C.E.S. Agriculture Agents.

In Table VI, the number and percentage of respondents in each level pertaining to the completion of higher education credit hours in light horse related subject matter are presented. Thirty-eight (69.1 percent) of the respondents had no college hours completed. Thirteen (23.6 percent) of the respondents had completed one to three hours of college credit, while the remaining four (7.3 percent) respondents had four to six hours of light horse related subject matter. No respondents had completed more than six hours of college credit.

The numbers and percentages of respondents, according to participation in various types of pre-service light horse related programs, are presented in Table VII. Of the the 55 respondents, 12 (21.8 percent) had not attended any special programs pertaining to light horse subject matter. The largest number of respondents, 30 (54.5 percent), had attended Cooperative Extension programs, while 29 (52.7 percent) had attended clinics and 28 (50.9 percent) had taken part in workshops. Of the remaining respondents 18 (32.7 percent) had attended in-service programs, while 11 (20.0 percent) of the respondents had attended breed programs. Four (7.3 percent) respondents checked other and listed events such as tours, horse shows, and horse training as where they had gained additional experience. None of the respondents had attended vo-tech courses. Note the number of responses varies in Table VII because the respondents were allowed to indicate more than one response.

TABLE VI
 DISTRIBUTION OF POPULATION BY COMPLETION OF HIGHER EDUCATION
 CREDIT HOURS IN LIGHT HORSE RELATED SUBJECT MATTER

Number of Hours	Frequency Distribution	
	No.	%
No College Hours	38	69.1
1 - 3	13	23.6
4 - 6	4	7.3
7 - 9	0	0
10 or more	0	0
Total	55	100.0

TABLE VII
 FREQUENCY DISTRIBUTION OF COUNTY C.E.S. AGRICULTURE AGENTS
 BY PARTICIPATING IN VARIOUS TYPES OF LIGHT
 HORSE RELATED PROGRAMS

Type of Program	Frequency Distribution	
	No.*	%
Not Attended Any Special Programs	12	21.8
In-Service Training	18	32.7
Vo-Tech Courses	--	----
Clinics	29	52.7
Workshops	28	50.9
Breed Programs	11	20.0
Cooperative Extension Programs	30	54.5
Other	4	7.3

*Note: The number of responses varies because respondents were allowed to indicate more than one response.

Table VIII represents the number and percentage of respondents relative to the number of times a week they use light horse related subject matter. Twenty-four (43.6 percent) of the respondents did not use light horse related materials in their counties. The largest majority of the respondents, 26 (47.3 percent), used light horse related material four to six times a week, while only one (1.8 percent) respondent used the material seven to nine times a week, and one (1.8 percent) respondent used light horse related material more than ten times a week.

In Table IX, the number and percentage of respondents that are presently training a horse judging team are represented. Of the 55 respondents 50 (90.9 percent) reported that they did not train a horse judging team, while five (9.1 percent) reported they were presently training a horse judging team.

The frequency distribution in Table X reported the response for the following question: "Are you now or have you ever been a horse owner?" A majority of the respondents, 41 (74.5 percent), reported that they had been or were horse owners, while 14 (25.5 percent) of the respondents had not been horse owners.

Table XI reveals the frequency distribution of the respondents who have completed light horse related competitive events such as horse shows, rodeos, etcetera. Twenty-three (41.8 percent) of the 55 respondents reported that they had competed in light horse competitive events while 32 of the respondents have not competed in light horse competitive events.

An objective of this study was to determine the competencies

TABLE VIII

FREQUENCY DISTRIBUTION OF COUNTY C.E.S. AGRICULTURE AGENTS
BY THE NUMBER OF TIMES A WEEK THEY USE LIGHT
HORSE RELATED MATERIALS

Number of Times A Week	Frequency Distribution	
	No.	%
0	24	43.6
1 - 3	26	47.3
4 - 6	3	5.5
7 - 9	1	1.8
10 or more	1	1.8
Total	<u>55</u>	<u>100.0</u>

TABLE IX

FREQUENCY DISTRIBUTION OF COUNTY C.E.S. AGRICULTURE AGENTS
PRESENTLY TRAINING A HORSE JUDGING TEAM

Training Teams	Frequency Distribution	
	No.	%
Yes	5	9.1
No	50	90.9
Total	<u>55</u>	<u>100.0</u>

TABLE X
 FREQUENCY DISTRIBUTION OF COUNTY C.E.S. AGRICULTURE AGENTS
 WHO PRESENTLY ARE OR HAVE BEEN HORSE OWNERS

Horse Owners	Frequency Distribution	
	No.	%
Yes	41	74.5
No	14	25.5
Total	<u>55</u>	<u>100.0</u>

TABLE XI
 FREQUENCY DISTRIBUTION OF COUNTY C.E.S. AGRICULTURE AGENTS
 WHO HAVE COMPETED IN LIGHT HORSE EVENTS

Have Competed	Frequency Distribution	
	No.	%
Yes	23	41.8
No	32	58.2
Total	<u>55</u>	<u>100.0</u>

possessed by county C.E.S. Agriculture Agents in Oklahoma relative to light horse subject matter.

The county C.E.S. Agriculture Agents were asked to rate their degree of competency on a five-point scale consisting of poor, below average, average, above average, and outstanding for each skill. The categories were each assigned the following values: Poor, 1.0-1.49; Below Average, 1.50-2.49; Average, 2.50-3.49; Above Average, 3.50-4.49; and Outstanding, 4.50-5.0. The frequency distribution and mean responses were computed and reported for each competency.

In Table XII three categories of light horse orientation were reported. Of the 55 respondents 13 (23.6 percent) ranked themselves poor, 14 (25.5 percent) ranked themselves below average, while 20 (36.4 percent) ranked themselves average relative to the history of light horses. The remaining eight (14.5 percent) respondents perceived themselves to be above average while none of the respondents ranked themselves outstanding. The mean response was 2.41 which revealed an overall ranking of below average relative to the history of light horses.

The respondents reported a mean response of 2.71 and a ranking of average in the category of breeds of light horses. Ten (18.2 percent) respondents perceived themselves to be poor, while eight (14.5 percent) reported themselves to be below average. Twenty-six (47.3 percent) and ten (18.2 percent) county C.E.S. Agriculture Agents perceived themselves to be average or above average respectively. One (1.8 percent) respondent classified him/herself to be outstanding in the knowledge of breeds of light horses.

