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## State supervisors roles in agricultural education curriculum: A national study

Becky L. Ridgeway  
*West Virginia University*

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State Supervisors Roles in Agricultural Education Curriculum: A National Study

Becky L. Ridgeway

Thesis submitted to the  
Davis College of Agriculture, Forestry and Consumer Sciences  
at West Virginia University  
in partial fulfillment of the requirements  
for the degree of

Master of Science  
in  
Agricultural and Extension Education

Deborah A. Boone, Ph.D., Chair  
Harry N. Boone, Jr., Ph.D.  
Stacy A. Gartin, Ph.D.

Division of Resource Management

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## ABSTRACT

### State Supervisors Roles in Agricultural Education Curriculum: A National Study

Becky L. Ridgeway

The purpose of this study was to examine state supervisors roles in agricultural education curriculum. A census survey, plus Puerto Rico and Virgin Islands were used to collect data for this study. The population included all head state supervisors employed during the spring of 2009. Of the 52 surveys sent out 36 were returned (69%). The study found that responsibility for developing and communicating career development events (CDE) and information varied by state, with the head state supervisor, executive secretary, state supervisor with FFA responsibilities or university faculty managing the events. State supervisors identified email, listserv (group email), telephone calls, websites and teacher conferences as their top five methods of communication. The courses most frequently taught as stand alone classes were identified as agriculture and natural resources, agriculture mechanics, floriculture, aquaculture and renewable energy (all programs in one state). State supervisors indicated that the most common subject matter incorporated into existing courses was soil science, plant science, agribusiness management, anatomy and physiology, and environmental science.

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## CHAPTER I

### Introduction

Throughout history, agricultural education has played an important role in the educational system. Agriculture has played the role of determining when schools would be opened and closed during planting and harvesting seasons. Even though school systems don't close during harvest season anymore, students today have the opportunity to learn more about how agriculture has diversified over the years. Students have the opportunity to learn about all areas of agriculture including animal and plant sciences, greenhouse and nursery, forestry, mechanics and much more (Moore, 1994). But the question arises, what are agricultural students learning across the United States? Are all students being taught the same subject matter?

The Smith-Hughes Act of 1917 established vocational agriculture education at the secondary level by developing and promoting vocational education in public schools. This act provided funding in terms of salaries, transportation cost, supervisors and directors of agricultural subjects including teachers. Funding provided by the Smith-Hughes Act had specific requirements. The funding went to programs that “(1) prepared students for useful employment, (2) were less than college grade, and (3) were designed for people over 14 years old who were working or preparing to work on the home farm or in the farm home” (Phipps, L., Osborne, E., Dyer, J., & Ball, A., 2008, p. 28). In 1928, the Future Farmers of America was established as a national organization, and “brought together students, teachers, and agribusiness to solidify support for agriculture education” (The National FFA Organization, 2008, ¶ 1). The Future Farmers of America is now known as the National FFA Organization (FFA) (National FFA Organization, 2007).

Agriculture education is composed of three components; classroom/laboratory, supervised agricultural experiences (SAE) and the FFA (National FFA Organization, 2007). All three aspects of agriculture education provide important roles in the education of agriculture students. Supervised agriculture experiences provide students with learning by doing, by applying skills they learn in the classroom and applying those skills to work outside of the classroom. The classroom and lab provide students with instructors who are knowledgeable within agricultural areas. The FFA component provides students with incentives through conventions and career development events, while applying skills they have learned through the classroom and SAE programs (National FFA Organization, 2007).

The three components of agriculture education provide a guide in the education of students in comprehensive high schools, as well as vocational centers throughout the nation (Lynch, 2000). Vocational education today provides students with the knowledge and skills students will need to enter the work force or post-secondary education after graduation. According to Lynch (2000) there are about 250 vocational schools that solely offer curriculum in specialized areas such as, agriculture, business and office, health, family and consumer sciences and labor market preparation programs. The students that attend these 250 schools spend their day learning the skills of a trade that students are interested in, while also receiving the academic foundations of a regular high school setting.

State supervisors play an important role in the curriculum that is taught at the high school level. With program curriculum an important aspect of the education system, Barrick (1985) estimates that supervisors spend sixty percent of their time on improving

instructional activities. When considering the factors that affect curriculum, supervisors have to look at the total program and how everything is integrated. Lynch (2000) states that when looking at instruction taught in high schools and vocational schools, one must look at the entire picture which includes; expectations for student learning, career and technical courses, required academic courses, learning in work environments, advising systems, active encouragement of students' interest and the use of assessments and evaluation methods which measure the effectiveness of a program.

