HISTORICAL ASPECTS OF GRADUATE PROGRAMS IN AGRICULTURAL EDUCATION IN THE UNITED STATES

By

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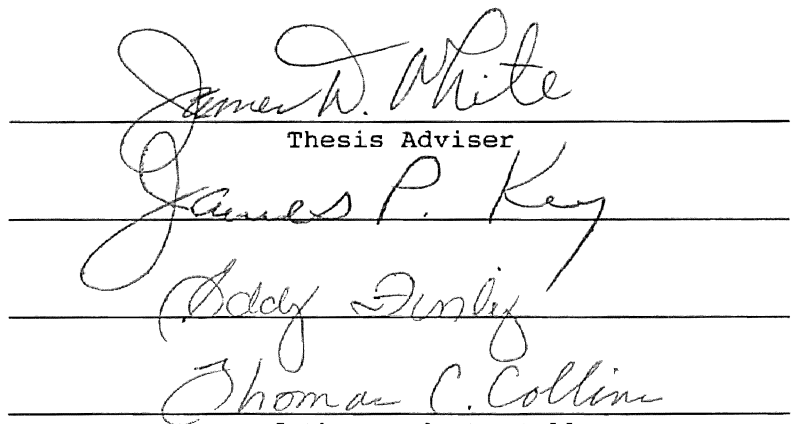

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CHAPTER I

INTRODUCTION

Higher education is becoming more and more important due to the rising expectations of society in today's world. With recent changes in agricultural education it is vital that instructors of agricultural education be involved in continuing education. One area in which agricultural education has been making progress in recent years is in the quality of graduate programs. The primary goal of graduate programs is to assist young men and women in achieving their potential as teachers, researchers, and extension leaders as well as complete advanced degrees. However, the major emphasis of this study was to highlight our heritage with regard to the development of graduate programs.

According to Thompson (1982) graduate programs are generally defined as:

> . . . graduate study is that formal study or education individuals pursue subsequent to having received a bachelor's degree. Graduate study usually is engaged in for the purpose of earning a degree higher than the bachelor's (p. 197).

In 1979 approximately 700 master's degrees were awarded by 67 agricultural education departments in the United States. There was an average of 10.74 master's degrees awarded per department. (Osborne, 1983). Master's degrees are but one spectrum of the higher education continuum. With regard to our past and the current direction of graduate programs in agricultural education it is

essential that we evaluate where we have been. A current historical record documenting graduate programs in agricultural education does not exist.

In order to document our heritage, as well as the growth and expansion of the profession, there is a need to know where agricultural education has been and where it is today.

Statement of the Problem

Few, if any, records are available to document the future direction as well as a historical record of agricultural education graduate programs. In the past many programs have directed their efforts toward an emphasis of preparing secondary teachers for teaching vocational agriculture. Today, the program is broader in scope and the demands are greater for better preparation in communications, public relations, extension, government services, and rural development. Many students are seeking admission to graduate programs today because of the breadth and scope of the program as well as the preparation they receive for the challenges and opportunities of the future. Therefore, to be able to serve the needs of future generations, we need to know and understand our heritage.

Purpose of the Study

The purpose of the study was to assess from a chronological standpoint the history of graduate programs in agricultural education in the United States.

Objectives of the Study

In order to accomplish the purpose of the study, the following objectives were established:

1. To determine when colleges/ universities which conduct agricultural education graduate programs in the United States were founded and if they were affiliates of 1862 Land-Grant Institutions.

2. To determine when the institutions initiated graduate programs in the college/ university as well as in agricultural education.

3. To determine the administrative unit under which agricultural education graduate programs were administered.

4. To determine the year graduate degrees in agricultural education were first awarded and the frequency of distribution of degrees in agricultural education as well as the distribution of degrees awarded by the institution.

5. To determine the focus and current status of graduate studies in agricultural education.

6. To determine the nature of the agricultural education graduate program offered by each institution.

7. To determine the most recent and numerous placement positions available to agricultural education graduates in the United States.

Assumptions for the Study

When considering the significance of this study and the application of the findings, certain assumptions need to be made:

1. The questions about the history of the graduate programs were answered to the best ability of the respondents.

2. Institutions not having conducted graduate programs in agricultural education would return the questionnaires noting the absences of a graduate program in the department.

Scope of the Study

The scope of the study included all of the agricultural education programs in the United States that have or have had graduate programs.

Definition of the Terms

The following definitions are presented as they apply to the study.

Agricultural/Extension Education - designed to provide both comprehensive and specialized training in preparation for a career as an educator in the various fields of agriculture.

Assistantship/Fellowship - an endowment for the support of a student or scholar doing advanced academic work.

Current Status of Graduate Program - provide information with regard to the number of students that are presently (1991-1992) pursuing a degree higher than a bachelor's degree.

Ed.D. - Doctor of Education - degree conferred in recognition of outstanding ability as an educator in some special field or fields. The candidate must prove their acceptability by accomplishing a set of standards established by the institution.

Ed.S. - Specialist in Education - degree conferred in recognition of achievement in a specialized field or fields. The candidate must prove their acceptability by accomplishing a set of standards established by the institution.

Focus of Graduate Study - the emphasis of the study directed in a field such as: Research, Agriculture, Psychology, etc.

Land-Grant Institution - a college or university that has received land from the government after the passage of the Morrill Act of 1862 or the Morrill Act of 1890 in order to secure funds for establishing and maintaining institutions of higher education.

M.Ag. - Master of Agriculture - designed for students who do not wish to complete a thesis and who do not wish to pursue a degree beyond the Master's.

M.Ed. - Master of Education - designed primarily for students who have an interest in teaching and educational research.

M.S. - Master of Science - designed for students who are interested in research and may later wish to continue their education beyond the Master's.

Nature of Program - dealing with admission requirements, residency, and academic regulations.

Non Land-Grant Institution - colleges or universities that are conducting agricultural education programs or any other subject matter but did not receive funding through the Morrill Act of 1862 or the Morrill Act of 1890.

Ph.D. - Doctor of Philosophy - granted in recognition of high achievement in programs involving a vigorous pursuit of academic scholarship and independent research.

CHAPTER II

REVIEW OF THE LITERATURE

The review of literature assembled in this research effort was divided into five section by the author: (1) Legislation Affecting Agricultural Education, (2) History of Agricultural Education, (3) Graduate Studies in Agricultural Education, (4) Giants of the Profession, and (5) A summary.

Legislation Affecting Agricultural Education

When we think of all of the federal legislation that has *affected agricultural education* in one manner or another, the thoughts become endless. However, the author has selected six, major legislative acts that have greatly influenced what agricultural education is today. The six legislative acts included in this review are the: (a) Morrill Land-Grant Act of 1862, (b) Hatch Act of 1887, (c) Morrill Land-Grant Act of 1890, (d) Smith-Hughes Act of 1917, (e) Vocational Act of 1963, and (f) the Vocational Education Amendments of 1968. Each of these pieces of legislation will be discussed briefly with reference to agricultural education.

Morrill Land-Grant Act of 1862

Universities known as the "Land-Grant" universities have cut a wide swath in the history of American higher education (Johnson,

1981). Some have even said it was the beginning of today's agricultural education. Prior to 1862, it was hard for anyone to get a college education, except for a select few who could manage the resources (Molnar, Dunkelperger & Salter, 1981). However, in 1862 Senator Justin Smith Morrill was able to convince the house and senate to pass the First Morrill Act, as it became known. The Morrill Act of 1862 stated in Section 4:

> . . . to the endowment, support, and maintenance of at least one college where the leading objective shall be, without excluding other scientific and classical studies and including military tactics, to teach such branches of learning as are related to agriculture and the mechanical arts, in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life (Brunner, 1962, p. 55).

The Morrill Land-Grant Act of 1862 in essence provided up to 30 thousand acres of public land to states and territories for each Senator and Representative accounted for in Congress. This land could be sold in order to provide for colleges teaching agriculture, the mechanical arts, and military science (Brunner, 1962).

Hatch Act of 1887

According to Moore (1887), there was not much interest in agricultural education at the secondary level until after the legislature passed the Hatch Act of 1887. The Hatch Act was established to:

> . . . aid in acquiring and diffusing among the people of the United States useful and practical information of subjects connected with agriculture and to promote

> scientific investigation and experiment respecting the principles and applications of agricultural science (p. 9).

According to the previous passage, the Hatch Act provided experimental research stations, but for agricultural education the insemination of this information would be most advantageous. It has been recorded that some people feel that the Hatch Act was the starting point of agricultural education in the United States and not the Morrill Act of 1862. However, some feel that when Columbus set foot on American soil, the Indians were the first agricultural education teachers in the United States. The Indians showed the settlers how to plant corn and how to harvest their crops.