TABLE XII

FREQUENCY DISTRIBUTION AND MEAN RESPONSE OF COUNTY C.E.S.
 AGRICULTURE AGENTS RELATING TO THEIR COMPETENCIES
 IN LIGHT HORSE ORIENTATION

	Poor		Below Average		Average		Above Average		Out-standing		Total		Mean Response	Inter-pretation of Mean Response
	N	%	N	%	N	%	N	%	N	%	N	%		
History of Light Horses	13	23.6	14	25.5	20	36.4	8	14.5	--	----	55	100.0	2.41	Below Average
Breeds of Light Horses	10	18.2	8	14.5	26	47.3	10	18.2	1	1.8	55	100.0	2.71	Average
Uses of Light Horses	8	14.5	10	18.2	29	52.8	7	12.7	1	1.8	55	100.0	2.69	Average

In the remaining category of Table XII eight (14.5 percent) respondents reported a poor ranking, while ten (18.2 percent) perceived themselves to be below average in the knowledge of the uses of light horses. The majority of the respondents, 29 (52.8 percent), perceived themselves to be average which led to a mean response of 2.69 percent and an overall ranking of average. Of the remaining eight respondents, seven (12.7 percent) perceived themselves to be above average and one (1.8 percent) outstanding.

Table XIII contains the findings of seven categories dealing with selection and judging. County C.E.S. Agriculture Agents perceived themselves to be average in the knowledge of the parts of the light horse with a mean response of 3.04. Three (5.5 percent) respondents perceived themselves poor; 12 (21.8 percent) responded below average; 23 (41.8 percent) responded average; 14 (25.4 percent) above average; while three (5.5 percent) respondents perceived themselves to be outstanding.

Four (7.3 percent) respondents perceived themselves poor while 11 (20.0 percent) reported a below average response in the area of desirable conformation and disposition. A mean response of 3.02 and an overall ranking of average was obtained with the majority of the respondents, 23 (41.8 percent), reporting an average response. Fourteen (25.4 percent) perceived themselves to be above average, while three (5.5 percent) respondents were outstanding.

A mean response of 2.69 and an overall ranking of average was reported by the county C.E.S. Agriculture Agents in the category of color markings. The responses given were as follows: nine (16.3 percent)

poor; 15 (27.3 percent) below average; 18 (32.7 percent) average; ten (18.2 percent) above average; and three (5.5 percent) outstanding.

In the category of mouthing for age the majority of the respondents, 24 (61.8 percent), reported themselves below average, 24 (43.1 percent) or poor ten (18.2 percent). Fifteen (27.3 percent) of the respondents perceived themselves to be average, while of the remaining six respondents four (7.3 percent) were above average and the remaining two (3.6 percent) were outstanding. The respondents were perceived to be below average in this category with a mean response of 2.35.

The data in the category of evaluating height revealed that nine (16.3 percent) or the respondents perceived themselves to be poor, while 15 (27.3 percent) were below average. Eighteen (32.7 percent) of the respondents reported themselves to be average. Above average is how ten (18.2 percent) of the respondents perceived themselves while, three (5.5 percent) gave an outstanding response. County C.E.S. Agriculture Agents reported themselves to be average with a mean response of 2.69.

The county C.E.S. Agriculture Agents perceived themselves to be above average with a mean response of 2.76 in the category of distinguishing between natural gaits. The data was reported as follows: nine (16.3 percent) poor; 11 (20.0 percent) below average; 22 (40.0 percent) average; ten (18.2 percent) above average; and three (5.5 percent) outstanding.

In the final category of Table XIII eight (14.6 percent) of the respondents reported themselves to be poor in the category of judging, while ten (18.2 percent) perceived themselves to be below average. A

mean response of 2.76 reveals that the respondents perceive themselves to be average. Twenty-six (47.3 percent) of the respondents reported an average response, while of the remaining 11 respondents nine (16.3 percent) responded above average with two (3.6 percent) outstanding.

Table XIV reports the finding of ten categories in the area of health and foot care. In the category of health maintenance and disease prevention five (9.1 percent) respondents reported a poor ranking, 16 (29.1 percent) responded below average; while 23 (41.8 percent) of the respondents perceived themselves to be average. Ten (18.2 percent) of the respondents were above average, while one (1.8 percent) respondent was outstanding in the knowledge of this category. A mean response of 2.75 indicated that the county C.E.S. Agriculture Agents perceived themselves to be average in health maintenance and disease prevention.

In the category of internal and external parasites the data were reported as follows: five (9.1 percent) respondents were poor; 12 (21.8 percent) below average; 25 (45.4 percent) were average; ten (18.2 percent) above average; and three (5.5 percent) were outstanding. The respondents perceived themselves to be average in this category with a mean response of 2.89.

The county C.E.S. Agriculture Agents perceived themselves to be average in the category of basic first aid with a mean response of 2.69. Five (9.1 percent) respondents reported themselves to be poor, while 17 (31.0 percent) respondents were below average in this category. Average is how 24 (43.6 percent) of the respondents perceived themselves, while eight (14.5 percent) and one (1.8 percent)

TABLE XIII
 FREQUENCY DISTRIBUTION AND MEAN RESPONSE OF COUNTY C.E.S.
 AGRICULTURE AGENTS RELATING TO THEIR COMPETENCIES
 IN SELECTION AND JUDGING OF LIGHT HORSES

	Poor		Below Average		Average		Above Average		Out-standing		Total		Mean Response	Inter-pretation of Mean Response
	N	%	N	%	N	%	N	%	N	%	N	%		
Parts of the Light Horse	3	5.5	12	21.8	23	41.8	14	25.4	3	5.5	55	100.0	3.04	Average
Desirable Conformation and Disposition	4	7.3	11	20.0	23	41.8	14	25.5	3	5.5	55	100.0	3.02	Average
Color Markings	9	16.3	15	27.3	18	32.7	10	18.2	3	5.5	55	100.0	2.69	Average
Mouthing for Age	10	18.2	24	43.6	15	27.3	4	7.3	2	3.6	55	100.0	2.35	Below Average
Evaluating Height	9	16.3	15	27.3	18	32.7	10	18.2	3	5.5	55	100.0	2.69	Average
Distinguishing Between Natural Gaits	9	16.3	11	20.0	22	40.0	10	18.2	3	5.5	55	100.0	2.76	Average
Judging	8	14.6	10	18.2	26	47.3	9	16.3	2	3.6	55	100.0	2.76	Average

TABLE XIV

FREQUENCY DISTRIBUTION AND MEAN RESPONSE OF COUNTY C.E.S. AGRICULTURE AGENTS
RELATING TO THEIR COMPETENCIES IN HEALTH AND FOOT CARE