When considering there are 1,100 vocational schools (Lynch, 2000), along with a majority of high schools offering some form of agriculture education, the question arises, what is the curriculum used in these schools? Since the majority of a supervisors time is spent on the course of instruction for the programs (Barrick, 1985), this is where the role of the state supervisors comes into play. With curriculum changes being made over time, what factors do supervisors consider when making changes to the state curriculum?

Throughout the nation students every year enroll in a variety of agriculture education classes. These courses are offered throughout the nation, but are all students learning the same subjects? Students in the south may be learning about landscaping and turf management, but are those students also learning about forestry? Does where students live affect the courses and subject matter that is taught? Are students in the east, midwest, south and west all learning the same curriculum?

Not only should state supervisors be considering and spending an abundant amount of time to improve state curriculum, but they also need to consider other roles they fill for the teachers. Supervisors need to remember that they are not only there to assist with the state curriculum, but are in charge of a state educational program.

Supervisors should exhibit their abilities in leadership, communications, program planning and development, in-service support, recordkeeping, reporting, public relations and their image (Mannebach, 1985). Supervisors need to show that they are the right person for the job and that they are putting the agriculture educational program first, along with being able to be open-minded, considerate, be able to communicate with all individuals who are affected in agriculture education and also be able to promote their programs to the general public (Mannebach, 1985). If supervisors lack any of these traits, they are not only hurting themselves, but hurting agriculture education in their state if they are not moving the program forward. Supervisors which are members of the National Association of Supervisors Agricultural Education are part of a formal organization which provides information to run quality agricultural education programs (National Association of Supervisors Agricultural Education, n.d., ¶ 1).

Agriculture education is offered throughout the United States. But, the question arises, is agricultural education curriculum the same throughout the nation? With students competing for national awards, using the same criteria and requirements, have they been afforded the same curriculum? The Official FFA Manual (2007) states the requirements for FFA members to earn their Greenhand, Chapter, State and American Degrees. Now the question is; how do states differ in curriculum offerings and awarding of degrees?

### *Purpose of the Study*

The purpose of this study was to determine what differences may exist among state agricultural education programs in the United States, including Puerto Rico and the Virgin Islands. How do agricultural education program laboratories/facilities differ

across the country and in what ways? As a means of developing this study answers to the following questions were sought:

*Research Questions*

1. What is the role of lead state supervisors in supervising teachers?
2. Who is responsible for coordinating and communicating information about the Career Development Events at the state level?
3. Who is responsible for working with the State FFA Officer Team?
4. How is input from teachers sought during statewide curriculum changes?
5. What are state supervisors preferred means of communicating with agricultural educators?
6. What courses are taught in each state?
7. What subject matter is taught in existing courses?
8. What types of laboratories/facilities are available to agricultural education programs?
9. Based on state membership what percent of members receive State FFA and American FFA Degrees?

## CHAPTER II

### Review of Literature

Since the creation of the Smith-Hughes Act in 1917, agricultural education has been an integral part of high school education. Looking back over the years and viewing how education has changed, one must note that agricultural education has also changed. In the early 1920s agriculture played an important role in schools. Many think students, teachers and the school administration are the main sources in education. However, many others play a role in education, such as state supervisors who are in charge of certain areas of the educational system. Few have considered the influences state leaders have on the quality of agriculture education. Straquadine (1987) found that some feel the quality of a program reflects on the leadership found within that state.

Smith, Lawrence, Gartin, and Odell (1990), found that “supervisors were primarily responsible for assuring program quality and compliance” (p. 45). In a national study of state supervisors, Barrick (1980) found that state leaders and teachers of vocational agriculture believe that program improvement is a high priority among state leaders’ responsibilities. State leaders can be one source to look at the differences that may be found in programs throughout the nation.

Barrick (1985) described supervision as a role and a process. The role can be assessed as improvements to the instruction of the program. Supervisors of agricultural education are widely involved in the course of instruction within the state. The process that a supervisor undertakes includes staff development and motivation, but these measurements of the process in the end revolve around the role of the supervisor. Roles of the supervisor can be characterized by serving the educational program, along with

keeping the communication open to the teachers and the appropriate administrative figures (Barrick, 1985).

When looking at agricultural programs, all parts of the program must be considered. Since agricultural education has changed over the years, some items need to look at student achievement, certain situations and variables within all states, along with looking at the curriculum that students are enrolled in at institutions (Arrington & Cheek, 1990). When educational programs were compared previously, standardized achievement test were given to assess the instructional effectiveness of programs (Rowan, Bossert, & Dwyer, 1983).

