THE IDENTIFICATION OF OPINION LEADERS AMONG OKLAHOMA AGRICULTURAL EDUCATION TEACHERS

By

JAMIE MARIE LISTON

Bachelor of Science

Oklahoma State University

Stillwater, Oklahoma

2001

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
MASTER OF SCIENCE
August, 2002

THE IDENTIFICATION OF OPINION LEADERS

AMONG OKLAHOMA AGRICULTURAL

EDUCATION TEACHERS

Thesis Approved:

Thesis Adviser

Dean of the Graduate College

ACKNOWLEDGEMENTS

"Some people weave burlap into the fabric of our lives, and some weave gold thread. Both contribute to make the whole picture beautiful and unique." ~ *Unknown*

I would like to thank those special gold threads in my life. Not only did you strengthen me, but you always put that extra special color in my life when all else seemed so pale. It is to these threads that I give great thanks for forming me to be the person I am today.

Mom and Dad…Wow! How do I put into words what you have done for me? I could not have learned how to be a good teacher from any better than the two of you. You both truly have a gift, and I pray to God everyday that gift has been passed to me.

Brad and Katie…The two of you are such a bright spots in my life. Katie, thanks for always telling me exactly how it is and for constantly reminding me that I deserve the best. Brad, just think…that box of Twinkies may have actually paid off. Thanks so much for always setting the bar just high enough to give me a challenge but not so high as to keep me from succeeding every now and then.

Mema, Papa, and Grandma Lois…I thank the Lord everyday for letting me be a part of the lives of such special people. I am truly blessed.

My OSU Family…A special thank you to all the undergraduates, graduate students, faculty and staff, especially to Javonne Soos. At the beginning, little did we

know that we were starting a journey on the same path. I am so glad you were there to share the walk with me.

Dr. Kelsey…Your wittiness never ceases to amaze me. There are very few individuals who can embarrass me the way you can. Thank you for your guidance and encouragement.

Dr. Cartmell…You may not be Michael Jordan, but you very well could be Larry Bird. Thank you for constantly reminding me this is an educational process. I am grateful for your understanding, leadership and friendship.

Dr. Terry…As I sat in your class that first day of AGED 3103, I couldn't keep myself from smiling because I knew I was right where I needed to be. Due to your constant encouragement and motivation, I have never doubted my abilities and desire to be an agriculture teacher. Thank you for your guidance throughout my time at OSU. You are a very special person.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Background and Setting

"We live in a moment of history where change is so speeded up that we begin to see the present only when it is already disappearing." R.D. Laing (Quoteland.com, 2001).

According to Heylighen (2000), the acceleration of information distribution is remarkable. In pre-industrial times, people communicated over long distance by letters carried by couriers on horseback. The first major revolution in communication technology was the invention of the telegraph in the 19th century. It could transmit a signal virtually instantaneously. Present-day modems, through which computers can communicate over telephone lines and fiber optic cables, reach some 30,000 bits per second. In a mere 200 years, the speed of information transmission has increased 10 billion times.

Weimann (1994) stated that with the increased rate of information distribution, there is a need to determine the best channel in which communication should flow. One of the earliest appearances of one method of communication was found to be used during the thirteenth century B.C. in the Sinai Desert.

> Then the Lord said to Moses, "Assemble for me seventy of the elders of Israel, men you know for true elders and authorities among the people, and bring them to the meeting tent. When they are in place beside you, I will come down and speak with you there. I will also take some of the spirit that is on you and will bestow it on them, that they may share the burden

> of the people with you. You will then not have to bear it by yourself" (Numbers 11:16-17, New American Bible).

Moses did just as God commanded and gathered the elders, who would serve as channels of communication in a flow of information from God to Moses, from Moses to the elders, and from the elders to the rest of the community. Just as in this scenario, opinion leaders act just as the elders – channels of communication from one source to another (Weimann, 1994).

Rogers (1995) stated that with the use of opinion leaders, people able to influence the decisions of others, change agents, people who are encouraging change, can expedite the process of change or the adoption process. Within a social system, opinion leaders are a separate set of individuals from the innovators, who are the individuals coming up with new ideas and practices. Many times innovators are not highly respected and are perceived with suspicion by members of such a system, who ultimately do not trust the innovators sense of judgment about innovations. Opinion leaders work to fill the communication gap between innovators and clients in which change agents are not able to do.

Since opinion leaders are part of the clientele population, they are often highly regarded for their judgment on innovations. According to Rogers (1995), a common error that occurs is that change agents often select people who are too innovative, and therefore, are not true opinion leaders. Thus the need to correctly identify true opinion leaders in respective fields of research to enable change agents to effectively communicate with their clients.

Statement of the Problem

There has been no research conducted to identify opinion leaders among professional improvement (P.I.) groups of Oklahoma agricultural education professionals. To effectively use the change agent strategy for diffusion of innovations in agricultural education, teachers who are regarded as opinion leaders by their peers need to be identified.

Purpose of the Study

The purpose of the study was to determine the opinion leaders among Agricultural Education teachers in the Shawnee P.I. of Oklahoma pertaining to various aspects of agricultural education programs.

Objectives of the Study

The following objectives served as guidelines for the study:

1. Develop a profile of agriculture teachers based on selected demographic characteristics.
2. Determine innovativeness of agricultural education teachers.
3. Describe social participation of agricultural education teachers.
4. Describe cosmopoliteness of agricultural education teachers.
5. Identify opinion leaders among agricultural education teachers.
6. Compare identified opinion leaders to their peers in terms of demographics, innovativeness, social participation and cosmopoliteness.

Scope of the Study

The study consisted of those agricultural education teachers teaching in the Shawnee Professional Improvement group during the 2001-2002 academic school year. Through the use of the Oklahoma agricultural education teacher directory (2002), 21 teachers were identified as teaching in the area during this time frame.

Assumptions

The following assumptions were made regarding this study:

1. The instruments used in this study will elicit accurate responses from all participants.
2. The participants of the study will answer the questions honestly and to the best of their abilities.

Limitations of the Study

The author recognized the following limitations:

1. The identification of opinion leaders in agricultural education is subject to error due to the subjective judgement given by the teacher when identifying whom he or she would have sought for advice and information on a certain area of the program.
2. The identification of opinion leaders was limited to those teachers within one particular Professional Improvement group. The possibility exists that teachers would have sought advice and information from another agriculture teacher outside his or her P.I. group.

3. Teachers were asked to name one teacher when identifying opinion leaders. This answer is subject to the teacher with whom the respondent had the most recent contact.
4. A limitation to determining the innovativeness of a teacher is his or her ability to recall the exact date on which he or she first incorporated a particular innovation into the program.
5. A limitation to determining the cosmopoliteness of a teacher is his or her ability to recall the exact number of meetings attended and programs visited within the past two years.

Definition of Terms

Agricultural Education - organized instruction at the secondary education level about agricultural food and fiber systems (OK *Career*Tech, 2002).

Adoption - A decision to continue full use of an innovation (Rogers, 1995).

Adoption process - The mental process through which an individual passes from first hearing about an innovation to final adoption. Five stages in the adoption process are: awareness, interest, evaluation, trial and adoption (Rogers, 1995).

Cosmopoliteness – The degree to which an individual's orientation is external to a particular social system (Rogers, 1995).

Innovation - An idea perceived as new by the individual (Rogers, 1995).

Innovativeness - The degree to which an individual is earlier in adopting new ideas than other members of the social system (Rogers, 1995).

Opinion leader - A person who is able to influence, informally, other individual's attitudes or overt behavior in a desired way with relative frequency (Weimann, 1994).

Social system - a population of individuals who are functionally differentiated and engaged in collective problem solving (Rogers, 1995).

Professional Improvement (P.I.) group - An agricultural education district subdivision consisting of approximately three counties and an average of 18 teachers; professional groups established by the Oklahoma Agricultural Education Teachers Association to act as support for agricultural education teachers.

CHAPTER II

REVIEW OF LITERATURE

This chapter reviews literature pertaining to the diffusion of innovations, opinion leadership theory, and change in education. Specific areas to be examined include the elements needed for the diffusion of innovations, innovation adopter categories, characteristics of opinion leaders and opinion leader identification methods.

Background and Setting

"Almost every organized group is concerned with educating or influencing somebody" (Lionberger, 1960, p. 1). The diffusion of innovations theory explains how new ideas and practices spread within and between communities (Valente & Davis, 1999). Valente and Davis (1995) stated that the basis for the theory states that social contact, social interaction and interpersonal communication play a vital role in influencing the adoption of new behaviors. Programs designed to use interpersonal communication to promote behavior change are referred to as peer influence, education, or networks. This peer promotion model suggests that within a group some individuals act as role models for others. These role models act as opinion leaders in their communities and can be effective in quick and continuing behavior change (Valente & Davis, 1999).

Diffusion of Innovations Process

According to Rogers (1995), diffusion is a type of social change in which there is an alteration in the structure and purpose of a social system. Lionberger (1961) noted that individuals within a particular social system play different roles in the adoption of new ideas and practices. The process as Rogers (1995) stated has four main elements to the diffusion of innovation process identifiable in every diffusion research study: (1) the innovation, (2) communication channels, (3) time, and (4) the social system.

The Innovation

An innovation as defined by Rogers (1995) is an idea or practice perceived as new by an individual. The actuality of the innovation being new does not matter as much as the perceived newness of the innovation by an individual. It is the perceived newness that controls the individual's reaction to the innovation. "Newness" may be expressed in terms of knowledge, persuasion, or a decision to adopt.

Innovations have a few key characteristics to help explain their different rates of adoption. An innovation's relative advantage is the degree to which it seems to be better than the idea or innovation before it. The compatibility is the degree to which the innovation fits with existing norms, values and needs of potential adopters. The degree to which the innovation is difficult to understand or use refers to the innovation's complexity. If the innovation can be experimented or used on a trial basis, it is called its trialability. The final characteristic is observability. It is the degree to which others can see the results of the innovation (Rogers, 1995).

Rogers (1995) explained that another important aspect of the innovation was the adopter categories in which any given population can be divided. The innovators

comprise 2.5 percent of a population. These individuals readily adopt innovations. The early adopter group in which Rogers (1995) stated that most opinion leaders belong comprise 13.5 percent of the population. Opinion leaders normally belong to the early adopter category. The early majority and late majority groups make up 68 percent of the population with 34 percent for each group. The final category is comprised to those who are the last to adopt. This group is termed as the laggards and make up 16 percent of the population. The categories for a normal distribution form a bell shaped curve, which is shown in Figure 1.