Morrill Land-Grant Act of 1890

According to Brunner (1962) the term land-grant college applies to any institution of higher education that has been identified by the legislature of the State in which it is located to receive the benefits of either or both the First Morrill Act of 1862 or the Second Morrill Act of 1890.

The Second Morrill Act provided additional funds for the 1862 land-grant colleges along with initial funds to establish a system of black colleges which were to be located in each of the 17 southern and border states in areas where blacks predominantly lived (Molnar, Dunkelberger & Satler, 1981). These colleges would be under the same provisions as the 1862 Land-Grant colleges in that they were to provide education in agriculture, the mechanical arts,

and military science. "The Morrill Act of 1890 was regarded as an advance for Negro educational opportunities." (Preer, 1982, p. 121)

Smith-Hughes Act of 1917

Vocational educators often attribute the very beginnings of agricultural education profession in the United States to the Smith-Hughes Act of 1917 (Camp, 1987). The fact is that federal funding for vocational education at the high school level began with the passage of the Smith-Hughes Act of 1917 (Herren, 1987).

According to Malpiedi (1987) in order to qualify as a "Smith-Hughes" school there were certain criteria that had to be met:

(1) vocational agriculture instruction and supervised practices were to be offered to fourteen year olds and older; this would be taught by a certified vocational agriculture teacher,

(2) a State designated board would administer the act,

(3) a formation of supervisors and teacher trainers would be established, and

(4) a yearly plan and report would be submitted for approval by Federal Board for Vocational Education (p. 11).

Moreover, the Smith-Hughes Act not only established the teaching of agriculture at the high school level, but also required the training of those who would teach agricultural education (Key & Price, 1987). This becomes important when agricultural education at the university level is addressed relative to the legislation enacted.

The Vocational Education Act of 1963

The Vocational Education Act of 1963, Public Law 88-210, amended the Smith-Hughes Act of 1917. The purpose of the Act was to strengthen and improve the quality of vocational education and expand opportunities throughout the United States (Phipps, 1965). The basic design of the Act was to extend present programs and develop new programs of vocational education, encourage research and experiments, and to provide work study programs (Key & Holley, 1986). This Act greatly broadened the purpose of vocational education and broadened vocational agriculture to include agribusiness (Cox, 1987).

1968 Amendments to the 1963 Act

Amendments to the 1963 Act's primary goal was to provide vocational offerings so that persons of all ages in all communities of a state would have ready access to vocational training which is of high quality, which is realistic in the light of actual or anticipated opportunities for gainful employment, and suited to their need, interest, and ability to benefit from such training (p. 5).

History of Agricultural Education

Agricultural education has seen its highs and lows but one thing is certain, agricultural education "bounces right back on its feet" (Nelson, 1986, p. 10). Pinpointing when agricultural

education started in the United States is quite a mystery. According to Nelson (1986),

> . . . education in agriculture is one of the oldest American professions dating from the mythical lesson for Pilgrims on corn planting offered by the Squantos (p. 3).

Nelson also feels that the definition of "agricultural education" has greatly changed since those early days of agriculture, mostly due to legislative laws that have entered into the profession.

Today agricultural education has greatly diversified from those early years of farming.

> Agriculture is more than farming. Persons engaged in commercial agriculture production know that their lives are committed to a basic industry. The challenges to produce high quality products, to be efficient, to conserve and use resources wisely, to promote family welfare, and to contribute to society are powerful and worthy motivations. Education along those lines is essential and it must be accessible (Stevens, 1967, p. 26).

However, these values are still being taught in the high school agricultural education classrooms.

Stevens (1967) quoting from H. M. Hamilin's Public School Education in Agriculture stated:

> There are two ways of viewing the public interest in agricultural education. One arises from concern about making agriculture an effective industry . . . The other emphasizes agriculture education as a means of developing good American citizens and good human beings . . . There can be no compromise between these approaches. Education must emphasize human and social values; agriculture must be made a means of attaining these values . . . (p. 18).

"Developing good American citizens and good human beings" has since expanded into the college level of agricultural education. Agricultural education recognized that students would no longer just

go into production agriculture, but would, however, go on to post-secondary schooling. This caused many schools to change their curriculum in order to provide students with the academic skills required for college entrance (Stevens, 1967).

Agricultural education at the collegiate level got a big boost when President Abraham Lincoln signed the Morrill Land-Grant Act into law on July 2, 1862. "The Land-Grant colleges did not spring-like Athene, full-armed from the brain of Zeus: . they grew out of experience" (Shepardson, 1929, p. 23). Also according to Shepardson, there was one state institution of higher learning in agriculture authorized before the Morrill bill was introduced and three in all before the bill was passed.

Then came the Hatch Act. This Act introduced the implementation of research stations. In order to get this piece of legislation passed the heads of colleges and existing experiment stations went to Washington to advise Congress that the progress of American agriculture required national aid for investigation and experimentation in the several states and territories (Shepardson, 1929).

> Between 1887 and 1907 the situation of the agricultural colleges underwent important changes. The number of students increased rapidly, government and state support came forth abundantly, research was established, departments multiplied, buildings and material equipment arose to keep pace with needs. The colleges began to find themselves as institutions of higher education (Shepardson, 1929, p. 35).

By now agricultural education at the collegiate level was up and running. It seemed as if there was no stopping the growth of

agriculture, however the funds started to run dry. It was now time for legislation to step in and help once more.

In 1917, the Smith-Hughes Vocational Education Act supplied funds to assist the teaching of agricultural education in the high school classroom. More importantly, the Smith-Hughes Act required the training of teachers in agricultural education. Teacher-training activities moved forward vigorously after the passage of the Smith-Hughes Act. In the agricultural education field, we have a system with the college as a nucleus (Shepardson, 1929).

> In 1894, in all the Land-Grant colleges, there were about 2,700 enrolled, including short-course students and those in colored institutions. These figures may be compared with the 15,000 resident students registered twenty years later for agricultural degrees in white institutions alone (Shepardson, 1929, p. 49).

This shows over a 450 percent increase in enrollment, not including the black institutions of agriculture.

According to Norris and Briers (1989):

> Vocational agriculture has witnessed several changes in the industry it serves since the passage of the Smith-Hughes Act of 1917. However, at no time in history has agriculture been more rapid than it is now. Agriculture is in the midst of a technological revolution which promises to bring drastic changes (p. 32).

Is American agriculture ready for more changes? If not, it had better get ready! If so, let's go!

According to Shepardson (1929), there were 51 institutions of higher learning that had agricultural education. According to the Directory of Teacher Educators in Agriculture 1990-1991, there are now 99 institutions of higher education within the United States (including Puerto-Rico). It is safe to say that agricultural

education is expanding to meet the needs of its clientele of the future.

The major objectives for agricultural education today are to develop:

1. An understanding of and appreciation for career opportunities and preparation needed to enter and progress in agricultural occupations.
2. Agricultural competencies needed to engage in and advance in agricultural occupations, including continuing education.
3. Business, management, marketing, and entrepreneurial skills needed in agricultural occupations.
4. Those abilities in human relations that are essential in agricultural occupations.
5. Career objectives and job-seeking/ job-retention skills.
6. The abilities needed to demonstrate and follow effective leadership in fulfilling occupational, social, and civic responsibilities.
7. Practical life skills needed for planning, establishing, and maintaining a homestead and garden. (Career Planner-A catalog of Vocational Courses, 1990, p. 5).

With these objectives, one can determine that agricultural education is changing in order to meet the needs of students and communities in the United States.

Graduate Study in Agricultural Education

When thinking of graduate study in agricultural education, we generally think of the Master's and Doctoral degrees. The Master's and Doctoral degrees are broken down into many other categories. But what is the purpose of graduate study? According to Thompson (1982):

> The purpose of graduate study involves two perspectives: Why is graduate education offered? Why would teachers of agriculture seek graduate study? The first is an instructional perspective, and the second is an individual, or consumer, perspective. The reasons for each are not always the same--nor should they be (p. 198).

At Oklahoma State University the graduate college is the "hub" of advanced study in agricultural education. Faculty and students share an interest in the conduction of research and the acquisition of information in order to achieve greater knowledge and present it to the scholarly community. With a common goal, research is not only conducted, but the atmosphere in which it is conducted makes everything easier. The purpose of graduate study is:

> . . . to provide an exciting research environment where students and faculty can make significant contributions to the store of knowledge, and to encourage each individual to reach his or her potential (Oklahoma State University Catalog, 1990-1991, p. 108).

Therefore, graduate study is offered to make a contribution to the body of knowledge. Many students in agricultural education evaluate the worth of a program within the agricultural field, and determine if it is a valuable portion of the program or to determine if another similar program needs to be implemented. The individual benefits from the gaining of new and unknown knowledge that can be implemented in his or her profession.