When looking at the differences in high school educational programs, all aspects of agricultural education need to be evaluated, including middle school programs. Without a set curriculum for middle school students, how do high school teachers know what their incoming students have already studied? “Developing a framework for middle school agricultural education curriculum is the first step in furthering the continuity and focus of middle school agricultural education” (Frick, 1993, p.77). The National FFA Organization, the U.S. Department of Education and the U.S. Department of Agriculture support the establishment of middle school curriculum, which would be distinct of high school agriculture curriculum. A set middle school curriculum would give high school teachers a framework to build on, so they could focus on new information (Frick, 1993).

Agricultural education has had many influences over the years, including the introduction of the Future Farmers of America (FFA) in 1928. The organization was geared towards students in agriculture that generated activities and incentives, including

national conventions, career development events as well as chapter, state and national degrees for recognition of work through agricultural education (National FFA Organization, 2007). Considering the benefits of agricultural education and the influences of the FFA, one must include supervised agricultural experiences, which provide students with experiential learning connected with the knowledge and interest of the student. Experiential learning is an integral component of agricultural education providing students with opportunities to learn by doing (Cheek, Arrington, Carter, & Randell, 1994).

Dyer and Osborne (1995) found that teachers and administrators have determined that agriculture teachers should be held responsible for making sure students participate in a supervised agriculture experience. Most teachers promote student participation in supervised agriculture experience programs, but teachers who make SAE programs a part of the student's grade find a higher percentage of participation (Dyer & Osborne, 1995). Another factor that affects participation in SAE programs is the amount of time teachers are willing to put into the programs. Teachers which have extended contracts are more likely to spend time during the summer months making visits to their students compared to teachers who do not have an extended contract (Dyer & Williams, 1997). Teacher supervision may lack in the area of student participation in SAE programs because of the barriers a teacher has to overcome in the size of classes, release time and little funding for teachers to make visits to their student's homes or place of work. It appears that teachers extended contracts are on a decrease across the country, which in return effects the communication and supervised visits a teacher is going to make with their students over the summer months (Dyer & Williams, 1997).

The supervised agricultural experience, takes into consideration student interest, knowledge, agricultural economy within the area and state program requirements. It is proposed that all high school agricultural programs should include supervised agricultural programs outside of the time spent in school.

Qualifications of a person for state and American degrees through the National FFA Organization must be examined. The unique situations of student achievements need to be considered, along with the regulations that different states have for awarding these degrees (Arrington & Cheek, 1990).

The National FFA Organization (2008) states for members to receive a state degree they must meet the national guide lines which are: received a chapter degree, been an active member for twenty-four months, completed the equivalent of three-hundred sixty hours of systematic school instruction, earned and productively invested \$1,000 or three hundred hours of work and demonstrated leadership by performing ten procedures of parliamentary law, given a six minute speech, satisfactory scholastic record, participated in planning the program of activities and participated in at least five chapter events. Furthermore for a student to achieve the American degree, students must achieve the following goals according to the National FFA Organization (2008), received a state degree, completed three years of secondary school instruction, graduated from high school twelve months prior to the national convention, operated and maintained records, earned and productively invested \$7,500 or \$1,500 and 2,250 hours of work, community involvement, high school scholastic record of a “C” and have the proper certifications in the application for the American FFA Degree.

## CHAPTER III

### Methodology

#### *Purpose of the Study*

The purpose of this study was to determine what differences may exist among state agricultural education programs in the United States, including Puerto Rico and the Virgin Islands. How do agricultural education program laboratories/facilities differ across the country and in what ways? As a means of developing this study answers to the following questions were sought:

#### *Research Questions*

1. What is the role of lead state supervisors in supervising teachers?
2. Who is responsible for coordinating and communicating information about the Career Development Events at the state level?
3. Who is responsible for working with the State FFA Officer Team?
4. How is input from teachers sought during statewide curriculum changes?
5. What are state supervisors preferred means of communicating with agricultural educators?
6. What courses are taught in each state?
7. What subject matter is taught in existing courses?
8. What types of laboratories/facilities are available to agricultural education programs?
9. Based on state membership what percent of members receive State FFA and American FFA Degrees?

### *Research Design*

This study was designed to determine responsibilities of the lead state supervisors, along with differences in state programs of instruction, laboratories/facilities and awarding of FFA degrees. The study utilized a descriptive research design. The descriptive design was used because it allowed for a variety of questions to be asked. Descriptive research design also allows for generalizations to be made based upon the data collected. A problem associated with descriptive research can be costly in money and the amount of time it takes to collect data (Ary, Jacobs, Razavieh, & Sorensen, 2006).

### *Population*

The target population was the head state agricultural education leaders employed during the spring of 2009. A census was conducted of all head state agricultural education leaders including Puerto Rico and the Virgin Islands employed during the spring of 2009. Frame error was avoided by using the agriculture education state leaders list compiled by the National FFA Organization. The states who listed the positions as vacant were contacted to determine who the leader in charge was. Using a census eliminated selection and sampling errors.