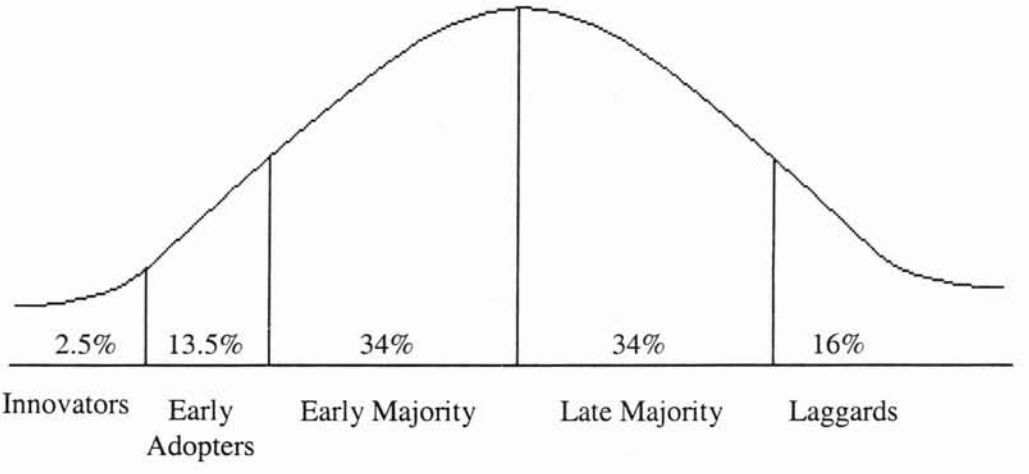


Figure 1. Distribution of adaptor categories within a normal distribution (Williamson, 2000).

Communication Channels

According to Rogers (1995), the way messages travel from one individual to another is a communication channel. Valente (1995) stated that mass media and interpersonal channels are two methods of disseminating information. The mass media is

effective in transferring news and ideas, yet interpersonal channels are more effective in actually persuading an individual to adopt or accept a new idea. Valente (1995) noted that although there are many factors that influence innovation diffusion, researchers agree that interpersonal contacts within a social network are important influences on adoption behavior.

Time

Rogers (1995) noted that the innovation-decision process takes time as an individual proceeds through five stages before the adoption occurs. Figure 2 illustrates the steps of the innovation-decision process.

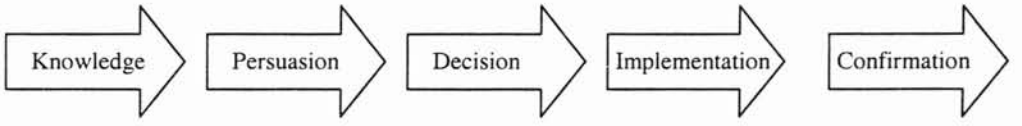


Figure 2. Innovation-decision process.

Rogers (1995) stated that the first stage of the innovation process, knowledge, occurs when an individual learns of a new innovation. The second stage is the persuasion stage where an individual forms an opinion toward the innovation. When an individual takes part in activities that lead to the adoption or rejection of an innovation, the individual is said to be in the decision stage. The fourth stage is implementation in which an individual puts the innovation to use. The final stage is confirmation, and occurs when an individual seeks out reinforcement for a decision. The adopter can decide to reject adoption if confirmation is not gained.

The Social System

The existence of opinion leaders in a social system offers change agents a "handle" whereby they can "prime the pump" from which new ideas flow through an audience via the "trickle-down" process. Briefly, this strategy for change implies that the change agent should locate opinion leaders and concentrate his or her promotional efforts on these individuals, allowing the new idea or innovation being promoted to spread by word of mouth from the opinion leader to the remainder of the change agent's audience (Lionberger and Gwin, 1991).

Lionberger and Gwin (1991) noted that as social systems develop, people enter specific trade or professions and forms social groups in which they can promote. Valente (1995) and Lionberger and Gwin (1982) stated that members of a particular social system or subgroup are more likely to exchange information and ideas concerning the adoption of new products or innovations. Therefore, these members tend to have similar adoption rates. Rogers (1995) noted that it is individual characteristics that influence a person's rate of adoption, but Williams (1997) concluded that the membership of the particular subgroup or interpersonal association does play a key role in an individuals decision to change. Lionberger and Gwin (1982) noted that social groups have common characteristics including people who associate more with each other, know each other better and trust each other, have similar standards, and help each other when assistance is need.

Professional Teacher Associations.

Williams (1997) stated that teaching is like a craft. The craft of teaching is changing. Lave and Wenger (1991) described people, like teachers, who are involved in a

craft to have a "community of practice" where ideas and thoughts can be exchanged. Williams (1997) further correlates these "communities of change" to professional teacher associations. Teacher associations contain various elements that allow members to discuss education and to grow as educators. Encouragement for new teachers and support for the educational process are all part of the purpose for most professional education associations.

The Oklahoma Agricultural Education Teachers Association is a division of the Oklahoma Vocational Association. It serves many roles and provides benefits for Oklahoma's agriculture teachers. All agricultural education teachers in Oklahoma ,435 teachers, are required to be members of OAETA. The state is broken down further into five districts and subdivisions within each district called professional improvement (P.I.) groups. The Agricultural Education Division of the Oklahoma Department of Career and Technology Education has defined the purposes and benefits of membership in OAETA (OK *Career*Tech, 2002):

1. Serves as an effective force in legislative process.
2. Provides leadership in agricultural education.
3. Serves as a united voice for agricultural education.
4. Maximizes effectiveness of OAETA.
5. Identifies and prioritizes needs of members.
6. Positions agricultural education as a leader in workforce development.
7. Showcases agricultural education's positive and dynamic image.
8. Provides professionalism among agricultural education instructors.

9. Provides opportunities for awards and recognition.

10. Provides a death benefit plan.

Opinion Leadership Theory

Opinion leaders are individuals who carry information across social boundaries between groups. They are not necessarily the most innovative nor are they people at the top or edge of things. Rather they are more of a broker between two groups (Burt, 1999).

Burt (1999) stated that opinion leaders make innovations contagious for the people with whom they speak. He also noted that opinion leaders are not the people at the top of any social system but rather those who are looking for new ways to improve. Rogers (1995) added that the most influential opinion leaders are the key targets of change agents. The transfer of information through opinion leaders can be better understood with the two-step flow of communication model (Figure 3).

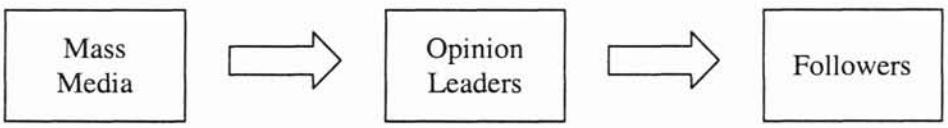


Figure 3. Two-step flow of communication model.

Two-Step Flow of Communication Model

With the two-step flow of communication model, it is easily illustrated how opinion leaders play an important role in information transfer. Valente (1995) noted that in general, members of a population wait for the most influential members of the group to adopt an innovation. Most influential members, opinion leaders, transfer information from the mass media to their followers.

Opinion Leader Characteristics

Opinion leaders can be differentiated from their followers in a number of ways. Rogers (1995) listed seven ways in which an opinion leader can be characterized.

1. Opinion leaders have greater exposure to mass media than their followers.
2. Opinion leaders are more cosmopolite than their followers.
3. Opinion leaders have greater change agent contact than their followers.
4. Opinion leaders have greater social participation than their followers.
5. Opinion leaders have higher socioeconomic status than their followers.
6. Opinion leaders are more innovative than their followers.
7. When a social system's norms favor change, opinion leaders are more innovative, but when the norms do not favor change, opinion leaders are not especially innovative.

Methods of Identification

Using the characteristics stated by Rogers (1995), opinion leaders could be identified using four methods. Of these methods, it has not been determined through previous research which is the most effective is identifying opinion leaders, yet all are about equally valid.

Sociometric method.

Weimann (1994) stated the sociometric method uses a series of questions to determine with whom individuals meet and talk, whose company they enjoy, and with whom they like to have contact. When applied to opinion leadership studies, the method consisted of asking respondents who they sought advice or information from concerning

a specific topic. Those individuals whose names appeared the greatest number of times were identified as the opinion leaders.

Rogers (1995) listed that an advantage of the sociometric method was that it is easy to administer and adaptable to many areas. A disadvantage is that it is not applicable to sample designs.

Self- designating method.

The self-designating technique asks respondents to indicate the tendency for others to regard them as influential. This method is dependent upon whether the respondent can accurately identify and report their self-images. As concluded by Rogers and Cartano (1957), the six-item self-designating opinion leadership scale used in their study of the diffusion of new farm ideas among Ohio farmers is considered reliable, valid, and one-dimensional. The self-designating method is not as reliable as a more systematic analysis, but is does have the advantage of being easy to apply to a large group of potential opinion leaders.

Key-informant's rating method.

Weimann (1994) stated that another method is to ask key-informants who are especially knowledgable about the communication and social ties of the group. One advantage as noted by Rogers (1995) is that the key-informants rating saves time and money when compared to the sociometric method. A disadvantage to the method is each informant must be very knowledgable with his or her particular social system.

Agricultural Education

Agricultural education formerly began in 1917 with the passage of the Smith-Hughes Act (Hamlin, 1956), but before that time, 30 states had established agricultural education courses in the public schools. The Smith-Hughes Act provided funds for vocational education, which included home economics and agricultural education.

Although formal instruction in agriculture began with the Smith-Hughes Act, education about agriculture started years before that time. School age children were being educated on the farm and at home about agricultural practices for many years before this legislation (Hamlin, 1958). Since 1917 many changes have occurred and are still occurring in agricultural education (Phipps & Osborne, 1988). Owens (1987) noted that with change constantly occurring, it is imperative that teachers of agriculture stay abreast of new technology, improved curriculum, and added programs. With the slow adoption process in education it is essential that agriculture teachers obtain information on innovations in a timely and efficient manner so that the adoption process can begin.

Chapter Summary

This chapter provided an overview of literature concerning the diffusion of innovation, the opinion leadership theory, and the change in education.