The Master of Agriculture degree is offered by many institutions of higher learning. In most cases the Master of Agriculture degree does not require the writing of a thesis but does require the writing of a non-thesis equivalent. This degree is often pursued by individuals that do not wish to further their education beyond the Master's level. The non-thesis option usually

includes a "creative-component" written over a particular subject matter that will benefit the individual in his or her career path.

Another, probably the most popular, widely sought after Master's degree is the Master of Science degree. This option is most often pursued by individuals who have an interest in pursuing a degree beyond the Master's. This degree requires the writing of a thesis and the research is conducted in an area of interest to the individual. Many times the individual does not pursue a higher degree than that of a Master's; however, many teachers or individuals wishing to become teachers find the Master of Science degree to be very beneficial.

The Doctoral degrees become more diversified compared to the Master's degree, depending on what the individual wants to do after obtaining his or her degree.

The Doctor of Philosophy (Ph.D.) is most often pursued by individuals wishing to teach at the collegiate level. The Doctor of Education (Ed.D.) very much resembles the Ph.D. but is focused more toward the educational field. Many teachers on the collegiate level have obtained either a Ph.D. or and Ed.D. Specialist in Education (Ed.S) is another graduate degree sought after in the agricultural education field. This degree has specific requirements, less the doctoral with a specialty in one field or another.

According to Shepardson (1929), there were 375 Master's degrees offered in agriculture in 1925. This corresponds with the reported 700 Master's degree recipients in 1979 in agricultural education alone (Osborne, 1983). This is an indication of the perceived

importance of graduate studies in agricultural education and its value to the profession.

How can a teacher of agricultural education (or any other individual) obtain the needed graduate courses to obtain a graduate degree? Most Doctoral students begin their degree programs as full-time students. However, Master's students seldom leave the teaching field to become full-time students. These teachers generally take night courses and classes during the summer sessions. Another way many classes are being offered is through "weekend" programs. This option is available in some parts of the country (Thompson, 1982).

Giants of the Profession

This section is reserved for a select few individuals that are to be considered "Giants of the Profession". Knowing that there are far more than nine individuals that have influenced agricultural education, this section is limited to nine individuals that the author and his committee feel may have received the recognition they deserve or who should be so recognized.

The individuals included in this section are: Ralph Bender, H. Nevill Hunsicker, Jim Perky, Lloyd Phipps, Robert R. Price, Norman K. Quarles, A. Webster Tenney, J. Robert Warmbrod, and Ralph J. Woodin.

Ralph Bender

Dr. Ralph Bender was selected as one of the top ten Great Individuals in the History of Agricultural Education in a study done

by Camp and Crunkilton (1985). Dr. Bender enrolled in vocational agriculture in 1925, and was elected the first President of the Ohio Association of FFA; later becoming the National Association of FFA's Vice-President. He earned his B.S., M.S., and Ph.D. at The Ohio State University. He began teaching in 1933 and four years later was asked to teach vocational agriculture at Canal Winchester, one of the five University-supported training centers for teachers of vocational agriculture. Dr. Bender served as major advisor to 126 Master's degree candidates and 66 Doctor of Philosophy degree candidates. As a leader, Dr. Bender served as Vice-President of the American Vocational Association for three years and Secretary and President of the agricultural Education Division of AVA. Some of Dr. Bender's writings appear in Teacher Education in Agriculture, The Individual and His Education, and A University Department Evaluates Its Curriculum. Dr. Bender has written or co-authored over 100 state and national publications. Dr. Ralph Bender is known as the "Master Teacher" (Wolf, 1975).

H. Neville Hunsicker

Mr. H. Neville Hunsicker was also one of Camp's and Crukilton's (1985) Great Individuals of the History of Agricultural Education. Mr. Hunsicker has the claim of being the first high school FFA member to become the National FFA Advisor. Some highlights in Mr. Hunsicker's leadership career at the national level include:

(1) development of agribusiness for students who wish to join the profession of off-farm employment,

(2) expanding agricultural education programs into the post-secondary technical schools,

(3) development of national guidelines for conducting Young Farmers and other adult education programs,

(4) development of national standards for quality agriculture/agribusiness education programs,

(5) revision of the National FFA constitution to meet the needs of young men and women enrolled in non-farm agribusiness and natural resources,

(6) increased participation of business and industry in the National FFA Foundation, and

(7) the formation of an active National FFA Alumni Association.

Mr. Hunsicker received his B.S. from Virginia Polytechnic Institution in 1931 and his M.A. degree from The Ohio State University in 1947 (Bundy, 1977).

Jim Perky

Mr. James Barney Perky was often characterized as a demanding administrator as Oklahoma's State Supervisor. Mr. Perky always demanded top performance from the teachers, but imposed it first of all on himself. Jim Perky was always impatient with anything or anyone who might hamper or delay the progress of vocational agriculture education. Mr. Perky received his B.S. from Wisconsin University in 1923 and his M.S. from Colorado State University in 1939. He became a District Supervisor in 1927 and the State

Supervisor in 1931. In 1941, he was appointed as State Director of Vocational Education. Mr. Perky served as a member of the National Advisory Council of the FFA and Board of Trustees for the FFA Foundation. He also served two terms as President of the National Association of State Directors of Vocational Education. In 1961, Jim Perky was appointed to President Kennedy's Panel of Consultants on Vocational Education, where he helped structure the 1963 Vocational Education Act and the 1968 Amendments. James "Big Jim" Perky who was feared, yet beloved by so many, made great contributions not only to vocational agriculture and the FFA, but also to Vocational Education in its entirety (Price, 1976).

Lloyd L. Phipps

Dr. Lloyd Phipps was also one of the Great Individuals in the History of Agricultural Education (Camp & Crukilton, 1985). Dr. Phipps received his B.S. from the University of Illinois, where he graduated with highest honors. Dr. Phipps taught high school vocational agriculture for one and a half years before he accepted a position at the Carbondale campus of Southern Illinois University. After six years he returned to the University of Illinois, where he was an instructor of agricultural education and completed his Doctorate degree in 1949. Dr. Phipps is probably most known for his book The Handbook on Agricultural Education for Public Schools. Dr. Phipps also became known as "Mr. Adult Education". In 1961, Dr. Phipps became chairman of the Agricultural Education Department

at Illinois where he was the major advisor to 37 Doctoral students (Walker, 1978).

Robert R. Price

A graduate student from an Arabian country once told Dr. Price that he was deserving of the honored title, "Old Camel". When asked to explain the Arabian student said "A wise Old Camel can carry the load of many young asses". For you see three young faculty had just climbed aboard the Oklahoma State University Agricultural Education staff. The fact of the matter is, "The Old Camel" had been carrying a big load in Agricultural Education for his entire professional career. Dr. Price enrolled in Oklahoma A & M College in 1930 and received his B.S. in Horticulture in 1934. From 1935 to 1948, Dr. Price taught at the high school level. While teaching he completed his M.S. in Agricultural Education. In 1948, Dr. Price joined the Agricultural Education staff as an itinerant teacher trainer at Oklahoma State University. By 1958, Dr. Price became Department Head of Agricultural Education, after the completion of his Ed.D. at Pennsylvania State University. Dr. Price was instrumental in the formation of the Oklahoma Young Farmers Association becoming its first honorary member. Under his guidance over 1,850 individuals qualified to teach vocational agriculture at the rate of 60 to 85 each year, making Oklahoma State University one of the largest in the country. He directed 320 Master's degrees and 52 Doctoral degree candidates along with some 236 international students from 28 different countries. Dr. Price remained Department

Head until 1975 when he retired. Now at the youthful age of 81, he still maintains an office in the Agricultural Education Department that is full of life and enthusiasm. On his door hangs a sign "The Old Camel" (Terry, 1977).

Norman K. Quarles

Dr. Norman Quarles was a graduate of Texas A & M University where he received both his B.S. and M.Ed. He later received his Ed.D. from the University of Houston. Dr. Quarles is known as a teachers friend because of the countless hours spent providing assistance to vocational agriculture. Dr. Quarles began his teaching career in 1939 and taught until 1943, when he was called up by the United States Navy to serve in World War II. In 1945, Dr. Quarles was discharged and taught high school vocational agriculture for sixteen more years. In 1961, Dr. Quarles joined the faculty at East Texas State University in the Department of Agricultural Education. During his 16 years at East Texas State he supervised the writing of seven nationally distributed handbooks on cooperative training in vocational agriculture. Among the most prestigious awards that Dr. Quarles received was the Southern Regions Distinguished Service Award in Agricultural Education. Dr. Quarles retired from his full-time teaching position in 1978 (Quarles, 1979).