### *Instrumentation*

The instrumentation used for this research study consisted of a 3-part questionnaire. The first part of the questionnaire consist of multiple choice questions about supervisors responsibilities. Part two of the questionnaire consisted of open-ended questions relating to communication methods, stand alone agricultural programs and subject matter incorporated into existing courses, and available school

facilities/laboratories in each state. Part three consisted of multiple choice and open-ended questions about the number of degrees, certifications, SAE visits, teacher contracts and demographics of the respondents.

*Validity.* The revised instrument was presented to a panel of experts to establish its content and face validity. The panel of experts consisted of teacher educators in Agricultural and Extension Education at the local land-grant university and the local state supervisor for agricultural education. Each individual on the panel had extensive teaching experience at either the high school or university level. The panel of experts concluded the instrument has content and face validity.

*Reliability.* Reliability is the ability of the scores produced by an instrument to be consistent, repeatable, dependable and generalized (Ary et al., 2006). Reliability was established using the split-half analysis procedure. Reliability was found to be extensive (Spearman-Brown = .23) (Robinson, Shaver, & Wrightsman, 1991). The instrument was found to be reliable.

#### *Data Collection Procedures*

Dillman's (2005) Total Design method for mailed questionnaires was used in collecting data. The first mailing involved a survey packet which included the cover letter informing subjects of the purpose of the research, questionnaire and a stamped self-addressed envelope. Subjects were given fourteen days to return the questionnaire. Non-respondents were sent a e-mail reminding them about the questionnaire and informing them of a second mailing. Following the e-mail, non-respondents were mailed a second packet containing the questionnaire, letter, and return envelope. An additional fourteen days were given for return of the second mailing of the questionnaire. A second follow-

up e-mail was sent to all non-respondents after the deadline passed. Phone calls were made to non-respondents to complete the survey over the phone.

### *Analysis of Data*

Each respondent was identified by a numerical code located on the survey. This code was utilized to follow-up with non-respondents. Later the code key was destroyed to protect the anonymity of the respondents. Data was entered into an Excel spreadsheet. Answers to questions requiring an open-ended response were documented in full text format and grouped together based on the responses. Thirty-six (69%) states responded to the survey, those states were Alabama, Arizona, Arkansas, Colorado, Connecticut, Delaware, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Texas, Utah, Virgin Islands, Virginia, Washington, West Virginia, Wisconsin and Wyoming.

Data was analyzed utilizing the Statistical Package for the Social Sciences (SPSS) 11.0 for Windows. Descriptive analyses appropriate for the respective scale of measurement were performed on the data including measures of central tendency (mean, median, or mode) and variability (frequencies or standard deviation). The results were represented as frequencies and percentages in both tables and narrative forms.

*Non-response error.* Non-response error was addressed by comparing early respondents to late respondents. A chi-square test of independence was performed on five variables to determine if there was a significant relationship between early and late respondents. The five variables included number of years experience as a state supervisor, number of years as lead supervisor, number of years as an agriculture teacher,

age and were you an agriculture teacher. The results were not significant therefore it was determined that there was no difference between early and late respondents.

#### *Use of Findings*

Findings from this study can be used by individuals who are interested in the differences of agricultural education curriculum throughout the nation. This may include the National FFA Organization, state supervisors, agriculture teachers, university faculty, state FFA advisors and staff involved in agriculture education. Findings from this study could be used to look at what data states keep on file and what information should states collect.

## CHAPTER IV

### *Findings*

#### *Purpose of the Study*

The purpose of this study was to determine what differences may exist among state agricultural education programs in the United States, including Puerto Rico and the Virgin Islands. How do agricultural education program laboratories/facilities differ across the country and in what ways? As a means of developing this study answers to the following questions were sought:

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8. What types of laboratories/facilities are available to agricultural education programs?
9. Based on state membership what percent of members receive State FFA and American FFA Degrees?

### *Findings*

The target population included 52 head state leaders including Puerto Rico and the Virgin Islands, who were employed during the spring of 2009. The Agriculture Education State Leader's List was secured from the National FFA Organization. The accessible population for this study consisted of 52 head agricultural educator state leaders. Of the 52 questionnaires sent, 36 (69%) were returned with usable information.

### *Demographic Characteristics of Respondents*

Respondents were asked to identify their gender, age and ethnicity. There were 31 (86.1%) respondents who were male and five (13.9%) respondents indicated they were female (see Table 1).