The diffusion of innovations has been a topic of discussion for nearly 50 years. This strategy of change can be used to increase the adoption of innovations. There are many methods that could be used to improve the rate at which change occurs, but the theory of opinion leadership is one that has been found to be effective.

The opinion leadership theory uses opinion leaders with a social system to transfer knowledge and influence others to adopt innovations through interpersonal communication. There are a few distinct ways in which opinion leaders can be identified, including different methods and characteristics.

Change in education is a slow process, including changes in the for agricultural education profession. Agricultural education has experienced many changes throughout the years and will have many changes to come. It is important that teachers are aware of potential changes and changes that are occurring around them.

CHAPTER III

METHODOLOGY

This chapter describes the methods and procedures used to conduct this study. It contains a description of the research design and population. The instruments used, which include a written survey and Q-sort technique guideline are also described. The process for accomplishing the objectives of the study through administration and statistical analysis of the survey are presented as well.

Institutional Review Board

Prior to conducting research, permission was sought and granted from the Oklahoma State University Office of University Research and the Institutional Review Board (IRB) to conduct this study (Appendix A). In compliance with federal regulations, these two entities conduct a review of all research in which human subjects will be involved to protect the rights and welfare of individuals. This study received proper review and was assigned the application number AG0233 by the Institutional Review Board.

Purpose of the Study

The purpose of the study was to determine who the opinion leaders were among Agricultural Education teachers in the Shawnee P.I. of Oklahoma pertaining to various aspects of agricultural education programs.

Objectives of the Study

The following objectives served as guidelines for the study:

1. Develop a profile of agriculture teachers based on selected demographic characteristics.
2. Determine innovativeness of agricultural education teachers.
3. Describe social participation of agricultural education teachers.
4. Describe cosmopoliteness of agricultural education teachers.
5. Identify opinion leaders among agricultural education teachers.
6. Compare identified opinion leaders to their peers in terms of demographics, innovativeness, social participation, and cosmopoliteness.

Population

To accomplish the purpose of this study, agricultural education teachers belonging to the Shawnee P.I. group during the 2001-2002 academic school year were purposefully selected. A census of the population consisting of 21 agriculture teachers was taken with a 95% response rate.

Research Design

The research design used for this study was a descriptive survey of the population. According to Leedy & Ormrod (1985), descriptive research describes those conditions which actually exist. It also goes beyond the gathering and calculating of data; it uses interpretations of the meaning of the data. Ary, Jacobs and Razavieh (1996) added that descriptive research involves description not manipulation of variables. Since a census of the population was surveyed, inferential statistics were employed.

Instrumentation

The instrument developed by the study conducted by Johnson (1960) was adapted for the current study. Due to the elapsed time since the Johnson study was conducted, it was necessary to update the instrument with current terminology. For example, the term "vocational agriculture" was used throughout the original survey. The name for programs teaching agriculture in secondary schools in Oklahoma was changed from "vocational agriculture" to "agricultural education" in 1988 (NAAE, 1998). Thus the need to update the survey. The written instrument was divided into multiple sections, and below is an explanation of each section.

Sociometric Section

In the identification of teachers from whom respondents would seek advice and information, the categories were expanded and modernized to reflect current programs. The researcher and thesis committee chairperson looked at the various parts of an agricultural education program in order to include general statements for which a teacher may ask for advice or information.

Cosmopoliteness Section

Publications were edited for those that were regional in nature and were in print at the time of this research. To update the publications that teachers might receive, three teachers from outside the population were contacted to see what publications they received. To determine publications not named by the polled teachers, the researcher and thesis committee chairperson added publications not named. The formatting was changed to a table, and a column for teachers to respond if they did not receive the publication was added.

To determine the number of professional education meetings attended, the areas that a teacher could attend meetings were changed to reflect the various levels Oklahoma agriculture teachers could attend.

Sources of Information Section

There were no content changes to Section C. The format of the section was changed to make it more user friendly by stating the question to be answered only once at the beginning of the section instead of prior to each set of answers that could have been chosen.

Innovativeness Section

Innovations selected as part of the study conducted by Johnson (1969) were not relevant to the current study. It was imperative to select innovations that pertained to current agriculture teachers. To accomplish this goal, the Local Program Success Guide (2002), an initiative of the National Council for Agricultural Education, was used for its suggestions of promising practices for agricultural programs. The promising practices

index included ideas in seven areas: instruction, Supervised Agricultural Education (SAE) program, FFA, partnerships, marketing, professional growth, and program planning. Of the nearly 100 innovative practices or ideas listed in the index, the researcher and thesis committee chair selected 20 that pertained to Oklahoma agricultural teachers. Practices from each of the seven areas were chosen.

Social Participation Section

The section that dealt with the social participation of agriculture teachers was changed to make it easier to understand. The section where teachers were to list organizations that they were involved was divided into two sections, community organizations and professional organizations. All other information was identical to the original survey.

Demographics Section

Questions concerning demographics were included in the last section of the survey as suggested by Dillman (1999). Dillman noted that although demographic questions are easy for the respondent to complete, they lose their "connectedness" to the purpose of the study. Therefore, it was decided that the survey should not begin with demographic questions.

Q-sort Technique Guideline

The Q-sort technique guideline was also updated for terminology pertaining to Oklahoma agricultural education. The term "district supervisor" was replaced with "district program specialist." The program specialist was asked to rank the teachers on their individual degree of opinion leadership instead of their degree of opinion leadership

in one specific area of the agricultural education program as the original guideline had instructed.

Data Collection Procedure

Previous Study

Johnson (1969) collected data on all agricultural teachers in South Carolina during 1959-1960 academic school year. The data collection took place at a statewide agriculture teachers' meeting. The researcher took several minutes to describe the nature of the study before administering the survey. Those teachers not attending the meeting were contacted at a later date to complete the instrument.

During the time the agriculture teachers were completing their portion of the survey, the district supervisors were given guidelines for the Q-sort technique and allowed to complete their task without further instruction.

Present Study

A pilot study was conducted to ensure validity and reliability of the instrument. The pilot group consisted of those teachers attending the Northwest District speech contest held in Enid, Oklahoma, on April 23, 2002. Minimal changes were made to the instrument following the pilot study.

After meeting with the thesis advisory committee, it was concluded that to insure the high response rate needed for the study, a personal visit to each teacher in the Shawnee P.I. was imperative. Prior to the actual visitation of teachers, each teacher was contacted to schedule an appointment for the visit. Program visits took place on May 2-3, 2002, and resulted in a 95% response rate.

A letter stating the intent of the research was given to each teacher prior to the administration of the survey (Appendix B). It informed the teachers that each instrument was coded with an individual respondent number to insure the privacy of each person and that participation was voluntary. After reading the letter, the agriculture teacher was administered the survey (Appendix C).

The Q-sort technique was used to determine the key-informant's rank of agriculture teachers according to opinion leadership. As noted by Stephenson (1953), the Q-sort technique allows correlations to be made between persons rather than test scores or other measures. It results in the Q-sort participant responding to a large number of items at the same time, so that the response to one item affects the response to another item.

For this study, the Central District Program Specialist, G.T. Moody, was identified as the key-informant for the Shawnee P.I. due to his knowledge of the teachers. At the time of administration of the survey, he was given written guidelines as to how to complete the survey along with note cards with a teacher's name within the P.I. printed on individual cards. He was asked to follow the guidelines by placing the teachers into three equal groups according to the definition of opinion leadership given and then rank the teachers within each group resulting in a rank from 1 to 21 of all teachers in the Shawnee P.I. according to their degree of opinion leadership. After the cards were placed in order according to opinion leadership by the program specialist, the researcher recorded the number rank for every teacher on the back of each card. The guidelines are included in Appendix C.

Analysis of Data

To analyze data collected from this research study, the Statistical Package for Social Sciences (SPSS) version 10.0 was used. The data were recorded in Microsoft Excel and then converted to the SPSS software for analysis. Data from the instrument were both descriptive and correlative.

Just as in the study by Johnson (1969), innovativeness of teachers was calculated using the formula developed by Christiansen (1965). To determine the innovativeness of teachers, a date at which each innovative practice or idea was determined. The earliest any teacher in the Shawnee P.I. could have adopted any of the teaching practices was 1971. Therefore, it was determined that using the formula developed by Christiansen, an date of 1970 could be used for all innovations that arose prior to 1970. All other dates were determined through historical reading of the topic. The dates determined for all innovations included on the survey are as follows:

1. Biotechnology units...1970
2. Agricultural science fair...1970
3. Special needs students...1970
4. Instructional partnerships...1970
5. E-mail...1988
6. PowerPoint...1987
7. Student SAE cooperatives...1970
8. Electronic record book...1998
9. Selection of FFA chapter officers...1970
10. Community service projects...1970

11. Officer training program/retreat...1970
12. Chapter newsletter...1970
13. Grant writing ...1995
14. Scholarship foundation...1970
15. Advisory council...1970
16. Student recruitment...1970
17. Chapter / program web site...1994
18. Monthly school board report...1970
19. Student evaluations...1970
20. FFA alumni board or support group...1970

The formula used, which was developed by Christiansen (1965) took into account the date that a particular innovation was adopted, the number of innovations actually adopted by an individual teacher, the maximum number of years any teacher had taught agricultural education, and the number of years each teacher had been teaching agricultural education. If a teacher had not adopted a particular innovation, a date of 2002 was given with no credit of innovation adoption. If the teacher indicated that a particular innovation had been adopted but did not give a date, a date of 2002 was given with credit of innovation adoption.

The date each innovation could have been adopted was subtracted by either the date recorded by the teacher or the date given by the researcher for each innovation. The calculations for all innovations were added together and divided by the actual number of innovations adopted by each individual. This number for each teacher was then

multiplied by an equalization factor. An equalization factor was used so that younger teachers would not be penalized for teaching a fewer number of years. The equalization factor divided 29, the maximum number of years any one teacher had taught, by the number of years an individual teacher had taught.

$$IS = \frac{Tla + Tlp}{Na} \times \frac{29}{Ye}$$

IS = Innovativeness Score

Tla = Time Lag (year recorded by teacher – 1st year for innovation adoption)

Tlp = Time Lag Penalty (2002 – 1st year for innovation adoption)

Na = Number of innovation adopted

29 = Maximum number of years taught by any one teacher

Ye = Years taught by the individual teacher

For example, a teacher who had been teaching for five years had adopted two innovations both in 1999. The first years the innovations could have been adopted were in 1970 and 1980. There were 3 other innovations the teacher could have adopted but had not. The earliest date those innovations could have been adopted was 1970, 1985 and 1999. The maximum number of years any teacher in the surveyed group had taught was 29 years.