	Poor		Below Average		Average		Above Average		Out- standing		Total		Mean Response	Inter- pretation of Mean Response
	N	%	N	%	N	%	N	%	N	%	N	%		
Health Main- tenance & Disease Prevention	5	9.1	16	29.1	23	41.8	10	18.2	1	1.8	55	100.0	2.75	Average
Internal & External Parasites	5	9.1	12	21.8	25	45.4	10	18.2	3	5.5	55	100.0	2.89	Average
Basic First Aid	5	9.1	17	31.0	24	43.6	8	14.5	1	1.8	55	100.0	2.69	Average
Fundamentals of Foot Care (Trimming)	6	10.9	21	38.2	18	32.8	8	14.5	2	3.6	55	100.0	2.62	Average
Foot Problems (Shoeing)	9	16.4	27	49.1	12	21.8	6	10.9	1	1.8	55	100.0	2.33	Below Average
Vaccinating	6	10.9	16	29.1	24	43.6	7	12.8	2	3.6	55	100.0	2.69	Average
Deworming	6	10.9	12	21.8	26	47.3	9	16.4	2	3.6	55	100.0	2.80	Average
Branding	9	16.4	15	27.2	22	40.0	9	16.4	--	---	55	100.0	2.56	Average
Castration	12	21.8	21	38.2	18	32.7	4	7.3	--	---	55	100.0	2.25	Below Average
Floating Teeth	14	25.5	29	52.7	11	20.0	1	1.8	--	---	55	100.0	1.98	Below Average

of the respondents reported an above average or outstanding ranking respectively.

The data in the category of fundamentals of foot care (trimming) revealed that six (10.9 percent) of the county C.E.S. Agriculture Agents perceived themselves to be poor, while the largest number of respondents, 21 (38.2 percent), reported that their knowledge was below average in this category. A slight majority of the respondents, 50.8 percent, perceived themselves to be either average, 18 (32.8 percent), above average eight (14.5 percent), or outstanding two (3.6 percent). A mean response of 2.62 was computed to give the respondents an average ranking.

In the category of foot problems (shoeing) nine (16.4 percent) respondents and 27 (49.1 percent) respondents perceived themselves to be poor or below average respectively. Twelve (21.8 percent) of the respondents ranked their competency level as average, while six (10.9 percent) respondents considered themselves to be above average. Only one (1.8 percent) county C.E.S. Agriculture Agent reported him/herself to be outstanding in this category. A mean response of 2.33 indicated that these agents perceived themselves to be below average in the knowledge of foot problems (shoeing).

The county C.E.S. Agriculture Agents perceived themselves to be average in the knowledge of vaccinating with a mean response of 2.69. The data reported is listed as follows: poor, six (10.9 percent); below average, 16 (29.1 percent); average, 24 (43.6 percent); above average, seven (12.8 percent); and outstanding, two (3.6 percent).

In the category of deworming the largest number of respondents,

26 (47.5 percent), perceived themselves to be average. Twelve (21.8 percent) respondents reported a below average response, while the remaining respondents, nine (16.4 percent), six (10.9 percent), and two (3.6 percent) perceived themselves to be above average, poor, or outstanding respectively. The county C.E.S. Agriculture Agents perceived themselves to be average with a mean response of 2.80.

The data in the category of branding revealed a mean response of 2.56 which earned an overall ranking of average. Nine (16.4 percent) respondents felt their knowledge was poor relative to branding, while 15 (27.2 percent) reported they were below average. Twenty-two (40.0 percent) respondents responded with an average ranking, while the remaining nine respondents reported their competency levels as above average. No county C.E.S. Agriculture Agents perceived themselves to be outstanding in this category.

Castration was the next category the county C.E.S. Agriculture Agents were asked to rank their competency levels in. A mean response of 2.25 revealed that they perceived their knowledge to be below average in this category. The data compiled revealed the following responses: 12 (21.8 percent) poor; 21 (38.2 percent) below average; 18 (32.7 percent) average; four (7.3 percent) above average; with no respondents perceiving themselves to be outstanding.

The county C.E.S. Agriculture Agents perceived themselves to be below average with a mean response of 1.98 in the category of floating teeth. No respondents perceived themselves to be outstanding, while the largest number of responses 29 (52.7 percent) were below average. Fourteen (25.5 percent) reported themselves to be poor in this

knowledge, while 11 (20.0 percent) were average and one (1.8 percent) respondent was above average.

Table XV reports the findings for two categories in the areas of nutrition. Four (7.3 percent) respondents reported themselves to be poor in the knowledge of management of feeding horses, while 12 (21.8 percent) of the respondents felt they were below average. The majority of the county C.E.S. Agriculture Agents, 28 (50.9 percent), assessed themselves to be average, which helped lead to a mean response of 2.87 and an overall ranking of average. Of the remaining 11 respondents nine (16.4 percent) and two (3.6 percent) perceived themselves to be above average or outstanding respectively.

The second category reported in Table XV revealed that the county C.E.S. Agriculture Agents perceived themselves to be average with a mean response of 2.89 with respect to their knowledge of nutritional requirements. The data obtained was listed as follows: four (7.3 percent) poor; ten (18.2 percent) below average; 31 (56.4 percent) average; eight (14.5 percent) above average; two (3.6 percent) outstanding.

Table XVI relates to competency levels of county C.E.S. Agricultural Agents in regard to reproduction and is composed of four categories. In the first category ten (18.2 percent) respondents perceived themselves to be poor, while 11 (20.0 percent) reported their competency level to be below average. No respondents classified themselves to be outstanding in this category, while of the remaining respondents 26 (47.3 percent) were average and eight (14.5 percent) considered themselves to be above average. A mean response of 2.58

TABLE XV
 FREQUENCY DISTRIBUTION AND MEAN RESPONSE OF COUNTY C.E.S.
 AGRICULTURE AGENTS RELATING TO THEIR DEGREE
 OF COMPETENCY IN NUTRITION

	Poor		Below Average		Average		Above Average		Out-standing		Total		Mean Response	Inter-pretation of Mean Response
	N	%	N	%	N	%	N	%	N	%	N	%		
Management of Feeding Horses	4	7.3	12	21.8	28	50.9	9	16.4	2	3.6	55	100.0	2.87	Average
Nutritional Requirements	4	7.3	10	18.2	31	56.4	8	14.5	2	3.6	55	100.0	2.89	Average

revealed that the respondents perceived themselves to be average in knowledge with respect to mating procedures.

The category dealing with fertility and genetics of reproduction received an overall ranking of below average due to the mean response of 2.45. Eleven (20.0 percent) of the respondents considered themselves to be poor, while 15 (27.3 percent) responded with a below average ranking. The largest number of county C.E.S. Agriculture Agents, 22 (40.0 percent), perceived themselves to be average in the knowledge of this category, while the remaining seven (12.7 percent) reported their competency levels to be above average.