Two (5.6%) respondents were between the ages of 20-30 years of age. The number of individuals in the 31-40 years of age category totaled seven (19.4%). Six respondents (16.7%) were 41-50 years of age and 13 (36.1%) respondents were between the ages of 51-60 years of age. Eight (22.2%) respondents indicated they were in the 61-70 years of age (see Table 1).

One respondent (2.8%) indicated black, non Hispanic as their real ethnicity. The number of individuals in the white, non Hispanic category totaled 35 (97.2%) (see Table 1).

Table 1

*Gender, Age and Ethnicity of State Supervisors*

	N	%
Gender		
Male	31	86.1
Female	5	13.9
Age		
20-30 years of age	2	5.6
31-40 years of age	7	19.4
41-50 years of age	6	16.7
51-60 years of age	13	36.1
61-70 years of age	8	22.2
Ethnicity		
Black, non Hispanic	1	2.8
White, non Hispanic	35	97.2

*Level of FFA Participation by State Supervisors*

Respondents were asked to indicate if they were a member of the FFA when they were in high school, along with if the respondents earned state FFA degrees and American FFA degrees. Thirty-one (86.1%) respondents were members of FFA during high school. Twenty-eight respondents (77.8%) had earned their state FFA degree and 12 (33.3%) respondents had earned their American FFA Degree (see Table 2).

Table 2

*Level of FFA Participation by State Supervisors*

	N	%
Member of FFA	31	86.1
State FFA Degree	28	77.8
American FFA Degree	12	33.3

*Agriculture Teaching Experience of State Supervisors*

Respondents were asked about previous employment as an agriculture teacher and the number of years experience as an agriculture teacher. Thirty-three respondents (91.7%) indicated they had been an agriculture teacher. One (2.8%) individual had been an agriculture teacher for less than one year. Four (11.1%) respondents had 1 - 5 years teaching experience and 10 (27.8%) respondents had 6 – 10 years of teaching experience. Respondents with 11 – 15 years teaching experience included eight (22.2%) respondents and the number in the 16 – 20 years teaching experience was two (5.6%) respondents. Two (5.6%) respondents reported 21 – 25 years teaching experience and six (16.7%) respondents indicated 26 plus years of teaching experience (see Table 3).

Table 3

*Agriculture Teaching Experience of State Supervisors*

	N	%
Agriculture Teacher	33	91.7
Years Experience as an Agricultural Teacher		
Less than one year	1	2.8
1 – 5 years	4	11.1
6 – 10 years	10	27.8
11 – 15 years	8	22.2
16 – 20 years	2	5.6
21 – 25 years	2	5.6
26 + years	6	16.7

*State Supervisor Experience including Lead State Supervisor*

Respondents were asked the number of years experience as a state supervisor and the number of years experience as the lead state supervisor. Four (11.1%) respondents had less than one year experience and 12 (33.3%) respondents had between 1–5 years experience as state supervisor. The number of individuals with 6–10 years experience as state supervisor was seven (19.4%). Five (13.9%) respondents had 11-15 years experience as state supervisor and one (2.8%) respondents had 16 - 20 years experience as state supervisor. Two (5.6%) respondents had 16-20 years experience as state supervisor and five (13.9%) respondents had 26 plus years of experience as a state supervisor (see Table 4).

Table 4

*State Supervisor Experience including Lead State Supervisor*

	N	%
<b>State Supervisor</b>		
Less than one year	4	11.1
1-5 years	12	33.3
6-10 years	7	19.4
11-15 years	5	13.9
16-20 years	1	2.8
21-25 years	2	5.6
26 years or more	5	13.9
<b>Lead State Supervisor</b>		
Less than one year	5	13.9
1-5 years	14	38.9
6-10 years	6	16.7
11-15 years	5	13.9
16-20 years	1	2.8
21-25 years	2	5.6
26 years or more	3	8.3

When asked to identify the years experience as the lead state supervisor, five (13.9%) respondents indicated less than one year as the lead state supervisor and 14 (38.9%) had between 1-5 years experience as the lead supervisor. Respondents with 6-10 years as lead state supervisor totaled six (16.7%). Five respondents (13.9%) indicated 11-15 years experience as lead supervisor and one (2.8%) individual indicated 16-20

years. Two (5.6%) respondents had 21-25 years and three (8.3%) respondents had 26 or more years experience as the lead state supervisor (see Table 4).

*Individual in Charge of Communicating Career Development Event Information*

Of the participants who responded to the question addressing individual in charge of communicating career development event information, 11 (30.6%) responded that the head supervisors are in charge of communicating career development event information. Twenty-six (72.2%) of the participants indicated the executive secretary is in charge of communicating information, while five (13.9%) responded that the state supervisors with FFA responsibilities communicate CDE information. Two (5.6%) respondents indicated that the Extension service communicates the information (see Table 5).