Step 1: Calculate the time lag

1999 – 1970 = 29

1999 – 1980 = 19

29 years + 19 years = 48

Step 2: Calculate the time lag penalty

$2002 - 1970 = 32$

$2002 - 1985 = 17$

$2002 - 1999 = 3$

$32 + 17 + 3 = 52$

Step 3: Add together time lag and time lag penalty

$32 + 52 = 84$

Step 4: Divide by number of innovations adopted

$$\frac{84}{2} = 42$$

Step 5: Multiply by equalization factor

$$42 \times \frac{29}{5} = 243.6 = IS$$

Social Participation

Social participation was determined using the Chapin Scale of Social Participation (Chapin, 1937). The scale was used to describe the social participation of agriculture teachers and compare opinion leaders with non-opinion leaders. The scale was not used to compare the agriculture teachers with existing norms, other professions or scales.

Chapter Summary

A study to identify opinion leaders among Oklahoma agricultural education teachers was conducted in the Spring 2002 semester. A census of agriculture teachers within the Shawnee P.I. for the 2001-2002 academic school year served as the population for the study. Data were collected through a written survey and Q-sort technique

conducted by the interviewer. The instruments used were developed by Johnson (1969). A total of 21 teachers were identified. Of the 21 teachers, 20 surveys were completed giving a 95% response rate. The instruments completed by the teachers were coded with a number representing each teacher prior to administration. Data were analyzed using the Statistical Package for Social Sciences (SPSS). Findings are presented and explained in Chapter IV.

CHAPTER IV

FINDINGS

This chapter presents the findings as they relate to each of the objectives of this study. The purpose, objectives, and population are described as the first three sections of the chapter. The findings are organized by objective.

Purpose of the Study

The purpose of the study was to determine the opinion leaders among Agricultural Education teachers in the Shawnee P.I. of Oklahoma pertaining to various aspects of agricultural education programs.

Objectives of the Study

The following objectives served as guidelines for the study:

1. Develop a profile of agriculture teachers based on selected demographic characteristics.
2. Determine innovativeness of agricultural education teachers.
3. Describe social participation of agricultural education teachers.
4. Describe cosmopoliteness of agricultural education teachers.
5. Identify opinion leaders among agricultural education teachers.
6. Compare identified opinion leaders to their peers in terms of demographics, innovativeness, social participation and cosmopoliteness.

Population

To accomplish the purpose of this study, agricultural education teachers belonging to the Shawnee P.I. group during the 2001-2002 academic school year were purposefully selected. A census of the population consisting of 21 agriculture teachers was taken with a 95% response rate.

Findings

Findings for this study are presented by objective. Objective 5 is presented first among the 6 objectives to identify opinion leaders who will be used as a comparison to non-opinion leaders. Findings related to objective 6 are included within objectives 1, 2, 3 and 4 to compare opinion leaders with non-opinion leaders.

Identification of Opinion Leaders

The fifth objective was to determine the opinion leaders among the teachers in the Shawnee P.I. group. Three methods of determining opinion leaders were used: sociometric method, self-designating method, and key-informant's rating method.

Sociometric method.

According to Weimann (1994), the sociometric method is used to determine which individuals are looked to for advice, information or as an expert in a particular area. This process was done through the identification of agriculture teachers with whom other agriculture teachers would ask for information on topics pertaining to the agricultural program.

Figure 4 shows the frequency of times each individual teacher was named as a source of advice or information in any one of the eleven areas identified. Teacher number 7 was named most frequently with teachers 20 and 6 having 20 and 17 mentions respectively. All other teachers were mentioned less than fifteen times with teachers 11 and 21 not being mentioned at all.

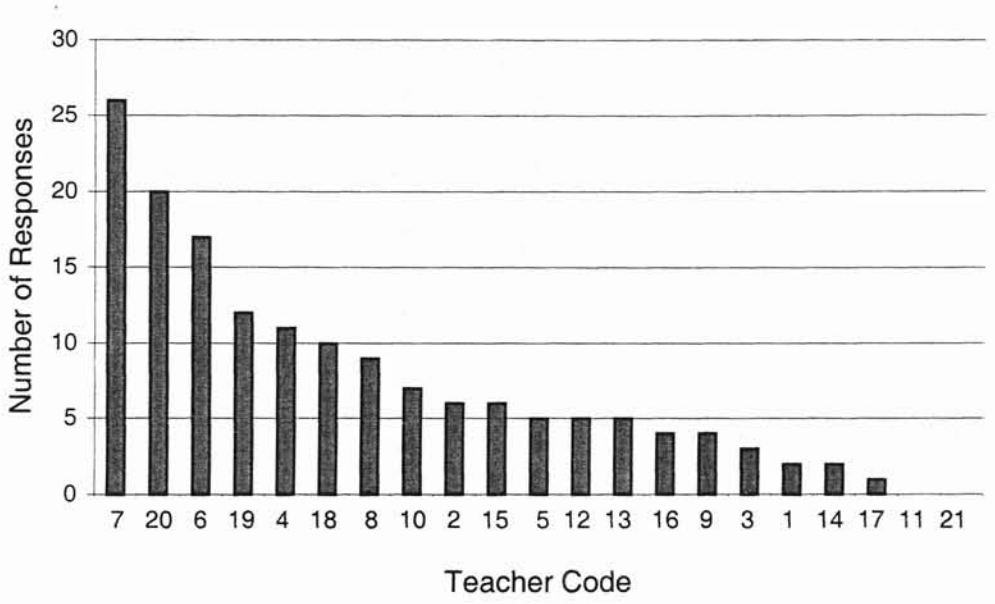


Figure 4. Frequency of responses of teachers.

To correlate the three methods, ranks were given to each teacher according to the frequency each was named by another teacher as a source of advice and information. Table 1 shows the ranks of each teacher along with the number of times each was named.

Table 1

Sociometric Method Ranks and Frequency Numbers

Rank	Teacher Code	Frequency	Rank	Teacher Code	Frequency
1	7	26	12	5	5
2	20	20	12	12	5
3	6	17	12	13	5
4	19	12	15	16	4
5	4	11	15	9	4
6	18	10	16	3	3
7	8	9	18	1	2
8	10	7	18	14	2
10	2	6	19	17	1
10	15	6	21	11	0
			21	21	0

There were two teachers whose names appeared 20 or more times on the sociogram (teachers coded 7 and 20). Teacher number seven was given the first rank since he/she had the most responses. The third most frequent name was teacher number six with 17 mentions. Larke and Norris (1988) used a natural break to identify opinion leaders using the sociometric method. There was a difference of five between ranks 3 and 4 showing a natural break for opinion leader identification for this study. Teachers numbered 2 and 15 were named six times giving them both a rank of ten. With a

frequency of five, three teachers (5, 12, and 13) were ranked number 12. All other teachers were named less than five times according to the sociometric measure.

Self-designating method.

A technique used by Rogers in 1957 (1995) and adapted by Johnson (1969) was used to determine opinion leaders using the self-designating method. This method uses a series of six questions to determine if individuals view themselves as opinion leaders.

With a score of 5, teacher coded as number 4 had the highest degree of self-designating opinion leadership. Teachers numbers 5, 6 and 15 had the next highest degree of opinion leadership and were given an average rank of three. A rank of six was assigned to three teachers, 2, 9, and 17, with a score of 7. The largest group of teachers had a sum score of eight. The next largest group was comprised of four teachers who each had a score of nine.

Table 2 shows how teachers see themselves as opinion leaders. The lowest score shows the highest degree of self-designating opinion leadership. Teachers were ranked according to their score with the lowest score receiving a rank of one.

Table 2

Self-Designating Method Ranks and Scores

Rank	Teacher Code	Score	Rank	Teacher Code	Score
1	4	5	11	16	8
3	5	6	11	18	8
3	6	6	11	20	8
3	15	6	16	8	9
6	2	7	16	10	9
6	9	7	16	19	9
6	17	7	16	21	9
11	1	8	19	12	10
11	7	8	19	14	10
11	13	8	20	11	11

Key-informant's rank method.

The key-informant rank method uses an individual or group of individuals to rank a group according to each member's degree of opinion leadership. The district program specialist's rank is shown in Table 3. The opinion leaders identified were within the top half of the population.

Table 3

Key-Informant Ranks According to Respondent Number

Rank	Respondent Number	Rank	Respondent Number
1	20*	11	5
2	2	12	15
3	8	13	12
4	7*	14	9
5	19	15	18
6	10	16	21
7	1	17	14
8	13	18	3
9	4	19	17
10	6*	20	11
		21	16

* Denotes identified opinion leaders.

Method correlations

To determine which of the three methods to use in determining the opinion leaders a correlation was needed. First, a rank of teachers for each method was determined. The ranks for each method were then correlated to each other. Teacher number 3 was not ranked on self-designating method because a survey response was not obtained. The sociometric and key-informant methods did not rely on a response from

teacher number 3 to designate as an opinion leader for those methods. Correlations are shown in Table 4.

Table 4

Correlations Between Methods for Determining Opinion Leaders

	Sociometric	Self-Designating	Key-Informant
Sociometric	-----	.286[b]	.717[a]
Self-Designating	.286	-----	.130[c]
Key Informant	.717[a]	.130[c]	-----

[a] Strong-moderate correlation [b] Weak-weak correlation [c] Little or no correlation

Martin (2002) noted various strengths of correlations. There was a weak-weak correlation between the self-designating and the sociometric methods with a correlation of .286. The self-designating method had little to no correlation with the key-informant method with a correlation of .130. There was a high correlation of .717 between the sociometric and key-informant methods.

Since there was shown to be a strong-moderate correlation between the sociometric and key-informant rating method, it was decided to use the sociometric method to identify opinion leaders due to its specific technique for determining opinion leaders.

In a study by Larke and Norris (1988), opinion leaders were identified using the sociometric technique. A natural break occurred between the teachers who were named

the fifth and sixth most often. The natural break identified the top five teachers as the opinion leaders for their study.

It was decided to look for a natural break in the frequencies given by the sociometric technique. A natural break occurred between the third and fourth ranked teachers with frequencies of 17 and 12 respectively. This was the largest break between any two teachers. The opinion leaders were identified as respondents 6, 7 and 20.