A. Webster Tenney

Dr. Webster Tenney was another Great Individual in the History of Agricultural Education (Camp & Crunkilton, 1985). Dr. Tenney received his B.S. in Agricultural Education from the University of Florida. In 1933, Dr. Tenney received his M.S. from The Ohio State University and later received his Ed.D. from New York University in 1951. Dr. Tenney taught high school vocational agriculture for four years. After teaching at the high school level Dr. Tenney moved to the college ranks as Professor of Agricultural Education at the University of Florida. Two years later he joined the State Agriculture Education staff. The move that had the most impact was made in 1943. Dr. Tenney accepted the position as Program Specialist in Agricultural Education in the United States Office of Education. During this tenure of 14 years at the position Dr. Tenney established the FFA Supply Service, implemented The National FFA Foundation, and the National Future Farmer Magazine. Dr. Tenney resigned as FFA Executive Secretary in 1957. In 1960, Dr. Tenney organized the National Agricultural Hall of Fame (Hunsicker, 1975).

J. Robert Warmbrod

Dr. Robert Warmbrod received his B.S. from the University of Tennessee in 1952 and his M.S. in 1954. Then Dr. Warmbrod went to the University of Illinois to get his Doctorate in 1962. In, 1968, Dr. Warmbrod took a job as Professor in Agricultural Education at The Ohio State University. In 1972, Dr. Warmbrod was one of eight

teachers of The Ohio State University who received the Alumni Award for Distinguished Teaching. At the 1974 American Vocational Association Convention, Dr. Warmbrod was awarded the Annual Distinguished Service Award of the American Association to Teacher Educators in Agriculture. Dr. Warmbrod has been the author or co-author of four national publications. Some of Dr. Warmbrod's publications include: New Dimensions in Public School Education in Agriculture and New Designs in Vocational, Technical, and Practical Arts. Dr. Warmbrod personally advised numerous Master's and Doctoral degree recipients (Bender, 1975).

Ralph J. Woodin

Dr. Ralph Woodin received his B.S. (1931) and M.S. (1951) at Ohio State University. During the first nine years out of college Dr. Woodin taught high school vocational agriculture. Afterwards, he was named as an Agricultural Education instructor at Ohio State. From 1962 to 1965, Dr. Woodin served as the editor of The Agricultural Education Magazine and for 18 years he was the editor to The Ohio Agricultural Education News. Prior to that he was editor to The Ohio Vocational Association Reporter. Dr. Woodin authored approximately 100 articles during this time. In 1965, the American Vocational Association presented him a Distinguished Service Award. He was the Ohio Vocational Association Executive Secretary for 15 years. During his collegiate rein Dr. Woodin advised 25 Ph.D. candidates and 60 Master's degree candidates (Bender, 1976).

These are but a few of the individuals who have influenced agricultural education. The author realizes that there are many more individuals that have made great contributions but due to the limited space these individuals were singled out.

Summary

Throughout the review of literature the author has focused on the legislation that has affected agricultural education, the history of agricultural education, graduate programs in agricultural education and the "Giants of the Profession" of agricultural education. Knowing that these are not the only attributes that have made agricultural education what it is today, the author and his committee felt these attributes were very important. Graduate study is being perceived with greater importance, therefore it is worthwhile that we look at what has helped mold agricultural education.

CHAPTER III

PROCEDURES

The purpose of this chapter is to describe the methods and procedures the author used to conduct the study.

The purpose of the study was to assess from a chronological standpoint the history of graduate programs in agricultural education in the United States. In order to fulfill the purpose of the study specific objectives were established, a population was determined and an instrument was developed for collecting the data. The data collection for this study was conducted by mail-questionnaire to all agricultural education graduate programs in the United States.

Institutional Review Board (IRB)

Federal regulations and Oklahoma State University policy require review and approval of all research studies that involve human subjects before investigators can begin their research. The Oklahoma State University Office of University Research Service and the IRB conduct this review to protect the rights and welfare of human subjects involved in biomedical and behavior research. In compliance with the aforementioned policy, this study received the proper surveillance and was granted permission to continue. Furthermore, this research was assigned the following research project number: AG-91-020.

Population of the Study

The population of this study involved all agricultural education programs which are conducting or have conducted graduate programs in the United States. In order to get full representation of all graduate programs in agricultural education the Directory of Teacher Educators in Agriculture 1900- 1991 was utilized. In addition, the author, with the assistance of his graduate committee members, determined the agricultural education departments conducting graduate programs and each department selected was involved in the study with the mailing of a questionnaire.

Development of the Instrument

The instrument used to assess from a chronological standpoint the history of graduate programs in agricultural education in the United States was developed in order to obtain information to be submitted for a chapter of Dr. Gary Moore's book on the History of Agricultural Education. Dr. A. P. Bell (North Carolina A & T), Dr. Alex Hash (Clemson), and Dr. Jim Key (Oklahoma State University) developed a draft copy of the questionnaire at the Southern Region Research Conference in Agricultural Education at Lexington, Kentucky in March of 1991. Further development of the questionnaire was done at Oklahoma State University by the author, the authors committee, and peers. The questionnaire was constructed in order to obtain information concerning the number of graduate degrees awarded in agricultural education, the focus of the graduate study, the placement positions of the graduates, and other demographic

characteristics about the institutions' graduate programs. The survey instrument contained a total of 13 items, with 12 questions being forced-response items, while one was open-response in nature. The instrument was designed to utilize nominal and ordinal scales as well as interval.

Collection of the Data

Agricultural education departments conducting graduate programs were identified through personal knowledge of the author and his committee with the assistance of the Directory of Teacher Educators in Agricultural Education 1990- 1991. A mailed questionnaire was then sent to each institution that has conducted or is conducting graduate studies in agricultural education. If the author or the committee members were uncertain as to whether or not a graduate program existed, the institution was mailed a questionnaire to avoid the exclusion of any institution that has or is conducting a graduate program in agricultural education.

The first mailing of the questionnaire was mailed on May 23, 1991 and a cover letter accompanied the questionnaire stating the fact that the information would be used in Dr. Gary Moore's book, The History of Agricultural Education.

A follow-up letter and questionnaire were mailed on June 19, 1991 to all of the non-respondents. In addition, some of the institutions were phoned to determine their progress on the first mailed questionnaire.

Analysis of the Data

The data were arranged in alphabetical order with regard to the name of the institution. In addition, the author also identified if the institution was a Land-Grant college; the year the graduate program started; where the agricultural education graduate program is administered; the year the institution awarded the first M.S., M.Ag., Ed.S., M.Ed., Ed.D., Ph.D., and other; and the status of current enrollment and fellowships/assistantships.

The author then broke the information down into smaller portions by breaking the years into 20 year increments. This provided easier to read tables and narratives.

Descriptive statistics were used to analyze the remaining data. The analysis of the data was completed by the Oklahoma State University Computer Center under the direction of Iris McPherson. The data were compiled in order to show the frequency of distribution and mean ranks degrees awarded by institutions in agricultural education, the focus of graduate study programs in agricultural education, and the availability of most recent and numerous employment opportunities for agricultural education graduates.

One qualitative question was involved with the study concerning the nature of the agricultural education graduate program with regards to admission requirements, residency, academic regulations, and other. Due to lack of response the question and data were not used in the study findings.

Real limits were established to make findings more relevant to the reader and to determine the most appropriate categories for the respective responses. Initially numerical values were assigned as follows for question nine on the survey instrument with the category of "greatest" value equal to five, while the category of "least" value corresponded to one. Real/absolute limits were then established to reflect the focus of graduate study programs in agricultural education as a mean rank. Ranges in absolute value were aligned as follows: 5.0 to 4.5 was the "greatest" value, 4.49 to 3.5, 3.49 to 2.5, 2.49 to 1.5 and 1.49 to 1.0 for the "least" value. In addition, numerical values of one to nine were assigned as the result of utilizing mean rankings for questions 11 and 12. Limits were then fixed for numerical values of one to nine with one being of the "greatest" value. The real limits were as follows: 1.0 to 1.49; 1.5 to 2.49; 2.5 to 3.49; 3.5 to 4.49; 4.5 to 5.49; 5.5 to 6.49; 6.5 to 7.49; 7.5 to 8.49; 8.5 to 9.0 was the "least" value for survey items 11 and 12.

CHAPTER IV

PRESENTATION AND ANALYSIS OF THE DATA

Introduction

The major purpose of this study was to assess from a chronological standpoint the history of graduate programs in agricultural education in the United States.

The scope of the study was all agricultural education programs which are conducting or have conducted graduate programs in the United States. Survey instruments were mailed to 83 universities and colleges. After a generous time frame 60 questionnaires (72.3 percent) were returned with 53 (63.9 percent) containing usable information.

To better understand this study, the primary goal of this chapter was to examine the data collected and report the findings in a logical order according to the format and sequence of the study objective and questionnaire.