Table 5

*Individual in Charge of Communicating Career Development Event Information*

	N	%
Head Supervisors	11	30.6
Executive Secretary	26	72.2
State Supervisor with FFA responsibilities	5	13.9
University Faculty	9	25.0
Extension Service	2	5.6

*Individual in Charge of Coordinating Career Development Event Schedule*

When asked to identify the individual in charge of coordinating career development event (CDE) information, 10 (27.8%) respondents replied the head state supervisors coordinate the CDE schedule and 25 (69.4%) participants indicated the executive secretary coordinates the CDE schedule. Six (16.7%) respondents replied the

state supervisor with FFA responsibilities coordinates the career development event schedule. Thirteen (26.1%) respondents indicated university faculty and one (2.8%) indicated the Extension service was in charge of coordinating career development event schedules (see Table 6).

Table 6

*Individual in Charge of Coordinating Career Development Event Schedule*

	N	%
Head State Supervisor	10	27.8
Executive Secretary	25	69.4
State Supervisor with FFA responsibilities	6	16.7
University Faculty	13	26.1
Extension Service	1	2.8

*Teachers Involvement in Making Changes to Career Development Events*

Respondents were asked to identify the ways that the agriculture teachers are involved in making changes to the career development events. Two (5.6%) respondents indicated that teachers have no formal involvement in making changes to career development events. Nine (25%) respondents received teachers input during regional teacher meetings and 16 (44.4%) states included teacher involvement in making changes to career development events at state wide teachers conferences. Five (13.9%) respondents used surveys to include teachers input and 15 (41.7) respondents indicated teachers were involved in making changes to career development events by regional representatives. Email was used by eight (22.2%) respondents to involve teachers in making changes to career development events (see Table 7).

Table 7

*Teacher's Involvement in Making Changes to Career Development Events*

	N	%
No Formal Involvement	2	5.6
Regional Teacher Meetings	9	25.0
State Wide Teachers Conference	16	44.4
Surveys	5	13.9
Regional Representative	15	41.7
Email	8	22.2

*Methods of Involving Teachers in Making Changes to the High School Curriculum*

Respondents were asked to identify the ways that high school agriculture teachers are involved in making changes to the high school agriculture education curriculum. Two (5.6%) respondents indicated that agriculture teachers have no formal involvement in making changes to the curriculum. Regional teachers meetings were used by 14 states (38.9%) and, 21 (58.3%) respondents indicated state wide teacher's conferences were used to include teachers in making changes to high school curriculum. Seventeen (47.2%) respondents used surveys to include teachers when making changes to the curriculum, seven (19.4%) used regional representatives and 14 (38.9%) respondents used state agricultural teacher's organization officers to include teachers in making changes to high school curriculum. Fifteen respondents (41.7%) used email to involve teachers in making changes to the high school curriculum (see Table 8).

Table 8

*Methods of Involving Teachers Making Changes to the High School Curriculum*

	N	%
No Formal Involvement	2	5.6
Regional Teachers Meetings	14	38.9
State Wide Teachers Conferences	21	58.3
Surveys	17	47.2
Regional Representatives	7	19.4
State Agricultural Teachers Organization Officer	14	38.9
Email	15	41.7

*Individual Responsible with Working with the State FFA Officer Team*

When asked to identify the people who are responsible for working with the state FFA officer team, 14 (38.9%) respondents indicated the head state supervisor while, 31 (86.1%) respondents indicated the executive secretary was in charge of working with the officer team. The state supervisor with FFA responsibilities was indicated by four (11.1%) respondents, while three (8.6%) stated university faculty were responsible for working with the state FFA officer team (see Table 9).

Table 9

*Individual Responsible with Working with the State FFA Officer Team*

	N	%
Head State Supervisor	14	38.9
Executive Secretary	31	86.1
State Supervisor with FFA Responsibilities	4	11.1
University Faculty	3	8.6

*Lead State Supervisors' Visitation to First Year Teachers*

Respondents were asked to identify how many times a year first year teachers were visited by the lead state supervisor. Eight (22.2%) respondents indicated no visits were made to first year teachers. Fourteen (38.9%) state supervisors visited first year teachers one time a year and nine (25%) respondents indicated two visits were made to first year teachers. Four (11.1%) state supervisors indicated first year teachers were visited three times a year (see Table 10).