Demographic Characteristics of Teachers

There are 19 males and 1 female within the Shawnee P.I. making 95 percent of the teachers in the P.I. male. All three opinion leaders are male.

The average age of the teachers was approximately 40 years. When the group was divided into opinion leader and non-opinion leader categories, opinion leaders were approximately seven years older with a mean age 45.7 compared to the mean age of non-opinion leaders of 38.8.

The teachers in the group had been teaching an average of 13.6 years. The opinion leaders had approximately nine more years of teaching experience compared to non-opinion leaders. On average, opinion leaders had been teaching approximately 21 years, and non-opinion leaders had been teaching 12 years.

In terms of the number of years teaching within the Shawnee P.I., teachers had been teaching for an average of 11 years. The opinion leaders have been within the P.I. an average of about three years longer than non-opinion leaders. The average number of years opinion leaders had been teaching within the P.I. was 13.8 years while non-opinion leaders had been teaching an average of 10.5 years.

The average number of schools teachers had been employed was 1.8 schools. The data showed no notable difference in the number of schools of opinion leaders and non-opinion leaders had taught, with averages of 1.7 and 1.8 schools respectively.

The teachers had been teaching at their present location for approximately eight years. Opinion leaders had been teaching at their present location an average of approximately four years longer than non-opinion leaders, who had been teaching at their current location for seven years.

In terms of the number of college credit hours completed since beginning their careers agricultural education, the respondents had completed an average of 15.5 hours. The opinion leader group had completed an average of 20 hours, while non-opinion leaders had completed approximately 15 hours.

When looking at the degrees earned, a scale was used to determine the highest degree achieved: 1 = Bachelor's Degree (B.S.), 2 = Bachelor's Degree plus hours toward a Master's Degree (B.S.+), 3 = Master's Degree (M.S.), 4 = Master's Degree plus hours toward a Ph.D. (M.S.+). Most of the teachers had completed a Bachelor's plus hours towards a Master's Degree with a mean of 2.1. On average opinion leaders had a mean score of 2.7 compared to that of non-opinion leaders who had a mean score of 1.9.

The average score for the population on the amount of their own money they spent on professional development during the past two years was 5.4. Opinion leaders had a lower score of 4.0 when compared to the score for non-opinion leaders, of 5.7. The scale used to determine the amount of money spent is as follows: 1 = $0-100, 2 = $101-200, 3 = $201-300, 4 = $301-400, 5 = $401=500, 6 = $501-600, 7 = $601-700, 8 = $701-800, 9 = $801-900, 10 = $901-1000, 11 = above $1000.

The means for each demographic characteristic for the population as well as the means for the determined opinion leader and non-opinion leader groups are depicted in Table 5.

Table 5

Demographic Characteristics of Agriculture Teachers

Characteristics	Population (N=20)	Opinion Leader (N=3)	Non-Opinion Leader (N=19)
Gender	19 males	3 males	18 males
Age	39.8	45.7	38.8
Year Began Teaching Agricultural Education	1988	1981	1989
Years Teaching Agricultural Education	13.6	20.7	12.3
Number of Years Teaching in Same P.I.	11.0	13.8	10.5
Number of schools in which they have taught agricultural education	1.8	1.7	1.8
Number of years teaching at present location	7.6	10.5	7.1
College credit hours completed since beginning teaching agricultural education	15.5	20	14.6
Amount of schooling completed [a]	2.1	2.7	1.9
Amount of money invested in professional growth [b]	5.4	4.0	5.7

[a] 1 = B.S. 2 = B.S.+ 3 = M.S. 4 = M.S.+

[b] 1 = $0-100 2 = $101-200 3 = $201-300 4 = $301-400
5 = $401=500 6 = $501-600 7 = $601-700 8 = $701-800
9 = $801-900 10 = $901-1000 11 = above $1000

Innovativeness of Teachers

Objective two was to determine the innovativeness of agriculture teachers. The scale developed by Christiansen (1965) was used to calculate the innovativeness score for each teacher. The score for each teacher is depicted according to ranks, with the most innovative teacher receiving the first rank. A score of zero would indicate that an individual had adopted all innovations the first year that he or she could have possibly adopted. Thus, the lower the score, the more innovative the person. Ranks and scores for each respondent can be found on Table 6.

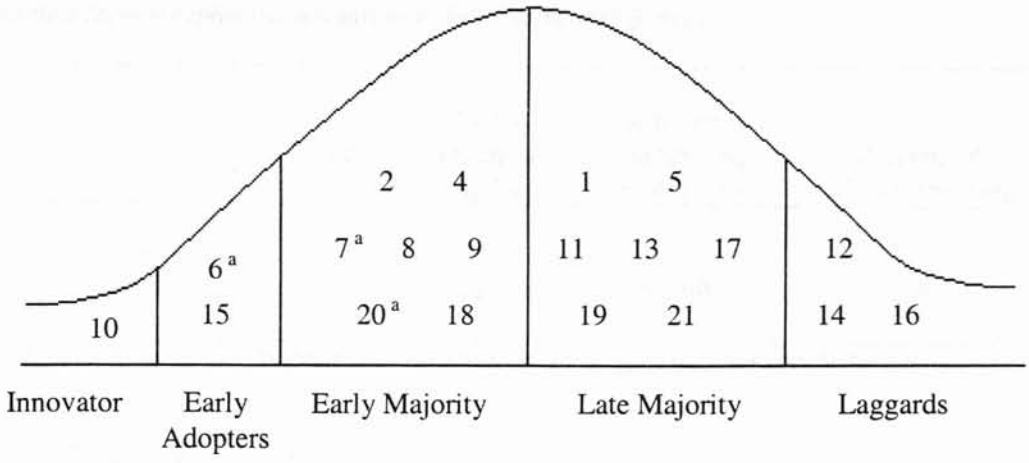
Table 6

Innovativeness Scores and Rankings

Rank	Teacher Code	Score	Rank	Teacher Code	Score
1	10	21.69	11	11	133.30
2	6[a]	38.67	12	21	175.29
3	15	41.69	13	5	209.21
4	8	52.99	14	17	233.71
5	4	55.72	15	1	274.94
6	20[a]	74.11	16	19	336.80
7	18	81.61	17	13	421.31
8	9	95.29	18	16	634.38
9	7[a]	109.56	19	12	638.00
10	2	129.96	20	14	738.81

[a] Denotes designated opinion leader.

According to Rogers (1995), the adopter categories within a population form a bell shaped curve. Innovators comprise 2.5% of any population. For this population teacher number ten was the innovator with the lowest innovation score of 21.69. The next adopter group, early adopters, make up 13.5% of the population. Teachers ranked second and third, who were teachers numbered 6 and 15 were categorized as the early adopters. The early majority and late majority adopter groups comprise a total of 68% of the population with 34% for each category. The early majority category had scores ranging 52.99 to 129.96 and included those teachers ranked four through ten and included teachers coded 2, 4, 7, 8, 9, 20 and 18. The late majority group included teachers ranked 11 through 17, with an innovativeness score range from 133.3 to 421.3. These were teachers numbered 1, 5, 11, 13, 17, 19 and 21. Teachers ranked 18 through 20 are termed as the laggards for they have the highest innovation scores with a range of 634.4 to 738.8. The laggards for the group were teachers numbered 12, 14 and 16. Figure 4 provides an illustration of the innovativeness of the agriculture teachers.



* Denotes designated opinion leaders.

Figure 5. Adopter categorization of opinion leaders and non-opinion leaders according to teacher code

To further describe the characteristics of agriculture teachers in terms of innovativeness, the innovativeness ranks were correlated to selected demographics: age, years teaching agricultural education, amount of schooling completed and amount of money invested in professional growth. Martin (2002) stated that varying degrees of correlations describe correlations more accurately. Demographic characteristics of age and years teaching agriculture education showed to have a strong negative correlation. In other words, as age of the teachers increased the innovativeness score decreased. The correlation between the amount of schooling completed and innovativeness was found to have a low negative correlation to innovativeness. The amount of money invested in professional growth was found to have a strong-moderate correlation to innovativeness. Correlations are listed on Table 7.

Table 7

Selected Demographics Correlation to Innovativeness Scores

	Age	Years Teaching Ag Ed	Amount of Schooling Completed	Amount of Money Invested
Innovativeness Scores	-.699 [b]	-.911 [a]	-.369 [c]	.399 [c]

[a] Strong correlation [b] Strong-moderate correlation [c] Strong-weak correlation

Social Participation of Teachers

The third objective was to describe the social participation of agriculture teachers. Using the Chapin Scale of Social Participation (1937), social participation was determined. One point was given for each organization membership by the individual teacher. Two points were given for merely attending meetings for each organization. Three points were given for each organization that a financial contribution was given. Four points were given for each committee membership, and five points were given for each office held. The points for each category as well as the total points for all teachers were averaged. The population was involved in an average of 2.3 organizations. With a score of 2.35, non-opinion leaders were involved in an average of .35 more organizations than opinion leaders.

The population had a mean attendance score of 4.10 with opinion leaders averaging slightly below with a score of 4.10 and non-opinion leaders scoring slightly above with a mean score of 4.12.

With a mean score of 3.40, the population average was higher than that for opinion leaders with an average of 3.00 but slightly less than non-opinion leaders with an

average of 3.47. Opinion leaders did have a higher mean score for committee membership than the non-opinion leaders. The population mean score was 3.40, and the opinion leader and non-opinion leader averages were 6.67 and 5.18, respectively. The population and non-opinion leader groups received an average of 3.24 points for offices held leaving opinion leaders with no points earned.

After total points were summed, the average score earned for the population was 17.95. Opinion leaders had 15.67 points, and non-opinion leaders had earned nearly three points more than opinion leaders with a total of 18.35 points. These data are summarized in Table 8.

Table 8

Social Participation of Agriculture Teachers

Social Characteristics[a]	Population (N=20)	Opinion Leader (N=3)	Non-Opinion Leader (N=19)
Organizations	2.30	2.00	2.35
Attendance	4.10	4.00	4.12
Contribution	3.40	3.00	3.47
Committee Membership	5.40	6.67	5.18
Offices Held	3.24	.00	3.24
Total Points	17.95	15.67	18.35

[a] 1 point given for each organization; 2 points for attendance; 3 points for contribution; 4 points for each committee membership; 5 points for each office held.