In the third category under reproduction the county C.E.S. Agriculture Agents were asked to rank their competency level in relation to the care of the mare and foal. Ten (18.2 percent) of the respondents ranked themselves as poor, while 12 (21.8 percent) of the respondents considered their knowledge to be below average. Average is how the largest number of respondents, 27 (49.1 percent), perceived themselves with five (9.1 percent) respondents answering to the above average rank and only one (1.8 percent) respondent considering his/her competency to be outstanding.

The final category represented in Table XVI related to the care of the stallion. The mean response of the county C.E.S. Agriculture Agents was 2.35 which represents a below average ranking. Ninety-nine percent of the respondents perceived their knowledge in this category to be average or below. The frequency distribution was as follows: 12 (21.8 percent) poor; 18 (32.7 percent) below average; 20 (36.4 percent) average; four (7.3 percent) above average; and one (1.8 percent)

TABLE XVI

FREQUENCY DISTRIBUTION AND MEAN RESPONSE OF COUNTY C.E.S.
 AGRICULTURE AGENTS RELATING TO THEIR COMPETENCIES
 IN REPRODUCTION

	Poor		Below Average		Average		Above Average		Out-standing		Total		Mean Response	Inter-pretation of Mean Response
	N	%	N	%	N	%	N	%	N	%	N	%		
Mating Procedure	10	18.2	11	20.0	26	47.3	8	14.5	--	---	55	100.0	2.58	Average
Fertility & Genetics of Reproduction	11	20.0	15	27.3	22	40.0	7	12.7	--	---	55	100.0	2.45	Below Average
Care of Mare & Foal	10	18.2	12	21.8	27	49.1	5	9.1	1	1.8	55	100.0	2.55	Average
Care of the Stallion	12	21.8	18	32.7	20	36.4	4	7.3	1	1.8	55	100.0	2.35	Below Average

outstanding.

Table XVII contains four categories in the areas of facilities and equipment. The county C.E.S. Agriculture Agents perceived themselves to be average in relation to physical facilities and stable management with a mean response of 2.62. Nine (16.4 percent) of the respondents perceived themselves to be poor, while 12 (21.8 percent) reported their knowledge to be below average. The largest number of respondents, 26 (47.3 percent), indicated their competency levels to be average while of the remaining eight respondents seven (12.7 percent) felt they were above average, while one (1.8 percent) felt he/she was outstanding.

The data relating to selection and care of tack revealed 11 (20.0 percent) respondents felt their knowledge was poor, while 13 (23.7 percent) respondents considered themselves to be below average. Average is how 22 (40.0 percent) of the respondents perceived themselves, while eight (14.5 percent) reported an above average response. Only one (1.8 percent) respondent perceived himself/herself to be outstanding. A mean response of 2.55 indicated that the county C.E.S. Agriculture Agents perceived themselves to be average in relation to selection and care of tack.

Average is how the county C.E.S. Agriculture Agents perceived themselves in relation to handling horses safely. A mean response of 2.84 was calculated from the following responses: six (10.9 percent) poor; 11 (20.0 percent) below average; 26 (47.3 percent) average; ten (18.2 percent) above average; and two (3.6 percent) outstanding.

TABLE XVII
 FREQUENCY DISTRIBUTION AND MEAN RESPONSE OF COUNTY C.E.S.
 AGRICULTURE AGENTS RELATING TO THEIR COMPETENCIES
 IN FACILITIES AND MANAGEMENT

	Poor		Below Average		Average		Above Average		Out-standing		Total		Mean Response	Inter-pretation of Mean Response
	N	%	N	%	N	%	N	%	N	%	N	%		
Physical Equipment & Stable Management	9	16.4	12	21.8	26	47.3	7	12.7	1	1.8	55	100.0	2.62	Average
Selection & Care of Tack	11	20.0	13	23.7	22	40.0	8	14.5	1	1.8	55	100.0	2.55	Average
Handling Horse Safely	6	10.9	11	20.0	26	47.3	10	18.2	2	3.6	55	100.0	2.84	Average
Transportation of Horses	9	16.4	12	21.8	24	43.7	8	14.5	2	3.6	55	100.0	2.67	Average

In the final category presented in Table XVII the county C.E.S. Agriculture Agents were asked to rank their competency levels in relation to transportation of the horse. Nine (16.4 percent) of the respondents felt their knowledge poor in this area, while 12 (21.8 percent) considered themselves to be below average. Twenty-four (43.7 percent) of the respondents perceived themselves to be average, while eight (14.5 percent) ranked themselves to be above average and two (3.6 percent) considered themselves outstanding. A mean response of 2.67 indicated the respondents perceived themselves to be average in relation to transportation of horses

Table XVIII relates to competency levels of county C.E.S. Agriculture Agents in regard to training light horses and is composed of three categories. The first category concerns breaking horses to lead. Nine (16.4 percent) of the respondents perceived themselves to be poor, while 16 (29.1 percent) of the respondents felt their knowledge to be below average. Nineteen (34.5 percent) of the respondents considered themselves to possess an average amount of competency in this category. Of the remaining 11 respondents eight (14.5 percent) reported an above average competency level, while three (5.5 percent) considered themselves to be outstanding. The respondents as a whole perceived themselves to be average with a mean response of 2.64.

The county C.E.S. Agriculture Agents perceived themselves to be average with a mean response of 2.51 in relation to starting the young horse under saddle. The data were calculated from the following areas: poor, ten (18.2 percent); below average, 22 (40.0 percent); average, 11 (20.0 percent); above average, nine (16.3 percent); and

TABLE XVIII

FREQUENCY DISTRIBUTION AND MEAN RESPONSE OF COUNTY C.E.S.
 AGRICULTURE AGENTS RELATING TO THEIR COMPETENCIES
 IN TRAINING LIGHT HORSES

	Poor		Below Average		Average		Above Average		Out-standing		Total		Mean Response	Inter-pretation of Mean Response
	N	%	N	%	N	%	N	%	N	%	N	%		
Breaking Horses to Lead	9	16.4	16	29.1	19	34.5	8	14.5	3	5.5	55	100.0	2.64	Average
Starting the Young Horse Under Saddle	10	18.2	22	40.0	11	20.0	9	16.3	3	5.5	55	100.0	2.51	Average
Advance Performance Maneuvers	13	23.7	23	41.8	12	21.8	6	10.9	1	1.8	55	100.0	2.25	Poor

outstanding, three (5.5 percent).

The final category in Table XVIII relates to advanced performance maneuvers. Thirteen (23.7 percent) of the county C.E.S. Agriculture Agents perceived their knowledge to be poor, while the largest number of respondents, 23 (41.8 percent), considered their competency to be below average. Of the remaining respondents, 12 (21.8 percent), felt they were average, six (10.9 percent) considered themselves above average, while only one (1.8 percent) respondent perceived himself/herself to be outstanding in this category. A mean response of 2.25 indicates that the county C.E.S. Agriculture Agents perceived their competency to be below average.