Findings

The data in Table I revealed a distribution of colleges and universities by the type of institution: 1862 Land-Grant, 1890 Land-Grant or Non Land-Grant Colleges or Universities. Over 70 percent of the respondents declared their college/university was an 1862 Land-Grant Institution, while more than 20 percent of the

respondents declared they were Non Land-Grant Institutions and eight percent were 1890 Land-Grant Institutions.

TABLE I

A DISTRIBUTION OF UNIVERSITIES/COLLEGES
BY TYPE OF INSTITUTION

	Frequency N	Percentages (%)
1862 Land-Grant	34	70.83
1890 Land-Grant	4	8.34
Non Land-Grant	10	20.83
Total	48	100.00

The data in Table II provided information concerning the year graduate programs were started at the responding institutions. Respondents were asked to indicate the year the Institution started a graduate program, while the author broke the distribution down into 20 year increments.

TABLE II

A DISTRIBUTION OF THE INITIAL BEGINNING OF GRADUATE PROGRAMS AT THE INSTITUTIONS SURVEYED BY YEAR PROGRAM WAS INITIATED

Year Graduate Program Started	Frequency N	Percentage (%)
Before 1861	3	7.9
1861-1880	3	7.9
1881-1900	6	15.8
1901-1920	5	13.2
1921-1940	7	18.3
1941-1960	8	21.1
1961-1980	6	15.8
1981-present	0	0.0
Total	38	100.0

Graduate programs of the respondents first began in 1821 and have since progressed throughout the United States. Three (7.9 percent) such institutions began before 1861 with another three (7.9 percent) beginning in the next 20 years between 1861 and 1880. Between 1881 and 1900 six (15.8 percent) institutions began graduate programs. From 1901 to 1920 five (13.2 percent) institutions, 1921 to 1940 seven (18.3 percent), 1941 to 1960 eight (21.1 percent) institutions, 1961 to 1980 six (15.8 percent) institutions began graduate programs within the university/ college setting.

The data in Table III included information concerning the starting of graduate programs in Agricultural/Extension Education. The respondents attested the year the programs were initiated, while the author expressed the findings in twenty-year intervals.

TABLE III

A DISTRIBUTION OF THE INITIAL BEGINNINGS OF GRADUATE PROGRAMS IN AGRICULTURAL/ EXTENSION EDUCATION BY YEAR

Year Graduate Program Started in Agricultural/ Extension Education	Frequency N	Percentage (%)
Before 1900	0	0.0
1901-1920	5	12.9
1921-1940	11	28.2
1941-1960	11	28.2
1961-1980	10	25.6
1980-present	2	5.1
Totals	39	100.0

The distribution shows that graduate programs in Agricultural/ Extension Education did not start as early as did other graduate programs. In fact, there was not a graduate program in Agricultural/Extension Education until after 1900. From 1901 to 1920 five (12.9 percent) graduate programs were started, from 1921 to 1940 11 (28.2 percent) graduate programs began, from 1941 to 1960 11 (28.2 percent) graduate programs began, from 1961 to 1980 10 (25.6 percent) graduate programs began, and from 1981 to the present time two (5.1 percent) graduate programs began.

The data in Table IV revealed how graduate programs in Agricultural/Extension Education were being administered. Respondents were asked to choose from Graduate School or specific

other. Of the 48 responses to this question 43 (89.5 percent) selected Graduate School, while the "specific others" included: College of Agriculture and Forestry one (2.1 percent), College of Education and Applied Sciences one (2.1 percent), School of Education one (2.1 percent), College of Agriculture and Agricultural Education Programs one (2.1 percent), and School of Agriculture one (2.1 percent).

TABLE IV

A DISTRIBUTION OF WHERE AGRICULTURAL/EXTENSION EDUCATION GRADUATE PROGRAMS WERE ADMINISTERED BY COLLEGE/SCHOOL

College/School	Frequency N	Percentage (%)
Graduate School	43	89.5
College of Ag. & Forestry	1	2.1
College of Ed. & App. Science	1	2.1
School of Education	1	2.1
College of Ag. & Ag. Ed. Programs	1	2.1
School of Agriculture	1	2.1
Total	48	100.0

The data in Table V showed where the Agricultural/Extension Education department is administered within the university or college. The 49 respondents to this question indicated 31 (63.4

percent) were administered through the College of Agriculture, while 12 (24.6 percent) were established in the College of Education. Some of the "specific others" were: School of Agricultural Sciences one (2.0 percent), College of Applied Human Sciences one (2.0 percent), College of Education and Applied Sciences one (2.0 percent), School of Applied Arts and Technology one (2.0 percent), and Agricultural Education, Family Resources and Consumer Sciences one (2.0 percent).

TABLE V

A DISTRIBUTION OF AGRICULTURAL/EXTENSION EDUCATION DEPARTMENTS WITHIN THE UNIVERSITY BY COLLEGE/SCHOOL

College/School	Frequency N	Percentage (%)
College of Agriculture	31	63.4
College of Education	12	24.6
School of Ag. Sciences	1	2.0
College of App. Human Science	1	2.0
College of Ed. & App. Science	1	2.0
School of App. Arts & Technology	1	2.0
Ag. Ed./Family Resources and Consumer Sciences	1	2.0
Total	49	100.0

The data in Table VI disclosed when the first Graduate degrees were awarded in Agricultural/Extension Education by the conveying institutions. Between the years of 1900 and 1920 there were: three (10.3 percent) Master of Science (M.S.) degrees, one (20.0 percent) Master of Agriculture (M.Ag.) degrees, zero (0.0 percent) Specialist in Education (Ed.S.), one (6.7 percent) Master of Education (M.Ed.), zero (0.0 percent) Doctor of Education (Ed.D.)degrees, zero (0.0 percent) Doctor of Philosophy (Ph.D.) degrees, and zero (0.0 percent) others. While between the years of 1921 and 1940 11 (37.9 percent) were M.S., zero (0.0 percent) M.Ag., one (10 .0 percent) Ed.S., four (26.7 percent) M.Ed., one (7.7 percent) Ed.D., three (25.0 percent) Ph. D., and one (14.3 percent) other degrees. However, between the years of 1941 and 1960 there were: four (13.8 percent) M.S., two (40.0 percent) M.Ag., two (20.0 percent) Ed.S., seven (46.8 percent) M.Ed., three (23.1 percent) Ed.D., four (33.3 percent) Ph.D., and one (14.3 percent) others. Furthermore, between 1961 and 1980 nine (31.0 percent) were M.S., one (20.0 percent) M.Ag., six (60.0 percent) Ed.S., two (13.3 percent) M.Ed., five (38.5 percent) Ed.D., three (16.7 percent) Ph.D., and three (42.9 percent) other degrees. In addition, between 1981 and the present time there were: two (7.0 percent) M.S., one (20.0 percent) M.Ag., one (10.0 percent) Ed.S., one (6.7 percent) M.Ed., four (30.7 percent) Ed.D., three (25.0 percent) Ph.D., and two (28. 5 percent) other degrees granted. In aggregate from 1900 to the present a total of 29 M.S., five M.Ag., 10 Ed.S., 15 M.Ed., 13 Ed.D., 12

Ph.D., and seven other degrees were granted by the responding institutions.

TABLE VI

A DISTRIBUTION OF FIRST GRADUATE DEGREES AWARDED IN UNITED STATES AGRICULTURAL/EXTENSION EDUCATION PROGRAMS BY YEAR

Year First Offered	M.S. N	M.S. (%)	M.Ag. N	M.Ag. (%)	Ed.S. N	Ed.S. (%)	M.Ed. N	M.Ed. (%)	Ed.D. N	Ed.D. (%)	Ph.D. N	Ph.D. (%)	Other N	Other (%)
1900-20	3	10.3	1	20.0	0	0.0	1	6.7	0	0.0	0	0.0	0	0.0
1921-40	11	37.9	0	0.0	1	10.0	4	26.7	1	7.7	3	25.0	1	14.3
1941-60	4	18.8	2	40.0	2	20.0	7	46.8	3	23.1	4	33.3	1	14.3
1961-80	9	31.0	1	20.0	6	60.0	2	13.3	5	38.5	2	16.7	3	42.9
1981-Pres	2	7.0	1	20.0	1	10.0	1	6.7	4	30.7	3	25.0	2	28.5
Total	29	100.0	5	100.0	10	100.0	15	100.0	13	100.0	12	100.0	7	100.0

The data in Table VII dealt with the number of degrees awarded in Agricultural/Extension Education. The total of 39 respondents answered this question. The frequency count and percentages revealed that prior to 1917 there were no degrees awarded in Agricultural/Extension Education. However, from 1917 to 1937 there were: 134 Master of Science (M.S.), 152 Master of Education (M.Ed.), zero Specialist in Education (Ed.S.) and Doctor of Education (Ed.D.), four Doctor of Philosophy (Ph.D.), and four other

degrees granted. While from 1938 to 1957 620 M.S., 619 M.Ed., five Ed.S., 27 Ed.D., 45 Ph.D., and 164 other degrees were awarded. From 1957 to 1977 1,876 M.S., 994 M.Ed., 66 Ed.S., 189 Ed.D., 331 Ph.D., and 602 other degrees were reported. In addition, from 1977 to the present time there were: 2,017 M.S., 1,072 M.Ed., 125 Ed.S., 195 Ed.D., 379 Ph.D., and 787 others. The total degrees reported by representative from responding institution over the 76 year period indicated 4,647 M.S., 2,837 M.Ed., 196 Ed.S., 411 Ed.D., 759 Ph.D., and 1,557 other degrees awarded.