To further describe the characteristics of agriculture teachers in terms of social participation, the total points earned for each teacher were correlated to selected

demographics: age, years teaching agricultural education, amount of schooling completed and amount of money invested in professional growth. Demographic characteristics of age, years teaching agriculture education and amount of money invested were found to have little or a weak correlation to social participation, while the amount of schooling completed was found to have a strong weak correlation to participation. Correlations can be found on Table 9.

Table 9

Selected Demographics Correlation to Social Participation

	Age	Years Teaching Ag Ed	Amount of Schooling Completed	Amount of Money Invested
Social Participation Score	-.138 [a]	-.345 [c]	-.195 [a]	.275 [b]

[a] Little or no correlation [b] Weak-weak correlation [c] Strong-weak correlation

Cosmopoliteness of Teachers

Rogers (1995) stated that the cosmopoliteness of individuals could be determined by knowing an individual's exposure to mass media, contact with others, and the types of sources of information sought.

Mass Media Exposure

Publications listed within the survey were grouped into education, research, special feature, livestock show, and farming categories. Scores were calculated by giving a score of 1 if the teacher did not receive the publication, a score of 2 if the teacher

received but did not read the publication, a score of 3 if they seldom read the publication, and a score of 4 if they read the publication regularly.

The population had a mean of approximately 2.00 for education and research type publications. Opinion leaders were slightly lower than non-opinion leaders with respect to educational magazines with a score of 2.00 compared to the 2.16 score of non-opinion leaders. Opinion leaders were higher than non-opinion leaders for research publications with a score of 2.45 compared to non-opinion leaders' score of 1.94.

The population had a score of approximately 3.00 for special feature, livestock show, and farming publications. Opinion leaders had a higher mean for the special feature and livestock publications with scores of 3.25 and 3.40, respectively, compared to that of non-opinion leaders. Non-opinion leaders had a mean of 2.90 for both publications. Opinion leaders had a mean approximately one point higher than non-opinion leaders in respect to farming publications. Opinion leaders had a mean score of approximately 3.30, and non-opinion leaders had a mean score of 2.20. Table 10 shows the types of publications most often read by agriculture teachers.

Table 10

Publications Read by Agriculture Teachers

Publication[a]	Population (N=20)	Opinion Leaders (N=3)	Non-Opinion Leaders (N=19)
Education	2.20	2.00	2.16
Research	2.02	2.45	1.94
Special Feature	2.95	3.25	2.90
Livestock Show	2.98	3.40	2.90
Farming	2.78	3.29	2.20

[a] 1 = Does Not Receive; 2 = Receive but Do Not Read; 3 = Seldom Read; 4 = Read Regularly

Personal Contact

To determine the contact that agriculture teachers had with others, teachers were asked to record the number of meetings attended at various levels as well as the departments of agriculture and other subject areas that he or she visited within the past year.

The population of agricultural teachers attended approximately seven P.I. meetings with opinion leaders attending about 10 meetings. At the district level, opinion leaders had attended approximately two more meetings than non-opinion leaders whose mean was 2.80. The population had attended a mean of 3.10 district meetings. The population had attended a mean of 2.65 statewide meetings. Non-opinion leaders had attended an average of 2.50, fewer meetings than opinion leaders who had attended a mean of 3.3 statewide meetings. There was little variation in the number of regional meetings opinion leaders and non-opinion leaders had attended. The population attended

an average of .25 regional meetings. There was one non-opinion leader who had attended one national meeting. All other teachers had not attended any meetings at the national level. Table 11 shows the means for the data collected.

Table 11

Agricultural Education Teachers Personal Contact

Personal Contact Method	Population (N=20)	Opinion Leaders (N=3)	Non-Opinion Leaders (N=17)
Professional Educational Meetings Attended			
P.I.	7.30	10.33	6.76
District	3.10	4.67	2.82
State	2.65	3.33	2.53
Regional	.25	.33	.24
National	.001	.00	.12
Agricultural Education Departments Visited			
Attend a Called Meeting	4.55	4.00	4.65
On Own Initiative	2.50	1.33	2.71
Other Departments of Instruction Visited			
Attend a Called Meeting	1.25	.67	1.53
On Own Initiative	1.40	.67	1.53

Sources of Information

Table 12 shows the information sources for agriculture teachers. A rank of one was given for impersonal sources sought and a rank of two was given for personal sources. A mean for the population was 1.40 with the opinion leaders having a slightly lower mean than non-opinion leaders with averages of .67 and 1.76 respectively. For sources outside agricultural education a rank of one was assigned and sources within agricultural education received a rank of two. The population as well as the opinion leader and non-opinion leaders groups had a mean of 2.00. When asked if teachers use sources far a field, which was given a score of one, or close at hand which was given a score of two, the population had a mean score of 1.90. The non-opinion leaders had a mean score of 1.94, which is slightly higher than opinion leaders who had a score of 1.67. In terms of sources, which require a cash outlay, with a rank of one or sources, which do not require a cash outlay with a score of two, the population had a mean of 1.70. The non-opinion leaders had a mean slightly lower than opinion leaders with means of 1.65 and 2.00 respectively. Those sources which require a lot of personal time were given a rank of one and sources that do not require a lot of personal time were given a rank of two. The population had a mean of 1.40 with opinion leaders averaging a score of 1.33 and non-opinion leaders averaging 1.41.

Table 12

Sources of Information Sought by Agriculture Teachers

Type of Source	Population (N=20)	Opinion Leaders (N=3)	Non-Opinion Leaders (N=17)
Impersonal Sources (1) Personal Sources (2)	1.40	.67	1.76
Outside Ag Education (1) Within Ag Education (2)	2.00	2.00	2.00
Far A Field (1) Close At Hand (2)	1.90	1.67	1.94
Require Cash Outlay (1) Do Not Require Cash Outlay (2)	1.70	2.00	1.65
Require A Lot of Personal Time (1) Do Not Require A Lot of Personal Time (2)	1.40	1.33	1.41

Note: 1 = Cosmopolite Sources 2 = Localite Sources

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this chapter is to present a review and summary of this study. Summary, conclusions and recommendations were based on the analysis and interpretation of data presented in Chapter IV.

Purpose of the Study

The purpose of the study was to determine the opinion leaders among Agricultural Education teachers in the Shawnee P.I. of Oklahoma pertaining to various aspects of agricultural education programs.

Objectives of the Study

The following objectives served as guidelines for the study:

1. Develop a profile of agriculture teachers based on selected demographic characteristics.
2. Determine innovativeness of agricultural education teachers.
3. Describe social participation of agricultural education teachers.
4. Describe cosmopoliteness of agricultural education teachers.
5. Identify opinion leaders among agricultural education teachers.
6. Compare identified opinion leaders to their peers in terms of demographics, innovativeness, social participation, and cosmopoliteness.

Scope of the Study

The study consisted of those agricultural education teachers teaching in the Shawnee Professional Improvement (P.I.) group during the 2001-2002 academic school year.

Summary of Methods and Procedures

Data were collected through a written survey and Q-sort technique conducted by the researcher. The instruments used were developed by Johnson (1969). Through the use of the 2002 Oklahoma Agricultural Education Teacher Directory, 21 teachers were identified as teaching in the area during this time frame. Of the 21 teachers data was acquired from 20 respondents resulting in a 95% response rate. The instruments completed by the teachers were coded with a number representing each teacher prior to administration. Data were analyzed using the Statistical Package for Social Sciences (SPSS) for Windows©.

Major Findings of the Study

Identification of Opinion Leaders

The fifth objective was to identify the opinion leaders among agricultural education teachers. Table 13 summarizes the data from the three techniques used. The top four for each technique are listed.

Table 13

Summarization of Opinion Leadership Identification Techniques

	Teacher Code
Sociometric Technique	7* 20* 6*
Self-Designating Technique	4 5 6 15
Key-Informant's Rank Technique	20 2 8

* Denotes designated opinion leaders.

Demographic Profile of Agriculture Teachers

Objective one was to develop a profile of agriculture teachers in the P.I. Group based on selected demographic characteristics. The selected variables included age, year he or she began teaching agricultural education, years teaching agricultural education, number of years teaching in the P.I. Group, number of schools that he or she had taught agricultural education, number of years teaching at the present location, college credit hours completed since he or she began teaching agricultural education, amount of schooling completed, and amount of money invested in professional growth. Profiles of the population as well as opinion leaders and non-opinion leaders are summarized in Table 14.

Table 14

Demographic Profile of Agriculture Teachers

	Population (N=20)	Opinion Leader (N=3)	Non-Opinion Leader (N=19)
Gender	95% male	100% male	94.5% male
Age	40 years	46 years	40 years
Year Began Teaching Agricultural Education	1988	1981	1989
Years Teaching Agricultural Education	14 years	21 years	12 years
Number of Years Teaching in Same P.I.	11 years	14 years	11 years
Number of schools in which they have taught agricultural education	2 schools	2 schools	2 schools
Number of years teaching at present location	8 years	11 years	7 years
College credit hours completed since beginning teaching agricultural education	16 years	20 years	15 years
Amount of schooling completed	B.S.+	M.S.	B.S.+
Amount of money invested in professional growth	$401-500	$301-400	$501-600

Innovativeness of Agriculture Teachers

The second objective was to determine the innovativeness of agricultural education teachers. Data were grouped by the opinion leader and non-opinion leader

groups and those demographics which were in highly correlated to innovativeness scores: age and number of years teaching agricultural education. One opinion leader was a member of the early adopter group for innovations while the other two identified opinion leaders were members of the early majority. These data are displayed in Table 15.

Table 15

Innovativeness of Agriculture Teachers

	Innovativeness Score	Age	Number of Years Teaching Ag Ed
Opinion Leaders (N=3)	222.34	46	21
Non-Opinion Leaders (N=17)	251.45	40	12

Social Participation of Agriculture Teachers

Objective three was to describe the social participation of agricultural education teachers. The findings related to this objective include:

1. Agricultural education teachers are involved in two organizations in which they attended regular meetings, provided a financial contribution, were members of at least one committee, and few held offices.
2. Compared to non-opinion leaders, opinion leaders were members of fewer organizations in which they attended meetings, made a financial contribution, and held an office.

3. Opinion leaders were members of more committees compared to non-opinion leaders.
4. There were no correlations between social participation and the selected demographics of age, years teaching agricultural education, amount of schooling completed and amount of money invested in professional growth.