CHAPTER V

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The intent of this chapter is to present an abbreviated review of the study, its design and conduct, and the major findings. Conclusions and recommendations which were based on the summarization of data collected are also presented.

Purpose of the Study

The purpose of this study was to determine the county C.E.S. Agriculture Agents in Oklahoma degree of competency and pre-service training relative to light horse related subject matter.

Objectives of the Study

The objectives of this study were:

1. To determine the competencies possessed by the county C.E.S. Agriculture Agents in Oklahoma relative to light horse subject matter.
2. To determine the pre-service experiences gained by the county C.E.S. Agriculture Agents in Oklahoma relative to light horses.
3. To acquire sufficient demographic data in order to characterize the county C.E.S. Agriculture Agents in Oklahoma.

Design of the Study

This study was designed to be follow-up research of the study conducted by Parli (1) in 1984. Revisions were made to the instrument used previously to satisfy the purpose of the study.

The population for this study consisted of the 69 county C.E.S. Agriculture Agents in Oklahoma. Mailed questionnaires were used for collecting data and were sent to each of the 69 county C.E.S. Agriculture Agents in Oklahoma. A total of 55 (80.0 percent) county C.E.S. Agriculture Agents responded to the questionnaire.

Major Findings of the Study

The major findings of this study were divided into three sections. They were as follows:

1. A comparison of the general characteristics of respondents.
2. A comparison of the competencies possessed by the county C.E.S. Agriculture Agents in Oklahoma and the competencies possessed by vocational agriculture teachers in the Central District of Oklahoma relative to light horses.
3. A comparison of the respondents pre-service experiences gained in relation to light horses.

General Characteristics of Respondents

Table XIX reports the general characteristics of respondents. The educational level of respondents revealed that 14.5 percent were above the Master of Science level, the largest group of respondents 23 (41.9 percent), possessed the Master of Science degree, while

TABLE XIX

A COMPARISON OF THE GENERAL CHARACTERISTICS OF COUNTY C.E.S.
 AGRICULTURE AGENTS TO VOCATIONAL AGRICULTURE TEACHERS

Characteristics of Respondents	<u>Frequency Distribution of Responses</u>						Total	
	<u>B.S.</u>	<u>B.S. +15</u>	<u>M.S.</u>	<u>M.S. +15</u>	<u>Ed.D.</u>	<u>Other</u>	N	%
Educational Level of Respondents								
CCESAA*	8 (14.5%)	16 (29.1%)	23 (41.9%)	6 (10.9%)	1 (1.8%)	1 (1.8%)	55	100.0
VAT**	25 (36.3%)	23 (33.3%)	12 (17.4%)	8 (11.5%)	1 (1.5%)	-- ---	69	100.0
Years Experience of Respondents	<u>0 - 3</u>	<u>4 - 7</u>	<u>8 - 11</u>	<u>12 - 15</u>	<u>16 or more</u>			
CCESAA*	9 (16.4%)	9 (16.4%)	10 (18.27%)	8 (14.5%)	19 (34.5%)		55	100.0
VAT**	13 (18.8%)	17 (24.7%)	13 (18.8%)	8 (11.7%)	18 (26.1%)		69	100.0

* County Cooperative Extension Service Agriculture Agents
 ** Vocational Agriculture Teachers

43.6 percent were below the Master of science level.

The largest groups of respondents, 24.5 percent, had 16 or more years experience, while the remaining 65.6 percent ranged from zero to 15 years experience.

Comparison of the Genral Characteristics of Respondents

Table XIX revealed that a larger percentage, 56.4 percent, of the county C.E.S. Agriculture Agents compared to 30.5 percent of the vocational agriculture teachers held the degree of Master of Science or above. Consequently, a larger percentage, 69.5 percent, of the vocational agriculture teachers possessed a Bachelor of Science plus 15 degree or lower compared to 43.6 percent of the county C.E.S. Agriculture Agents in those same categories.

Table XIX further revealed that a larger percentage of county C.E.S. Agriclture Agents, 49 percent, had 12 or more years of experience compared to 37.8 percent of the vocational agriculture teachers. A larger percentage of vocational agriculture teachers, 43.4 percent, had zero to seven years experience compared to 32.8 percent of the county C.E.S. Agriculture Agents

Competencies Possessed Relative to Light Horses

The rank order of the county C.E.S. Agriculture Agents' competency level with the highest mean response ranked first can be found in Table XX. The competencies were not categorized as they were on the questionnaire in order that rank order could be reported.

TABLE XX
 COMPARISON OF RANK ORDER AND MEAN RESPONSE OF COUNTY C.E.S.
 AGRICULTURE AGENTS AND VOCATIONAL AGRICULTURE
 TEACHERS FROM HIGHEST TO LOWEST
 COMPETENCY LEVEL

Competency	County C.E.S. Ag Agents Mean Response	County C.E.S. Ag Agents Numerical Rank	County C.E.S. Ag Agents Inter- pretation	Vo-Ag Teachers Mean Response	Vo-Ag Teacher's Numerical Rank	Vo-Ag Teacher's Inter- pretation
Parts of Light Horse	3.04	1	Average	2.65	10	Average
Desirable Conformation and Disposition	3.02	2	Average	2.36	27	Below Average
Internal and External Parasites	2.89	3	Average	2.75	3	Average
Nutritional Requirements	2.89	4	Average	2.59	15	Average
Management of Feeding Horses	2.87	5	Average	2.54	18	Average
Handling Horse Safely	2.84	6	Average	2.59	14	Average
Deworming	2.80	7	Average	2.77	1	Average
Distinguishing Between Natural Gaits	2.76	8	Average	2.49	21	Below Average
Judging	2.76	9	Average	2.61	11	Average
Health Maintenance and Disease Prevention	2.75	10	Average	2.70	5	Average
Breeds of Light Horses	2.71	11	Average	2.54	17	Average
Transportation	2.70	12	Average	2.61	12	Average
Uses of Light Horses	2.69	13	Average	2.70	4	Average
Color Markings	2.69	14	Average	2.67	8	Average
Evaluating Height	2.69	15	Average	2.59	13	Average
Basic First Aid	2.69	16	Average	2.68	6	Average
Vaccinating	2.69	17	Average	2.75	2	Average
Breaking Horses to Lead	2.64	18	Average	2.67	9	Average
Fundamentals of Foot care	2.62	19	Average	2.68	7	Average
Physical Equipment and Stable Management	2.62	20	Average	2.42	24	Below Average
Mating Procedures	2.58	21	Average	2.52	19	Average
Branding	2.56	22	Average	2.32	29	Below Average
Care of Mare and Foal Selection and Care of Tack	2.55	23	Average	2.45	22	Below Average
Starting the Young Horse Under Saddle	2.55	24	Average	2.51	20	Average
Fertility and Genetics of Reproduction	2.51	25	Average	2.55	16	Average
History of Light Horses	2.45	26	Below Average	2.38	25	Below Average
Mouthing for Age	2.42	27	Below Average	2.07	32	Below Average
Care of Stallion	2.35	28	Below Average	2.42	23	Below Average
Foot Problems (Shoeing)	2.35	29	Below Average	2.35	28	Below Average
Castration	2.33	30	Below Average	2.36	26	Below Average
Advanced Performance Maneuvers	2.25	31	Below Average	2.30	30	Below Average
Floating Teeth	2.25	32	Below Average	2.09	31	Below Average
	1.98	33	Below Average	2.07	33	Below Average