TABLE VII

A DISTRIBUTION OF DEGREES AWARDED IN AGRICULTURAL/ EXTENSION EDUCATION BY RESPONDENTS BY YEAR

Year Degree was Awarded	Freq. N M.S.	Freq. N M.Ed.	Freq. N Ed.S.	Freq. N Ed.D.	Freq. N Ph.D.	Freq. N Other
Prior to 1917	0	0	0	0	0	0
1917 - 1937	134	152	0	0	4	4
1938 - 1957	620	619	5	27	45	164
1958 - 1977	1,876	994	66	189	331	602
1978 - present	2,017	1,072	125	195	379	787
Total	4,647	2,837	196	411	759	1,557

The data in Table VIII illustrates the number of degrees awarded by the institution as a whole. A total of four responding institutions reported having granted the degree of Master of Agricultural (M.Ag.) no degrees were awarded prior to 1970; 869 between 1971 and 1990, with a total of 869 M.Ag. degrees awarded. Six institutions disclosed that they conferred Master of Science (M.S.) degrees: 11,971 before 1970, 36,353 between 1971 and 1990, with a total of 48,324. Four institutions indicated the granting of Master of Education (M.Ed.) degrees: 252 prior to 1970, 18,287 between 1971 and 1990, with a total of 18,539 degrees granted. Three institutions indicated the conferring of Specialist in Education (Ed.S.) degrees: four prior to 1970, while 3,620 were reported between 1970 and 1990, with a total of 3,624 degrees awarded. Three institutions awarded the Doctor of Education (Ed.D.) degree: 403 before 1970 and 3,183 between 1971 and 1990, with a total of 3,586 degrees granted. Five institutions indicated the granting of the Doctor of Philosophy (Ph.D.) degree: 1,014 prior to 1970, 11,300 between 1971 and 1990, with a total of 12,314 degrees conferred. However, three disclosed that they awarded other degrees: 1,068 such degrees were granted before 1970, 5,815 between 1971 and 1990, for a grand total of 6,883 "other" degrees being awarded.

TABLE VIII

A DISTRIBUTION OF DEGREES AWARDED BY RESPONDING INSTITUTIONS DURING SPECIFIC TIME PERIODS BY DEGREE AWARDED

Degree Awarded	Frequency Pre-1970	Frequency 1971-1990	Frequency total	Frequency N
M.Ag.	0	869	869	4
M.S.	11,971	36,353	8,324	6
M.Ed.	252	18,287	18,539	4
Ed.S.	4	3,620	3,624	3
Ed.D.	403	3,183	3,586	3
Ph.D.	1,014	11,300	12,314	3
Other	1,068	5,815	6,883	3

The data in Table IX dealt with the focus of the graduate study in Agricultural/Extension Education. The choices provided to the respondents were: education methodology, psychology, research, subject matter in agriculture, and other. The respondents were asked to rank their choices on a scale of five to one, five having the greatest emphasis. The data revealed a mean score of 3.62 for educational methodology, while other had a m ean score of 3.17 with four out of 18 indicating "other" as the main focus. Research as a graduate study focus had a mean score of 2.82 with 14 out of 45 reporting it as the second most emphasized area. However, subject matter in agriculture had a mean score of 2.60 among 45 institutions, while psychology had a mean of 2.55 score from 40 responding institutions.

TABLE IX

A SUMMARY OF GRADUATE STUDY EMPHASIS AMONG AGRICULTURAL/EXTENSION EDUCATION DEPARTMENTS BY RANK

Rank	Educational Methodology N	Psychology N	Research N	Subject Matter N	Other N
First	21	1	0	3	4
Second	7	7	14	9	5
Third	2	14	15	13	2
Fourth	9	9	10	7	4
Fifth	6	9	6	13	3
Total	45	40	45	45	18
Mean Rank	3.62	2.55	2.82	2.60	3.17

Semantic Scale: (5= "Greatest" to 1= "Least")

The data in Table X indicated that the representatives of responding institutions were asked to share the number of students enrolled in their graduate programs and the number of fellowships and/or assistantships offered by their departments programs. The enrollment was lead by Master of Science (M.S.) degrees with a mean of 23.03 students, 30 institutions with a total of 691 students enrolled with a range of one to 55. Master of Education (M.Ed.) had a mean of 18.20 students with 20 institutions reporting 364 students with a range of two to 60. Doctor of Philosophy (Ph.D.) programs had a mean of 15.70 students from 10 institutions reporting 157 students with a range of one to 52, while "others" had a mean of

11.90 students from 10 institutions reporting 119 students with a range of two to 30. The Specialist in Education (Ed.S.) had a mean of 9.60 students with five universities/colleges indicating a total of 48 students with a range of one to 26, while Doctor of Education (Ed.D.) programs had a mean student enrollment of 3.80 from 10 institutions reporting 38 students with a range of two to 30.

TABLE X

A SUMMARY OF 1991-1992 GRADUATE PROGRAM ENROLLMENTS IN AGRICULTURAL/EXTENSION EDUCATION DEPARTMENTS OFFERED BY DEGREE PROGRAMS

Degree	Frequency	Enrollment		
	N	Total Students	Mean	Range
M.S.	30	691	23.03	1 to 55
M.Ed.	20	364	18.20	2 to 60
Ed.S,	5	48	9.60	1 to 26
Ed.D.	10	38	3.80	1 to 15
Ph.D.	10	157	15.70	1 to 52
other	10	119	11.90	2 to 30

With regard to the data in Table XI, 49 students held assistantships/fellowships in Doctor of Philisophy (Ph.D.) programs for an average of seven graduate assistantships per responding institution with a range of one to 20, while "others" had an average of three students from the four responding institutions with a total

of 12 available assistantships with a range of one to six. However, Master of Science degree programs had a mean of 2.62 students having assistantships from 21 institutions with 55 total assistantships with a range of one to six. While programs offering the Doctor of Education degree had a mean of 2.50 graduates with assistantships from four institutions with a total of 10 assistantships ranging from one to five. Programs offering the Master of Education degree had a mean of 1.33 assistantships from nine institutions having 12 assistantships with a range of one to two, while no programs reported providing assistantships/fellowships for Specialist in Education.

TABLE XI

A SUMMARY OF 1991-1992 GRADUATE ASSISTANTSHIP/FELLOWSHIPS IN AGRICULTURAL/EXTENSION EDUCATION DEPARTMENTS OFFERED BY DEGREE PROGRAMS

Degree	Assistantship/Fellowship			
	Frequency N	Total Students	Mean	Range
M.S.	21	55	2.62	1 to 6
M.Ed.	9	12	1.33	1 to 2
Ed.S.	0	0	0.00	0 to 0
Ed.D.	4	10	2.50	1 to 5
Ph.D.	7	49	7.00	1 to 20
Other	4	12	3.00	1 to 6

The data in Table XII revealed the rank order of placement positions most recently filled by their graduates in Agricultural/ Extension Education. The sum of the rankings was determined by adding the quantity of (n x rank) to the quantity (n x rank). Teaching High School and Community College led the way for the responding institutions. With a mean rank of 1.41 among graduates choosing teaching in the High School and Community College, while Cooperative Extension ranked second with a mean of 2.46. Next, "Other" had a mean rank of 3.58; followed by, Teaching University and Research with a mean of 3.83. Placements in Government services and supervisory positions tied with a mean rank of 4.03. Sales had a mean rank of 4.06, while Agricultural Lobbyist had an mean rank of 7.11. Educational Lobbyist finished off the tally with a mean of 7.78.