Cosmopoliteness of Agriculture Teachers

The fourth objective was to describe the cosmopoliteness of agriculture teachers. Findings related to the data are summarized below:

1. Agriculture teachers in the Shawnee P.I. seldom read the publications they received.
2. Opinion leaders read the publications received more often than non-opinion leaders.
3. Opinion leaders attended more professional education meetings compared to non-opinion leaders.
4. Non-opinion leaders visited more agricultural education departments as well as other departments of instruction than opinion leaders.
5. Agricultural education teachers in the Shawnee P.I. prefer sources of information that are impersonal, within agricultural education, close at hand, that do not require a cash outlay, but do require a lot of personal time.
6. Opinion leaders tend to use sources of information that are more impersonal compared to non-opinion leaders.

Conclusions

Based on the findings of this study, the following conclusions were made:

1. The typical agriculture teacher in the Shawnee P.I. is: male; middle aged; has taught for many years in the same P.I. and at the same school; has completed work toward a Master's Degree; and spends personal money for professional growth.
2. Compared to their followers, opinion leaders in this P.I. are older, have taught longer and have earned a more advanced academic degree.
3. Opinion leaders in the Shawnee P.I. are more innovative than their followers. This conclusion agrees with Rogers (1995) that opinion leaders within a group tend to be more innovative than non-opinion leaders.
4. The most innovative teacher is not an opinion leader. This conclusion, too, agrees with Rogers (1995) contention that innovators are seen to be untrustworthy about their opinions on innovations and distant from the rest of the population.
5. Opinion leaders in the Shawnee P.I. are very localite. They are not as involved in their community or professional organizations as their followers.

Recommendations

1. District program specialists could be seen as change agents for Oklahoma agricultural education; therefore, the district program specialists should use the identified opinion leaders to help in the adoption of change in agricultural education. This recommendation concurs with that of Larke and Norris (1988)

where they suggested that opinion leaders be used as a link between state staff and agriculture teachers in Texas.

2. Because of the esteem in which opinion leaders are held by their followers, opinion leaders in this P.I. Group should be appointed as chairs for various committees that are focused on changes in areas such as curriculum, Supervised Agricultural Experience (SAE) programs, the FFA organization and livestock show regulations.
3. Opinion leaders should be used as mentors for new teachers. This recommendation supports a recommendation by Peiter (2002) that agricultural education teachers should serve as mentor teachers for the new agricultural education teachers.
4. Sociometric and key-informant's ranking methods should be used when identifying opinion leaders among agricultural educators.
5. Teachers identified as opinion leaders should undergo training to understand their role as opinion leaders and as leaders of change

Recommendations for Research

1. Studies should be conducted to identify opinion leaders in other groupings of agricultural education instructors such as other P.I. groups as well as district and state groups.
2. A study should be conducted to determine the effectiveness of the opinion leaders in influencing other agriculture teachers to adopt new innovations.

3. A study should be conducted to compare the innovativeness, cosmopoliteness, and social participation of agricultural education teachers to teachers of other subjects areas.

Discussion

There are several discoveries and questions regarding opinion leadership theory and agricultural education teachers as a result of this study. The first discovery was the continuity between Rogers (1995) theory and the findings of this research. The identified opinion leaders, for the most part, had those demographic characteristics as listed by Rogers (1995). Although the demographic characteristics are congruent with Rogers, what personal characteristics contribute to making a individual an opinion leader? Are there characteristics other than demographics that contribute to identifying a teacher as an opinion leader?

Although the demographic characteristics coincided with Rogers theory for opinion leaders, the social participation theory did not. Opinion leaders tend to be more localite and involved in their communities compared to non-opinion leaders, yet non-opinion leaders in this study were found to be members of more organizations. The possibility exists that identified opinion leaders may have been highly involved in community activities, but not formal members of organizations. Is social participation, in terms of the number of organization memberships, a factor in identifying opinion leaders among agricultural education teachers?

In terms of the cosmopoliteness of agriculture teachers, non-opinion leaders visited more departments of agricultural education than opinion leaders. According to Rogers (1995), opinion leaders tend to have much personal contact with their followers.

If opinion leaders are visiting fewer departments, when and where do these opinion leaders interact and exchange ideas with other teachers? Are there activities in which these teachers attend that allow them to have greater contact with fellow agriculture teachers in the P.I. Group?

These discoveries and questions are a guide to understanding opinion leadership in agricultural education. Although there is much to be learned about opinion leadership and the diffusion of innovations, the findings in this study provide direction in understanding how these theories apply to agricultural education.

BIBLIOGRAPHY

Anderson, G. E. (1966). *Estimated time for accepting educational ideas: 30 years.* Nation's Schools, 127.

Ary, D., Jacobs, L. C., & Razavieh, A. (1996). *Introduction to research in education.* Fort Worth, TX: Hartcourt Brace College Publishers.

Burt, R. S. (1999). The social capital of opinion leaders. *The Annals of the American Academy of Political and Social Science*, 566, 37-54.

Chapin, F. S. (1937). Social participation scale. Minneapolis: University of Minneapolis.

Christiansen, J. D. (1965). The adoption of education innovations among teachers of vocational agriculture (Doctoral dissertation, The Ohio State University, 1965).

Dillman, D. A. (2000*). Mail and Internet surveys: The tailored design method. 2nd ed.* New York: J. Wiley.

Hamlin, S. (1956). *History of Agricultural Education.* San Fransisco: Jossey Bass.

Heylighen, F. (2000). *Principia Cybernetica Web.* Retrieved May 23, 2002, from http://pespmc1.vub.ac.be/REFERPCP.html.

Johnson, H. J. (1968). The identification of teacher opinion leaders: An element in a change strategy for agricultural education (Doctoral dissertation, The Ohio State University, 1968).

Larke, A. Jr. & Norris, R. J. (1988). Opinion leadership among teachers of agriculture

science in Texas. *Journal of the American Association of Teacher Educators in Agriculture*, 29 (4), 32-39.

Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation.* Cambridge, MA: Cambridge University Press.

Leedy, P. D. & Ormrod, J. E. (1985). *Practical research: Planning and design. 7th ed.* Upper Saddle River, NJ: Prentice-Hall, Inc.

Lionberger, H. F. (1960). *Adoption of new ideas and practices.* Ames: The Iowa State University Printing Press.

Lionberger, H. F. & Gwin, P. H. (1982). *Communication strategies: A guide for agricultural change agents.* Columbia, MO: The Interstate Printers & Publishers, Inc.

Lionberger, H. F. & Gwin, P. H. (1991). *Technology from researchers...transfer to users.* Columbia: University of Missouri.

National FFA Organization. (2002). *Local Program Success Guide.* Retrieved April 9, 2002, from www.ffa.org

National Association of Agricultural Educators (NAAE). (1998) *News and Views*, 90 (3).

OK Career*Tech.* (2002) Retrieved April 29, 2002, from http://www.okcareertech.org/aged/

Owens, R. G. (1987). *Organizational behavior in education. 3rd ed.* Englewood Cliffs, NJ: Prentice Hall.

Peiter, R. L. (2002). An evaluation of the Oklahoma residency program and mentoring first year agricultural education teachers. (Doctoral dissertation, Oklahoma State University, 2002).

Phipps, L. J. & Osborne, E. W. (1988). *Handbook on agricultural education in public schools.* Danville, IL: The Interstate Printers & Publishers, Inc.

Rogers, E. M. (1995). *Diffusion of innovations.* New York: The Free Press.

SPSS 10.0, (1999). *SPSS 10.0 graduate pack for windows* [Computer Program] Chicago: SPSS Inc.

Stephenson, W. (1953). *The study of behavior.* Chicago: University of Chicago Free Press.

Valente, T. W. (1995). *Network models of the diffusion of innovations.* Cresskill, New Jersey: Hampton Press.

Valente, T. W. & Davis, R. L. (1999). Accelerating the diffusion of innovations using opinion leaders. *The Annals of the American Academy of Political and Social Science*, 566, 55-67.

Weimann, G. (1991). The Influentials: Back to the concept of opinion leaders? *Public Opinion Quarterly*, 55 (2), 267-279.

Weimann, G. (1994). *The influentials: People who influence people.* New York, NY: State University of New York Press.

Williams, M. (1997). Professional associations: supporting teacher communities. *Computers in New Zealand Schools*, 9 (2).

Williamson, K.L. (2000). Opinion Leadership. Retrieved May 24, 2002, from http://www.ciadvertising.org/studies/student/00_spring/theory/kwilliam/public_html/theory/Traits.html

APPENDIX A

IRB APPROVAL

Oklahoma State University
Institutional Review Board

Protocol Expires: 4/10/03

Date: Thursday, April 11, 2002 IRB Application No AG0233

Proposal Title: IDENETIFICATION OF OPINION LEADERS AMONG OKLAHOMA AGRICULTURAL EDUCATION TEACHERS

Principal Investigator(s):

Jamie Liston
459 Ag Hall
Stillwater, OK 74078

Robert Terry
458 AG Hall
Stillwater, OK 74078

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

Dear PI :

Your IRB application referenced above has been approved for one calendar year. Please make note of the expiration date indicated above. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved projects are subject to monitoring by the IRB. If you have questions about the IRB procedures or need any assistance from the Board, please contact Sharon Bacher, the Executive Secretary to the IRB, in 203 Whitehurst (phone: 405-744-5700, sbacher@okstate.edu).

Sincerely,

Carol Olson, Chair
Institutional Review Board

APPENDIX B

LETTER OF INTENT

May 3, 2002

Dear Agricultural Education Instructor:

We are conducting a survey to determine the personal, social and leadership characteristics of Oklahoma agricultural education teachers.

The information gathered will be used to plan further research in agricultural education. Please be assured your responses are completely confidential, your participation is strictly voluntary, and there will be no harmful affects caused by participating. The data will be collected using code numbers that cannot be traced back to you so your privacy is protected.

We know you are busy and that your time is valuable; however, the information your provide is very important and will make a difference in the way Oklahoma State University Agricultural Education and the Oklahoma Department of Career*Tech* serve you in the future.