The competency with the highest mean response was parts of the light horse with a 3.04. The competency with the lowest mean response was floating teeth with a 1.98. Competencies reported in Table XX with a mean response of 2.50 and above indicated the county C.E.S. Agriculture Agents perceived themselves to be average. Competencies reported in Table XX with a mean response of 2.49 and below indicated the county C.E.S. Agriculture Agents perceived themselves to be below average.

Comparison of the Competencies Possessed

Relative to Light Horses

A comparison of the rank order and mean response of county C.E.S. Agriculture Agents and vocational agriculture teachers from highest to lowest competency level is presented in Table XX. Below average competency levels were reported by both county C.E.S. Agriculture Agents and vocational agriculture teachers for the following competencies: fertility and genetics of reproduction; history of light horses; mousing for age; care of the stallion; foot problems; castration; advanced performance maneuvers; and floating teeth. Additionally, the vocational agriculture teacher considered themselves to be below average in competencies in the areas of desirable conformation and disposition; distinguishing between natural gaits; physical equipment and stable management; branding; and care of the mare and foal whereas the county C.E.S. Agriculture Agents reported that they considered themselves to be average. Both groups, the county C.E.S. Agriculture Agents and the vocational

agriculture teachers considered themselves to be average with the following competencies: parts of the light horse; internal and external parasites; nutritional requirements; management of foaling horses; handling horses safely, deworming; judging; health maintenance and disease prevention; transportation; use of light horses; color marking; evaluating height; basic first aid; vaccination; breaking horses to lead; and fundamentals of foot care. None of the respondents indicated that they were either above average or outstanding in any of the competency areas.

Pre-Service Experiences Gained in Relation
to Light Horses

Table XXI reports the pre-service experiences the respondents gained in relation to light horses. A large majority of the respondents, 69.1 percent, had no college credit hours in light horse related subject matter. None of the respondents had received more than six hours of college credit relating to light horses.

The respondents indicated that 21.8 percent had not attended any special light horse related programs. The remaining respondents indicated they had attended one or more of the following: in-service training; clinics; workshops; breed programs; cooperative extension programs and other programs which included horse shows, tours, and horse training as where they gained additional experiences.

Fifty respondents (90.9 percent) reported they did not train a horse judging team, while five respondents (9.1 percent) reported they did train a horse judging team.

TABLE XXI

COMPARISON OF PRE-SERVICE EXPERIENCE OF COUNTY C.E.S. AGRICULTURE AGENTS
TO VOCATIONAL AGRICULTURE TEACHERS IN RELATION TO LIGHT HORSES

Pre-Service Experience	Frequency Distribution of Respondents						Totals	
	No College Hours	1 - 3 Hours	4 - 6 Hours	7 - 9 Hours	10 or more	N	%	
Completion of Higher Education Credit Hours								
CCESAA*	38 (69.1%)	13 (23.6%)	4 (7.3%)	-- ---	-- ---	55	100.0	
VAT**	53 (76.8%)	12 (17.5%)	2 (2.9%)	1 (1.4%)	1 (1.4%)	69	100.0	
Participation in Various Programs								
	<u>None</u>	<u>In-Service</u>	<u>Vo-Tech</u>	<u>Clinics</u>	<u>Workshops</u>	<u>Breed Programs</u>	<u>Coop. Extension</u>	<u>Other</u>
CCESAA	12 (21.8%)	18 (32.7%)	-- ---	29 (52.7%)	28 (50.9%)	11 (20.0%)	30 (54.5%)	4 (7.3%)
VAT	43 (63.3%)	7 (10.1%)	6 (8.7%)	10 (14.5%)	8 (11.6%)	9 (13.0%)	4 (5.8%)	8 (11.6%)
Individuals Training Horse Judging Teams								
	<u>YES</u>	<u>NO</u>						
CCESAA	5 (9.1%)	50 (90.9%)						
VAT	7 (10.1%)	62 (89.9%)						
Individuals Who Have Been or Are Horse Owners								
CCESAA	41 (74.5%)	14 (25.5%)						
VAT	52 (75.4%)	17 (24.6%)						
Individuals Who Have Competed in Horse Events								
CCESAA	23 (41.8%)	32 (58.2%)						
VAT	33 (47.8%)	36 (52.2%)						

* Totals in this column do not total 100% because respondents could respond to more than one area.
 ** CESSAA - County Cooperative Extension Service Agriculture Agents
 *** VAT - Vocational Agriculture Teachers

The majority of the respondents, 41 (74.5 percent), had been or presently were horse owners.

Twenty-three (41.8 percent) of the respondents indicated they had competed in competitive horse events, while 32 (58.2 percent) reported they had not competed.

Comparison of the Pre-Service Experienced Gained in Relation to Light Horses

Table XXI reports the pre-service experiences both groups of respondents had gained in relation to light horses. The majority of county C.E.S. Agriculture Agents and vocational agriculture teachers, 69.1 percent and 76.8 percent respectively, had received no college credit hours pertaining to light horse related subject matter.

A majority of the vocational agriculture teachers, 62.3 percent, had not attended any special programs relating to light horse related material, while 78.2 percent of the county C.E.S. Agriculture Agents had attended one or more of the following programs: in-service training; clinics, workshops; breed programs; and C.E.S. programs.

Both groups reported that a large majority of them did not train horse judging teams. Of the responding county C.E.S. Agriculture Agents, 90.9 percent did not train a horse judging team, while 89.9 percent of the vocational agriculture teachers did not train a horse judging team.

The findings revealed that large majorities in both groups had been or were presently horse owners. Of the responding vocational

agriculture teachers, 74.5 percent, had been or were horse owners, while 74.5 percent of the county C.E.S. Agriculture Agents responded in the same manner.