TABLE XII

A DISTRIBUTION OF RANKINGS CONCERNING THE RECENT PLACEMENT OF AGRICULTURAL/EXTENSION EDUCATION GRADUATES BY PLACEMENT POSITIONS

Placement Position	Frequency N	Sum of Ranks	Mean Rank
Teaching H.S. & Com. College	44	62	1.41
Cooperative Extension	37	91	2.46
Other	12	43	3.58
Teaching Univ. & Research	30	115	3.83
Government Services	35	141	4.03
Supervision	31	125	4.03
Sales	33	134	4.06
Agricultural Lobbyist	9	64	7.11
Educational Lobbyist	9	70	7.78

Semantic Scale: (1= "greatest" to 9= "least")

The data shown in Table XIII indicated the areas of greatest job placement during the history of Agricultural/Extension Education graduate programs. The question addressing this item made many of the choices available as did the previous question. The sum of ranks were again determined by adding the quantity of (n x rank) to the quantity (n x rank). However, distribution was slightly different. Teaching High School and Community College led with a mean rank of 1.27 ranking it first, while Cooperative Extension came in second with a mean rank of 2.48. However, Government services ranked third having a mean rank of 3.67 with teaching at the University/College level and research having a mean rank of 4.00. "Other" had a mean rank of 4.18 and Sales followed a with mean rank of 4.19. Supervision had a mean rank of 4.29 followed by agricultural lobbyist with a 7.07 mean rank and educational lobbyist a mean rank of 7.43.

TABLE XIII

A DISTRIBUTION OF PLACEMENT RANKINGS AMONG PROGRAMS AGRICULTURAL/EXTENSION EDUCATION DEPARTMENTS THROUGHOUT ITS HISTORY BY PLACEMENT POSITION

Job Placement Position	Frequency N	Sum of Ranks	Mean Rank
Teaching H.S. & Community College	45	57	1.27
Cooperative Extension	42	104	2.48
Government Services	39	143	3.67
Teaching Univ. & Research	35	140	4.00
Other	11	46	4.18

TABLE XIII (Continued)

Job Placement Position	Frequency N	Sum of Ranks	Mean Rank
Sales	36	151	4.19
Supervision	35	150	4.29
Agricultural Lobbyist	15	106	7.07
Educational Lobbyist	14	106	7.43

Semantic Scale: (1= "greatest" to 9= "least")

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The purpose of this chapter was to present a summary of the following: (1) purpose and objectives of the study, and (2) the major findings of the research. In addition, as a result of the analysis of data and a thorough inspection of the findings, conclusion and recommendations were presented.

Purpose of the Study

The purpose of the study was to assess from a chronological standpoint the history of graduate programs in agricultural education in the United States.

Objectives of the Study

In order to accomplish the purpose of the study, the following objectives were established:

1. To determine when institutions which conducted agricultural education graduate programs in the United States were founded and if they were Land-Grant Colleges.

2. To determine when the institution initiated graduate programs in the university as well as agricultural education.

3. To determine the administrative unit under which agricultural education graduate programs are administered.

4. To determine the year graduate degrees in agricultural education were first awarded and the frequency of distribution of degrees in agricultural education as well as the distribution of degrees awarded by the institution.

5. To determine the focus and current status of graduate studies in agricultural education.

6. To determine the nature of the agricultural education graduate program offered by each institution.

7. To determine the most recent and most numerous placement positions for agricultural education graduates.

Summary of Population

The scope of the study included all of the agricultural education programs in the United States that have or have had graduate programs. After carefully identifying institutions that have or have had graduate programs in agricultural education, 83 universities and colleges were mailed questionnaires with 53 (63.9 percent) having some type of usable information.

Rationale for Design and Conduct of the Study

The objective of the study was to assess the historical as well as the current trends among graduate programs of agricultural education in the United States. The data was collected by mailed

questionnaire along with an introductory cover letter stating the importance of the study. Eighty-three institutions were given the opportunity to take part in the study. Fifty-three (63.9 percent) of the institutions returned some type of usable information.

Major Findings of the Study

Major findings of the study showed that 34 (70.83 percent) institutions were 1862 Land-Grant Colleges, while four (8.34 percent) were 1890 Land-Grant Colleges and 10 (20.83 percent) of the responding institutions were Non Land-Grant Colleges.

The initiation of graduate studies had wide spread beginnings. Three (7.9 percent) started prior to 1861, three (7.9 percent) were established between 1861 and 1880, six (15.8 percent) founded between 1881 and 1900, five (13.2 percent) founded between 1901 and 1920, seven (18.3 percent) began between 1921 and 1940, eight (21.1 percent) started between 1941 and 1960, while six (15.8 percent) were inaugurated between 1961 and 1980 and none of the 38 respondents indicated the beginning of any new graduate programs after 1981.

The initiation of graduate programs in agricultural education however, differed somewhat from the graduate programs in the college or university. Graduate programs in Agricultural Education did not begin until after 1900. Of the 39 institutions reporting five (12.9 percent) began graduate studies in Agricultural Education between 1901 and 1920, 11 (28.2 percent) from 1921 to 1940, 11 (28.2

percent) from 1941 to 1960, 10 (25.6 percent) from 1961 to 1980 and two (5.1 percent) having been initiated since 1981.

The college or school in which the Agricultural Education Graduate Programs were administered was not surprising. Of the 48 responding institutions 43 (89.5 percent) stated the Agricultural Education program was administered in the Graduate College/School. However, when asked where the Agricultural Education Department was administered 31 (63.4 percent) expressed that it was located in the College of Agriculture, while 12 (24.6 percent) indicated that theirs was located in the College of Education.

When asked about the first degrees awarded in Agricultural Education; the greatest number of first M.S. degrees (11 or 37.9 percent) were awarded between 1921 and 1940, while the highest frequency of first M.Ag. degrees (2 or 40 percent) was awarded between 1941 and 1960. The greatest number of the first Ed.S. in Agricultural Education (6 or 60 percent) were awarded between 1961 and 1980. The largest number of Master's in Education degrees in Agricultural Education first awarded (7 or 46.8 percent) were awarded between 1941 and 1960. The majority of Ed.D. degrees first awarded (5 or 38.5 percent) was awarded between 1961 and 1980. However the largest number of Ph.D. degree's first awarded (4 or 33.3 percent) were earned between 1941 and 1960. Between 1961 and 1980 three or 42.9 percent of the degrees classified as "Others" were first awarded.

When responding institutions were asked to identify the number of degrees conferred at the university/college level in Agricultural

Education, 39 responding institutions returned information indicating a total of 4,647 M.S. degrees, 2,837 M.Ed. degrees, 196 Ed.S. degrees, 411 Ed.D. degrees, 759 Ph.D. degrees and 1,557 other degrees.

When universities were asked to give the total number of degrees awarded by the institution, the number of responses declined when graduation records had to be obtained for the college/ university as a whole. Four institutions awarded 869 M.Ag. degrees, six institutions conferred 48,324 M.S. degrees, four institutions granted 18,539 M.Ed. degrees, three institutions awarded 3,624 Ed.S. degrees, three institutions granted 3,586 Ed.D. degrees, and three institutions conferred 12,314 Ph.D. degrees.

The focus of graduate study in Agricultural Education was the next issue addressed. With possible responses among Educational Methodology, Psychology, Research, Subject matter in Agriculture, and "other" as areas of emphasis in Agricultural Education graduate programs, the most frequently selected was Educational Methodology with 21 of 45 respondents selecting this as the area of graduate study most emphasized with a mean of 3.62. Research was at the bottom of the list with a mean of 2.82.

Graduate program enrollment was quite interesting. Enrollments in M.S. degree programs averaged 23.03 students with an average 2.62 assistantships offered to these students, while M.Ed. programs averaged 18.2 students with 1.33 assistantships extended. Ed.S. programs averaged 9.6 students with no assistantships. However, Ed.D. graduate programs averaged 3.8 students with 2.5

assistantships and Ph.D. programs averaged 15.7 students with 7 assistantships. "Other" degree programs averaged 11.9 students with 3 assistantships made available.

Universities were then asked to describe the recent jobs their Agricultural Education majors acquired. Teaching High School and Community College topped the list followed closely by Cooperative Extension. When asked the most numerous job placement by Agricultural Education graduates, again teaching High School and Community College topped the list with Cooperative Extension being second.

Conclusions

Based on the major finding and interpretation of the data reported by the respondents, the following conclusions were drawn:

1. Based on the findings, the universities and colleges responding to this study were primarily 1862 Land-Grant institutions.

2. The initiation of graduate studies in academic institutions in the United States was started prior to 1861, however a great many were initiated between 1941 and 1960; war and post war time.

3. Graduate studies in Agricultural Education began largely around 1910-1911 and continue until the present.

4. Graduate programs in Agricultural Education have been primarily administered through the Graduate School in the United States.

5. Agricultural Education Departments are frequently administered through Colleges of Agriculture.

6. Many of the first graduate degrees in Agricultural Education were awarded between 1900 and 1921, while the first terminal degrees were primarily granted between 1921 and 1940.