Table 10

*Lead State Supervisors' Visitation to First Year Teachers*

	N	%
0 times a year	8	22.2
1 time a year	14	38.9
2 times a year	9	25.0
3 times a year	4	11.1

*How Often do State Supervisors Communicate with Agriculture Teachers?*

When asked how often communication between state supervisors and high school agriculture teachers occurred, 21 individuals (60%) had no formal schedule but communicated as needed. Ten (28.6%) state supervisors communicated weekly with agriculture teachers and two (5.7) respondents communicated monthly with teachers. Two (5.7%) respondents indicated other schedules for communication with high school agriculture teachers (see Table 11).

Table 11

*How Often do State Supervisors Communicate with Agriculture Teachers?*

	N	%
As needed – no formal schedule	21	60.0
Weekly	10	28.6
Monthly	2	5.7
Other	2	5.7

*Communication Methods Used by State Supervisors*

State supervisors were asked to identify methods used in communicating with the agriculture teachers. Thirty-five (100%) respondents used telephone calls and 34 (97.1%) respondents used email to communicate. Thirty-two (91.4%) state supervisors indicated using websites as a communication method. Thirty (88.2%) respondents used visits to schools and teachers conferences to communicate. Twenty-nine (85.3%) individuals used state conventions, while 28 (80%) used mail (postal). Twenty-eight (82.4%) respondents used list serves (group email) and 28 used regional (state) meetings as a source of communication. The number of state supervisors that used national

meetings-conventions was 17 (50%). Sixteen (47.1%) respondents indicated electronic newsletters as a source of communication and 16 (47.1%) used a fax as a method of communication. Fifteen (44.1%) state supervisor used regional (national) meetings as a source of communication and 12 (35.3%) respondents indicated they used chapter banquets to communicate. Six (17.6%) of the state supervisors used newsletters (postal) and one (2.9%) used midwinter (sic) and one (2.9%) used electronic bulletin boards as communication methods with agriculture teachers (see Table 12).

#### *Ranking of Methods of Communication*

Supervisors were asked to identify the top five methods of communication that they use. Respondents ranked their top five communication methods by using a scale of one to five with one being the most frequently used down to five. The rankings were then reverse coded so one equaled five points, two equaled four points, three equaled three points, four equaled two points and five was worth one point. The points were then totaled from the 36 respondents. The highest ranked method of communication was email, followed by list serve (group email). Telephone calls ranked third and the use of websites was fourth. Teacher's conferences ranked fifth among state supervisors followed by visits to schools. Regional (state) meetings ranked seventh and electronic newsletter and state conventions were the eighth most frequently used method of communication. The tenth most used communication method was mail (postal) and electronic bulletin board was 11th. Newsletter (postal) ranked 12<sup>th</sup> and midwinter ranked 13<sup>th</sup>. Regional (national) meetings and national meetings-conventions were tied for 14<sup>th</sup> (see Table 13).

Table 12

*Communication Methods Used by State Supervisors*

	N	%
Telephone calls	35	100.0
Email	34	97.1
Website	32	91.4
Visits to Schools	30	88.2
Teacher conferences	30	88.2
State Conventions	29	85.3
Mail (postal)	28	80.0
List Serve (group email)	28	82.4
Regional (state) Meetings	28	82.4
National meetings-conventions	17	50.0
Electronic Newsletter	16	47.1
Fax	16	47.1
Regional (national) Meetings	15	44.1
Chapter Banquets	12	35.3
Newsletters (postal)	6	17.6
Midwinter	1	2.9
Electronic Bulletin Board	1	2.9

Table 13

*Ranking of Methods of Communication*

	Sum	Overall Ranking
Email	139.00	1
List Serve (group mail)	91.00	2
Telephone calls	80.00	3
Website	50.00	4
Teacher Conferences	36.00	5
Visits to Schools	24.00	6
Regional (state) Meetings	23.00	7
Electronic Newsletter	9.00	8
State Conventions	9.00	8
Mail (postal)	8.00	10
Electronic Bulletin Board	5.00	11
Newsletter (postal)	4.00	12
Midwinter	2.00	13
Regional (national) Meetings	1.00	14
National Meetings-Conventions	1.00	14

*Stand Alone Programs of High School & Technical Schools*

State supervisors were asked to identify the types of stand alone courses taught in their states. Of the 11 (36%) states who reported data for stand alone programs averages were compiled, along with total number of stand alone programs found throughout the responding states. All percentages and totals were based on the total number of high

schools and technical school in the state. One state taught renewable energy as a stand alone course with 100% (min = 100, max = 100) of the programs in the state offering this stand alone program. Eleven states reported agriculture and natural resources as a stand alone class with an average of 47.94% (min = 2.17, max = 100, SD = 42.58) of the programs offering the course. The average number of stand alone agriculture and natural resources programs in the 11 states reporting was 94.17 (SD = 116.09). Twelve states reporting an average of 44.64% of their programs offer agricultural mechanics as a stand alone program (min = 2.17, max = 100, SD = 39.19). The average number of stand alone agricultural mechanics programs per state was 60.69 (SD = 86.33) in the 12 reporting states (see Table 14).