A larger percentage of vocational agriculture teachers, 47.8 percent, had competed in competitive light horse events compared to only 41.8 percent of the county C.E.S. Agriculture Agents; however, the majority of the respondents had not competed in horse events.

Conclusions

Based upon the findings of this study the writer concludes the following.

The county C.E.S. Agriculture Agents who responded to the survey represented a variety of educational levels as well as number of years of experience. It is concluded that the county C.E.S. Agriculture Agents in Oklahoma can be characterized as possessing the Master of Science degree or above and has achieved 11 years or more experience as a county C.E.S. Agriculture agent.

It was further concluded as a result of the comparative findings that county C.E.S. Agriculture Agents possessed a higher level of education, Master of Science or above, compared to vocational agriculture teachers who possessed a Bachelor of Science plus 15 hours or below. Furthermore, the writer concluded that county C.E.S. Agriculture Agents had seven more years of work experience than vocational agriculture teachers.

Another conclusion is that county C.E.S. Agriculture Agents have received little, if any, formal education relating to the light

horse but have gained pre-service experiences by attending special programs.

It was further concluded as a result of the findings that the county C.E.S. Agriculture Agents in Oklahoma were not above average in any of the competencies relating to the light horse.

The writer concluded that a majority of county C.E.S. Agriculture Agents had no college credit pertaining to light horses. This causes the writer to wonder about the value the county C.E.S. Agriculture Agents have placed on light horse related subject matter.

The comparative findings led the writer to conclude that the county C.E.S. Agriculture Agents displayed a higher degree of interest in light horse related subject matter than did the vocational agriculture teachers as evidenced by the notable difference in attendance or participation in light horse related subject matter programs.

As a result of the findings it is concluded that the county C.E.S. Agriculture Agents rely most heavily on C.E.S. programs as a source of light horse information, however, clinics, workshops, in-service training and breed programs were also important sources of information.

The investigator further concludes that county C.E.S. Agriculture Agents placed a greater importance on special programs as a means of obtaining light horse information than did vocational agriculture education teachers.

Since a large majority of the county C.E.S. Agriculture Agents did not train a horse judging team the writer wonders if this may be the responsibility of the 4-H agent.

It is concluded that since only a small percentage of county C.E.S. Agriculture Agents and vocational agriculture teachers trained horse judging teams, the writer wonders whether or not their less than above average competency (in general, relative to light horses) may be a deterrent, or possibly horse judging teams are delegated to county C.E.S. 4-H agents.

Based upon the finding that 41 (74.5 percent) of the respondents either own or have owned horses, the writer concluded that perhaps the level of competency presently achieved by the respondents was a direct result of "hands-on" experience as owners. Similarly, the number of vocational agriculture teachers who either own or have owned horses was 75.4 percent, thus the writer concluded their competency was a direct result of "hands-on" experience as owners.

Remarkable similarities were discovered in the findings pertaining to the number of county C.E.S Agriculture Agents and vocational agriculture teachers who actually had competed in horse events. Based upon the similarities, the writer concluded that approximately 40 percent of each group had actually competed in horse events which may have also contributed to their present competency level.

It was further concluded as a result of the findings that county C.E.S. Agriculture Agents were not average or above concerning their competencies in the following areas: fertility and genetics of reproduction; history of light horses; mousing for age; care of the stallion; foot problems; castration; advance performance maneuvers; or floating teeth.

As a result of the comparative analysis the writer concluded that county C.E.S. Agriculture Agents possessed the same degree of competency, below average, as vocational agriculture teachers in the following areas: fertility and genetics of reproduction; history of light horses; mouthing for age; care of the stallion; foot problems; castration; advanced performance maneuvers; and floating teeth.

It was further concluded that the county C.E.S. Agriculture Agents possessed a higher degree of competency (average) than vocational agriculture teachers in the following areas: care of the mare and foal; branding; physical equipment and stable management; distinguishing between natural gaits; and desirable conformation and disposition.

Recommendations

Based on the conclusions of this study the following recommendations were presented.

1. Based upon the conclusion that special programs appear to be appealing and since little, if any, formal pre-service education was required the writer recommends that special programs be conducted the form of clinics, workshops, breed programs, in-service programs, and that formal pre-service educational courses be required as part of the field of specialization for both county C.E.S. Agriculture Agents and vocational agriculture teachers.

2. Based upon the conclusion that the county C.E.S Agriculture Agents were below average as far as competencies are concerned it is recommended that specific programs be provided which should enhance

their competency. The recommended specific programs should address the following topics: fertility and genetics of reproduction; history of light horses; mouthing for age; care of the stallion; foot problems (shoeing); castration; advanced performance maneuvers; and floating teeth.

3. In order to imperically validate this study it is recommended that this study be duplicated and that County Cooperative Extension 4-H agents be surveyed.

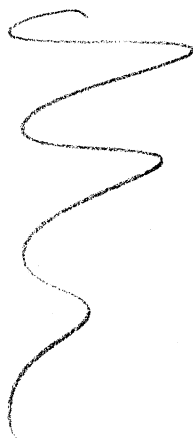
4. It is further recommended that a broad based light horse curriculum be implemented which would enhance the competencies of horse owners and breeders and that perhaps a study should be conducted to determine their competency levels and those findings be compared to the findings of this study.

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APPENDIXES



APPENDIX A

DATA COLLECTION INSTRUMENT

Directions

Please indicate your response to the following questions by checking (X) the appropriate response for each question.

1. What is your highest level of education?
 - (1) 1. B.S. 2. B.S.+ 15 3. M.S. 4. M.S.+ 15
 5. Ed. D. 6. Other
2. Indicate the approximate number of years which you have been a county agriculture agent.
 - (2) 1. 0 to 3 years 2. 4 to 7 years 3. 8 to 11 years
 4. 12 to 15 years 5. 16 or more
3. Indicate the approximate number of hours of collegiate course work you have completed in light horse related subject matter.
 - (3) 1. No collegiate hours credit 2. 1 to 3 hours
 3. 4 to 6 hours 4. 7 to 9 hours 5. 10 or more hours
4. Indicate any special light horse related programs which you have either attended or participated in.
 - (4) 1. Have not attended any special programs
 - (5) 1. In-service training
 - (6) 1. Vo-Tech courses
 - (7) 1. Clinics
 - (8) 1. Workshops
 - (9) 1. Breed Programs
 - (10) 1. Cooperative Extension Programs
 - (11) 1. Other, Please specify _____
5. Indicate the number of times a week you use light horse related subject matter in your county.
 - (12) 1. Do not use light horse related material 2. 1 to 3 times
 3. 4 to 6 times 4. 7 to 9 times 5. 10 or more times
6. Do you presently train a horse judging team?
 - (13) 1. Yes 2. No
7. Are you now or have you ever been a horse owner?
 - (14) 1. Yes 2. No
8. Do you now or have you ever competed in light horse related competitive events such as horse shows, rodeos, etc.?
 - (15) 1. Yes 2. No

Please indicate by checking (X) in the appropriate box your degree of competency for each category as it relates to light horses. (These are not necessarily the skills which you may teach-but the skills or competencies you have acquired).