7. Up-to-date, Master's degrees have largely been the degree most frequently conferred among graduate program completers in Agricultural Education.

8. Educational Methodology has been the primary focus of most graduate studies in Agricultural Education.

9. Enrollments in graduate studies have been largely at the Master's level, while assistantships have been primarily awarded to doctoral students.

10. Recent trends seem to indicate that teaching in High School and Community Colleges and the Cooperative Extension Service hold the most promise as primary employment opportunities for students completing graduate programs in Agricultural Education.

Recommendations

As a result of the conclusions drawn and interpretation of the data the following recommendations were outlined:

1. It is recommended that future studies be conducted as needed to update the historical base of the profession.

2. It is recommended that Agricultural/Extension Education Programs bring their department's historical records up-to-date and that better records be kept by the graduate coordinators.

3. It is recommended that Agricultural Education Departments initiate follow-up programs regarding graduate alumni employment placement, salary, areas of study which seem to attract the most notoriety, etc.

4. Rather than combining further research efforts concerning graduate programs in Agricultural Education, separate studies should be conducted of Master's and Doctoral programs.

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APPENDIXES

APPENDIX A

SURVEY INSTRUMENT

Name of Institution_____ Year Founded_____

Name of Department_____

Contact Person_____

Please Check:

1. ____1862 Land-Grant Institution ____1890 Land-Grant Institution

   ____Non Land-Grant Institution

2. Year Graduate Program started at institution_____

3. Year Graduate Program started in Agricultural/Extension

   Education____

4. Graduate Program in Agricultural/Extension Education is

   administered under:

   Please Check:

   ____Graduate School

   ____Other (specify)_____

5. Agricultural Education Department is located in: (Please Check)

   ____College of Agriculture

   ____College of Education

   ____Other (specify)_____

6. Year Graduate degrees first awarded in Agricultural/Extension Education:

   Please List Date for Each:

   _____M.S. _____M.Ag.

   _____Ed.S. _____M.Ed.

   _____Ed.D. _____Ph.D.

   _____Other (specify)_____

7. Number of Graduate degrees awarded in Agricultural/Extension Education: (If year breakdown not available, please give totals)

Period	M.S.	M.Ed.	Ed.S.	Ed.D.	Ph.D.	Others
Prior to 1917	____	____	____	____	_____	_____
1917- 1937	____	____	____	____	_____	_____
1938- 1957	____	____	____	____	_____	_____
1958- 1977	____	____	____	____	_____	_____
1978-present	____	____	____	____	_____	_____
Total	_____	____	____	____	_____	_____

8. Number of Graduate Degrees awarded by the institutions: (if available)

M.Ag.	M.S.	M.Ed.	Ed.S.	Ed.D.	Ph.D.	Others	
____	____	_____	_____	_____	____	_____	Before 1970
____	____	_____	_____	_____	____	_____	1970 -1990
____	____	_____	_____	_____	____	_____	Total

9. Focus of Graduate Study in Agricultural Education: (Rank order according to emphasis) (5 greatest and 1 least)

_____Educational Methodology

_____Psychology

_____Research

_____Subject Matter Agriculture

_____Other (please specify)_____

10. Current status of Graduate study in Agricultural Education for 1991-1992:

	M.S.	M.Ed.	Ed.S.	Ed.D.	Ph.D.	Others
Enrollment	____	____	____	____	____	_____
Number of Fellowships/ Assistantships	____	____	____	____	____	_____

11. What are the most recent (last 5 years) placement positions for your Agricultural/Extension Education graduates? (Please rank according to numbers of placements with 1 being greatest number)

Teaching and Research (University level) _____

Teaching High School and Community College _____

Cooperative Extension _____

Government Service (ie. ASCS, SCS, FmHA USAID) _____

Educational Organization Lobbyist _____

Agricultural Organization Lobbyist _____

Sales Management _____

Supervisory Position (Agriculture and Extension) _____

Other (please specify)_____ _____

12. What have been the most numerous placement (during the entire history of your Agricultural/Extension Education graduate program) for your graduates? (please rank according to the number of placements with 1 being the greatest)

Teaching and Research (University level) _____

Teaching High School and Community College _____

Cooperative Extension _____

Government Service (ie. ASCS, SCS, FmHA USAID) _____

Educational Organization Lobbyist _____

Agricultural Organization Lobbyist _____

Sales Management _____

Supervisory Position (Agricultural and Extension) _____

Other (please specify)_____ _____

13. Nature of the Agricultural Education Graduate program. Describe briefly. (Please send brochure, description from catalog, or other printed description if available)

Admission requirements:_____

_____

Residency:_____

_____

Academic Regulations:_____

_____

Other:_____

_____

APPENDIX B

LETTER OF FIRST MAILING

May 23, 1991

Dear _____:

To provide accurate information for the chapter on graduate studies for the book on the History of Agricultural Education, we need your help. The information on the enclosed questionnaire is needed to accurately represent the history of graduate studies in Agricultural/Extension Education at your institution. If you do not have this information, please pass this questionnaire on to the person in your department who does have it or can get it.

We are looking for all the information we can get on graduate studies (master, specialist, doctoral, other?) at each institution in Agricultural/Extension Education. If you have information about programs which have been discontinued or for some other reason are not represented on the survey, please include information about them along with the survey. If you have information in addition to that on the survey you feel should be included, please send it. The information we get from you will provide the history of your institution.

Thanks for the time and effort to provide this information.

Sincerely,

A. P. Bell
North Carolina A.&T.

Jim Key
Oklahoma State

Alex Hash
Clemson

Steve Ake
Oklahoma State University

APPENDIX C

LETTER OF SECOND MAILING

June 20, 1991

Dear _____:

HISTORY IS PASSING YOU BY!!!!!!!!!!!!!!!!!!!

IF WE DO NOT GET INFORMATION FROM YOUR DEPARTMENT, IT WILL NO LONGER BE A PART OF THE HISTORY OF AGRICULTURAL EDUCATION.

About a month ago, we sent you a copy of a questionnaire requesting information about your graduate program in Agricultural/Extension Education. As of this date, we have not received it. In order for your department to be represented in this chapter of the History of Agricultural Education, we must have the information.

We are enclosing another copy of the questionnaire. If you do not have the information, please give the questionnaire to someone who does or let us know who we can contact.

IF YOU DO NOT HAVE ALL THE INFORMATION, SEND US WHAT YOU HAVE!

At a minimum, you should be able to give us the information on the first six questions. You could even guess at nine through twelve and send us some kind of printed description of your program.

We know this is a terrible time of year for getting information, but we had no choice. Deadlines are deadlines.

THANKS VERY MUCH FOR TAKING TIME FROM YOUR HECTIC SCHEDULE TO SEND THIS INFORMATION!!!!!!!!!!!!!!!!

Sincerely,

A. P. Bell
North Carolina A.&T.

Jim Key
Oklahoma State

Alex Hash
Clemson

Steve Ake
Oklahoma State University

VITA

Steven N. Ake

Candidate for the Degree of

Master of Science

Thesis: HISTORICAL ASPECTS OF GRADUATE PROGRAMS IN AGRICULTURAL EDUCATION IN THE UNITED STATES

Major Field: Agricultural Education

Biographical:

Personal Data: Born in Alva, Oklahoma, August 30, 1968, the son of Junior and Donna Charboneau and the late Gene Ake. Married July 13, 1991 to Sandra Shandy.

Education: Graduated from Seiling High School, Seiling, Oklahoma, May, 1986; attended Panhandle State University from 1986 to 1988; received Bachelor of Science degree from Oklahoma State University, in December, 1990; completed requirements for the Master of Science degree in Agricultural Education from Oklahoma State University in December, 1993.

Professional Experience: Teacher, Agricultural Education, Ryan Public Schools, Ryan, Oklahoma from July 1991 until the present.

Professional Organizations: Member of National and Oklahoma Vocational Agriculture Teachers Associations, American Vocational Association and Oklahoma Education Association.

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
FOR HUMAN SUBJECTS RESEARCH

Proposal Title: An Assessment and Historical Perspective of Graduate Programs in Agricultural Education in the United States

Principal Investigator: James White/Steven Ake

Date: July 1, 1991 IRB # AG-91-020

This application has been reviewed by the IRB and

Processed as: Exempt [X] Expedite [ ] Full Board Review [ ]

Renewal or Continuation [ ]

Approval Status Recommended by Reviewer(s):

Approved [X] Deferred for Revision [ ]

Approved with Provision [ ] Disapproved [ ]

Approval status subject to review by full Institutional Review Board at next meeting, 2nd and 4th Thursday of each month.

Comments, Modifications/Conditions for Approval or Reason for Deferral or Disapproval:

Signature: Marcia D. Tilley Date: July 3, 1991

Chair of Institutional Review Board