Thank you,

Jamie Liston

APPENDIX C

TEACHER SURVEY

Oklahoma Agricultural Education Teachers

Personal, Social, and Leadership Characteristics Survey

SECTION A

1. From which *agricultural education teacher* in your P.I. would you seek advice and information about each of the following areas? Enter one name *or* write NONE in each blank.

   a. Teaching new courses being developed _____

   b. Using competency testing _____

   c. Learning about CDE rule changes _____

   d. Correctly completing award applications _____

   e. Using the new (yellow) FFA record book _____

   f. Properly completing *Career*Tech reports _____

   g. Selecting livestock show animals _____

   h. Purchasing instructional technology equipment _____

   _____

   i. Working with non-traditional SAE's _____

   j. Getting along with administration _____

   k. Implementing new fundraising ideas _____

2. Please check the appropriate blank for each of the following questions:

   a. During the past six months have you told an ag teacher about some new practice in agricultural education?

      Yes _____ No _____

   b. Compared with your circle of friends in agricultural education, are you likely to be asked for advice about new practices in agricultural education?

      Yes _____ No _____

c. Thinking back to your last discussion with ag teachers about new practices in agricultural education, were you asked for your opinion of the new practice or did you ask someone else?

Was asked _____ Asked someone else _____

d. When your friends who teach agriculture discuss new ideas in agricultural education, what part did you play?

Mainly listen _____ Try to convince them of your ideas _____

e. Which of these happens more often:

_____ You tell your neighboring agriculture teachers about some new practice?

_____ They tell you about some new practice?

f. Do you have the feeling that you are generally regarded by your fellow agriculture teachers as a good source of advice about new practices in agricultural education?

Yes _____ No _____

3. When confronted with a specific problem in your agricultural education program, from which of the following sources would you typically seek the advice and/or information needed to solve the problem:
MARK ONE SOURCE ONLY

_____ a. other agricultural education teachers

_____ b. other teachers

_____ c. district program specialist

_____ d. university teacher educator

_____ e. school administrator

_____ f. professional literature (periodicals, books)

_____ g. advisory group or member of advisory group

_____ f. other (specify) _____

_____

SECTION B

Instructions

1. Listed below are educational publications. Please mark the statement next to each publication, which applies to you.

Publication	Read Regularly	Seldom Read	Receive but Do Not Read	Do Not Receive
NAAE Newsletter				
Advocate (NEA)				
Results In Class Newsletter				
Journal of Ag Education				
ACTE Newsletter				
Agricultural Education Magazine				
Phi Delta Kappan				
Agricultural Research				
California Agriculture				
Science and Research				
Oklahoma Farmers Union News and Views				
Oklahoma Farm Bureau Perspective Newsletter				
The AGEDucator				
Cowboy Journal				
Ag Youth Magazine				
Showbox Magazine				
Show Circuit				
Showtimes				
Purple Circle				
Oklahoma Cattleman				
Oklahoma Farmer's				
High Plains Journal				
Successful Farming				
The Progressive Farmer				
Pork Report				
The Furrow				

SECTION C

Instructions

Please check letter a or b next to your response to the question below. Check one letter for each subgroup.

From which source do you tend to get most of the ideas you use in teaching?

_____ a. Impersonal sources such as publications of various kinds, television, radio, Internet, etc.

or

_____ b. Personal sources such as other teachers, administrative personnel, supervisory personnel, farmers, college professionals, etc.

_____ a. Sources within the field of agricultural education, such as other ag teachers, magazines pertaining to agricultural education,

or district specialists, etc.

_____ b. Sources outside the field of agricultural education, such as other teachers, general magazines, lay people in business and industry, etc.

_____ a. Sources relatively close at hand such as neighboring teachers, local school personnel, publications which cross your desk

or automatically, other people in the community, etc.

_____ b. Sources relatively far afield, such as technical publications to which you usually have to subscribe, teachers working in other districts or even out of state, results observed in industry training programs, etc.

_____ a. Sources which require a cash outlay by you personally, such as books you have to buy, magazines to which you have to
or subscribe, courses in which you have to pay a registration fee, etc.
_____ b. Sources which do not require a cash outlay to you personally, such as free magazines, publisher's displays at convention, free clinics, etc.

_____ a. Sources which do not take up a lot of your personal time, such as newsletters, other mail crossing your desk, drop-in visits
or during regular working hours, etc.
_____ b. Sources which require quite a bit of your personal time, such as summer school courses, workshops, trips, etc.

SECTION D

Instructions

Listed below are activities or practices, which you may or may not be using. First, read the description of the practice or activity then decide whether or not you have used or are using the practice. After making the decision, please provide the following information.

1. If you are using or have used the practice or activity, *estimate*, in the first space, the **year** the practice or activity was first used.
2. If you are not using the activity or practice and it *could apply* to your situation, place an **X** in the second space.
3. If you are not using the activity or practice and it *does not apply* to your situation, place and **X** in the third space.

Activity or Practice	Used 1st Year Used	Not Used Could Apply	Not Used Does Not Apply
1. Biotechnology units of instruction are taught.			
2. Agricultural science fair is conducted at the local level.			
3. Special needs students are taught in some capacity of the agriculture program.			
4. Instructional partnerships, such as ones with cooperating science teachers, are used to integrate the agricultural curriculum with other subject areas.			
5. E-mail is used as a primary method of correspondence.			
6. PowerPoint is used in teaching instructional units.			
7. Student SAE cooperatives, such as chicken or swine cooperatives, are used to introduce students to SAE's.			
8. All students have an electronic record book to document SAE activity.			

Activity or Practice	Used 1st Year Used	Not Used Could Apply	Not Used Does Not Apply
9. FFA chapter officers are selected by means other than a majority vote of members.			
10. Chapter members conduct monthly community service projects (such as Adopt-A-Highway and Read Aloud.)			
11. An officer training program/ retreat is held to discuss the chapter's Program of Activities.			
12. A regular chapter newsletter is sent to members of the community.			
13. Grant writing is actively utilized.			
14. Scholarship foundation has been established to provide educational assistance to students.			
15. An advisory council has been formed to assist the agriculture program.			
16. Students are recruited to enroll in agricultural education and join FFA.			
17. A chapter/program web site has been developed.			
18. Students present a monthly report to the local school board on chapter and program activities.			
19. Student evaluations are used to assess the teacher.			
20. FFA alumni board or support group is established to aid the program in activities.			

SECTION E

Instructions

1. **Section 1**: List the *community organizations* with which you are currently involved, such as club, lodge, business, political or religious organization (i.e. Lion's Club, Masonic Lodge).
   Section 2: List the *professional educational organizations* with which you have been involved in over the past 3 years (i.e. OAETA, NAAE).

2. Record under attendance if you attend meetings without regard to the number of meetings attended.
3. Record under financial contribution if you contribute or not without regard to amount contributed *(do not include membership dues as contribution).*
4. In the committee membership and offices columns, list only the number which you presently hold.

Section 1

Community Organizations	Attendance (yes/no)	Financial Contribution (yes/no)	Committee Membership	Number of Offices Held
Ex.				
1.				
2.				
3.				
4.				
5.				

Section 2

Professional Organizations	Attendance (yes/no)	Financial Contribution (yes/no)	Committee Membership	Number of Offices Held
Ex.				
1.				
2.				
3.				
4.				
5.				

SECTION F

Instructions

This page is concerned with general information about you. Please answer accordingly.

1. Age _____
2. Year you began teaching agricultural education _____
3. Number of years teaching agricultural education _____
4. Number of years teaching agricultural education in this P.I. _____
5. Number of schools you in which have taught agricultural education _____
6. Number of years teaching at your present location _____
7. College credit hours you have completed since you began teaching agricultural education _____

8. Amount of schooling completed (MARK HIGHEST)

   _____ a. Bachelor's degree
   _____ b. Bachelor's plus
   _____ c. Master's degree
   _____ d. Master's plus

9. What is the amount of your **own** money you have invested in professional growth (i.e. summer school, correspondence courses, travel to professional meetings, etc.) during the past two years? (Include fees, registration, books, dues, magazine subscriptions, etc.) MARK CLOSEST RANGE

   _____ a. $ 0-100
   _____ b. 101-200
   _____ c. 201-300
   _____ d. 301-400
   _____ e. 401-500
   _____ f. 501-600
   _____ g. 601-700
   _____ h. 701-800
   _____ i. 801-900
   _____ j. 901-1000
   _____ k. above 1000
   How much? _____

APPENDIX D

DISTRICT PROGRAM SPECIALIST SURVEY

INSTRUCTION SHEET FOR RANKING AGRICULTURAL EDUCATION TEACHERS ACCORDING TO OPINION LEADERSHIP

You have been given a stack of cards. Each card has the name of an agricultural education instructor in the Shawnee P.I. The total deck of cards contains the names of all teachers in the Shawnee P.I.

What you are to do is rank each of the teachers on the basis of opinion leadership held in agricultural education. Your ranking is to be based on the following definition of opinion leaders.

> Opinion Leader - agricultural education instructor who is influential with fellow teachers in approving or disapproving new ideas in agricultural education.

In order to assist you in ranking the teachers, first sort the cards into three equal stacks of seven teachers corresponding to the following headings.

Stack 1	Stack 2	Stack 3
High Degree of Opinion Leadership	Moderate Degree of Opinion Leadership	Low Degree of Opinion Leadership

Then rank each of the seven teachers in the three stacks from high to low. Then place the stacks in order on top of one another.

VITA 2

Jamie Marie Liston

Candidate for the Degree of

Master of Science

Thesis: THE IDENTIFICATION OF OPINION LEADERS AMONG OKLAHOMA AGRICULTURAL EDUCATION TEACHERS

Major Field: Agricultural Education

Biographical:

Personal Data: Born in Oklahoma City, Oklahoma, February 21, 1979, the daughter of Larry and Sharon Liston.

Education: Graduated from Westmoore High School, Moore, Oklahoma, May 1997; received a Bachelor of Science in Agricultural Education from Oklahoma State University, Stillwater, Oklahoma, May 2001; completed the requirements for the Master of Science degree in Agricultural Education at Oklahoma State University, August 2002.

Personal Experience: Graduate Teaching/Research Assistant, Oklahoma State University Department of Agricultural Education, Communications, & 4-H Youth Development, 2001-2002; Student Teaching, Amber-Pocasset High School, Spring 2001; Portfolio Specialist, Oklahoma State University, Fall 2000; Educational Intern, Oklahoma Farmers Union, Summer 1999.

Professional Organizations: American Association of Agricultural Educators, National Association of Agricultural Educators, Oklahoma Agricultural Education Teachers Association, Agricultural Education Graduate Student Association