COMPETENCIES		POOR	BELOW AVE.	AVERAGE	ABOVE AVE.	OUTSTANDING
		(1)	(2)	(3)	(4)	(5)
A. ORIENTATION XXX						
(16)	History of the Light Horse					
(17)	Breeds of the Light Horse					
(18)	Uses of the Light Horse					
B. SELECTION and JUDGING XXX						
(19)	Parts of the Light Horse					
(20)	Desirable conformation and disposition					
(21)	Color markings (Head and Leg)					
(22)	Mouthing for age					
(23)	Evaluating height					
(24)	Distinguish between natural gaits					
(25)	Judging					
C. HEALTH and FOOT CARE XXX						
(26)	Health maintenance and Disease prevention					
(27)	Internal and External Parasites					
(28)	Basic First Aid					
(29)	Fundamentals of Foot Care (Trimming)					
(30)	Foot Problems (Shoeing)					
(31)	Vaccinating					
(32)	Deworming					
(33)	Branding					
(34)	Castration					
(35)	Floating teeth					
D. NUTRITION XXX						
(36)	Management of Feeding Horses (Regulating for individual horses)					
(37)	Nutritional Requirements					
E. REPRODUCTION XXX						
(38)	Mating Procedure					
(39)	Fertility and Genetics of Reproduction					
(40)	Care of the Mare and Foal					
(41)	Care of the Stallion					
F. FACILITIES and EQUIPMENT XXX						
(42)	Physical Facilities and Stable Management					
(43)	Selection and Care of Tack					
(44)	Handling Horses Safely					
(45)	Transportation of the Horse					
G. TRAINING LIGHT HORSES XXX						
(46)	Breaking Horses to Lead					
(47)	Starting the Young Horse Under Saddle					
(48)	Advanced Performance Maneuvers					

APPENDIX B

DATA COLLECTION INSTRUMENT USED

BY PARLI

Directions

Please indicate your response to the following questions by checking (X) the appropriate response for each question.

1. What is your highest level of education?

- (1) 1. B.S. 2. B.S.+ 15 3. M.S. 4. M.S.+ 15
 5. Ed. D. 6. Other

2. Indicate the approximate number of years which you have taught vocational agriculture.

- (2) 1. 0 to 3 years 2. 4 to 7 years 3. 8 to 11 years
 4. 12 to 15 years 5. 16 or more

3. Indicate the approximate number of hours of collegiate course work you have completed in light horse related subject matter.

- (3) 1. No collegiate hours credit 2. 1 to 3 hours
 3. 4 to 6 hours 4. 7 to 9 hours 5. 10 or more hours credit

4. Indicate any special light horse related programs which you have either attended or participated in.

- (4) 1. Have not attended any special programs
 (5) 1. In-service training
 (6) 1. Vo-Tech courses
 (7) 1. Clinics
 (8) 1. Workshops
 (9) 1. Breed Programs
 (10) 1. Cooperative Extension Programs
 (11) 1. Other, Please specify _____

5. Indicate the amount of time you devote to teaching light horse related subject matter to your vocational agriculture students.

- (12) 1. Do not teach light horse related material
 2. Less than one week 3. one week 4. two weeks
 5. three weeks 6. four weeks or more

6. Do you presently train a horse judging team?

- (13) 1. Yes 2. No

7. Are you now or have you ever been a horse owner?

- (14) 1. Yes 2. No

8. Do you now or have you ever competed in light horse related competitive events such as horse shows, rodeos, etc.?

- (15) 1. Yes 2. No

(Questions continue on reverse side...)

APPENDIX C

COVER LETTER

March 12, 1987

Dear Cooperative Extension Service Agriculture Agent,

Please take 10 minutes of your time to fill out the enclosed research instrument. Due to the nature of the study, it is important that the completed instrument be returned within one week.

This study is designed to evaluate the competencies you possess relative to light horse subject matter. Also, to determine the pre-service experiences you have gained relative to light horses.

Your response will be anonymous, and should provide sufficient data to the Agriculture Education and Animal Science Departments at Oklahoma State University to develop light horse in-service training programs for county Cooperative Extension Service Agriculture Agents.

Thank you very much for your cooperation.

Sincerely,

A handwritten signature in cursive script that reads "Lee Cooper".

Lee Cooper

APPENDIX D

FOLLOW-UP LETTER

March 26, 1987

Dear Cooperative Extension Service Agriculture Agent,

I recently sent you a questionnaire designed to evaluate the competencies you possess relative to light horse subject matter and to determine the pre-service experiences you have gained relative to light horses.

It is imperative that I receive your input in order that a creditable training program can be designed and implemented to meet the needs of county Cooperative Extension Service Agriculture Agents.

I have enclosed another copy, in case you have misplaced the questionnaire sent previously.

Please take time to fill out the questionnaire and return today if possible.

Thank you in advance for your cooperation.

Sincerely,

A handwritten signature in cursive script that reads "Dee Cooper".

Dee Cooper

VITA ²

Dee Eugene Cooper

Candidate for the Degree of

Master of Science

Thesis: COMPETENCY LEVELS OF AND PRE-SERVICE TRAINING RECEIVED BY COUNTY COOPERATIVE EXTENSION SERVICE AGRICULTURE AGENTS IN OKLAHOMA RELATIVE TO LIGHT HORSES

Major Field: Agricultural Education

Biographical:

Personal Data: Born at Fairfax, Oklahoma, July 11, 1960, the son of Mr. and Mrs. C. J. Cooper.

Education: Graduated from Shidler High School, Shidler, Oklahoma in May, 1978; received the Bachelor of Science in Agriculture degree with a major in Animal Science, Oklahoma State University in May, 1984; completed requirements for the degree of Master of Science in Agricultural Education at Oklahoma State University, Stillwater, Oklahoma, July, 1987.

Professional Experience: Ranch Manager, Cooper Ranch, Grainola, Oklahoma, from May, 1984 to February, 1985; Plant Operator Phillips Petroleum Company, Pawhuska, Oklahoma, from February, 1985 to June, 1986; Livestock Feed Salesman, MoorMan Manufacturing Company, Osage County, Oklahoma, from July, 1986 to May, 1987; Oklahoma State University Cooperative Extension 4-H Agent, Choctaw/Pushmataha Counties, Oklahoma, from May, 1987 to present.