Horticulture was reported as a stand alone program in 10 states with an average of 31.05% (min = 5.63, max = 58.70, SD = 17.73) of the programs offering this course. The average number of stand alone horticulture programs per state was 43.09 (SD = 38.00) for the 11 states reporting information. Five states reported an average of 26.57% of their programs offer aquaculture (min = .33, max = 100, SD = 41.99). As a stand alone course the average number of stand alone aquaculture programs per state was 9.60 (SD = 8.08) in the five states reporting information. Plant science was reported as a stand alone program in six states with an average of 25.16% (min = .84, max = 100, SD = 37.63) offering the course. The average number of stand alone plant science programs per state was 16.17 (SD = 16.92) for the five states reporting information. Eight states reported forestry as a stand alone class with an average of 22.29% programs offering this course (min = 1.32, max = 78.98, SD = 26.98). Eight states reported an average number of 18.38 (SD = 12.53) forestry programs as a stand alone program (see Table 14).

Five states reported an average of 22.14% of their programs offer large animal science as a stand alone program (min = 1.99, max = 62.07, SD = 23.76). In the five states the average number of stand alone large animal science programs per state was 9.60 (SD = 6.84). Landscaping was reported as a state alone program in nine states with an average of 16.77% (min = 1.68, max = 49.74, SD = 14.61) of the programs in the state offering the course. Five states reported an average number of 24.11 (SD = 30.27) programs offering landscaping as a stand alone program. One state reported agricultural sciences as a stand alone class with an average of 13.79% (min = 13.79, max = 13.79) of their programs offering this course. Agribusiness management was reported as a stand alone program in eight states with an average of 13.75% (min = 5.24, max = 28.72, SD = 7.77) offering the course. The average number of stand alone agribusiness programs per state was 19.50 (SD = 21.36) in the eight states reporting information (see Table 14).

Environmental sciences was reported as a stand alone program in seven states with an average of 13.11% (min = 1.45, max = 32.21, SD = 11.53) offering the course. In the seven states the average number of stand alone environmental sciences programs per state was 22.13 (SD = 38.19). Three states reported an average of 12.46% of their programs offer wildlife management as a stand alone program (min = .66, max = 34.48, SD = 19.09) offering the course. The average number of stand alone wildlife management programs per state was 6.33 (SD = 4.73) of the three states reporting information. Marine biology was reported as a stand alone program in two states with an average of 11.61% (min = 2.17, max = 21.05, SD = 13.35) of the programs offering the course. The average number of stand alone marine biology programs per state was 2.50 (SD = 2.12) in the two states reporting information (see Table 14).

Three states reported an average of 11.38% of their programs offer animal processing as a stand alone program (min = 6.12, max = 21.74, SD = 8.97). The average number of stand alone animal processing programs per state was 8.50 (SD = 5.92) in the three states. Small animal science was reported as a stand alone program in six states with an average of 11.23% (min = .56, max = 31.88, SD = 8.97) of the programs offering the course. The average number of stand alone small animal science programs per state was 16.17 (SD = 13.23) for the six states reporting data. Floriculture was reported as a stand alone program in eight states with an average of 10.99% (min = 5.04, max = 17.22, SD = 4.36) of the programs offering the course. The average number of stand alone floriculture programs per state was 15.00 (SD = 7.71) for the eight states. Turf management was taught as a stand alone program in five states with an average of 10.30% (min = 4.08, max = 17.39, SD = 6.47) of the programs offering the course. Five states reported an average number of 10.60 (SD = 9.84) programs with turf management as stand alone programs. Three states reported an average of 9.58% of their programs offer soil science as a stand alone program (min = 4.08, max= 15.97, SD = 5.99). The average number of stand alone soil science programs per state was 21.50 (SD = 25.04) for the three states (see Table 14).

Agriculture leadership and personal development was reported as a stand alone program in one state with an average of 8.12% (min = 8.12, max = 8.12) programs offering the course. The average number of stand alone agriculture leadership and personal development programs per state was 29.00 for the one state reporting information. Four states reported an average of 7.70% of their programs offer equine sciences as a stand alone program (min = 6.12, max = 9.52, SD = 1.67) offering the

course. The average number of stand alone equine science programs per state was 13.75 (SD = 14.01) of the four states reporting. Advanced biological animal science was reported as a stand alone program in one state with an average of 4.76% (min = 4.76, max = 4.76) programs offering. The average number of stand alone advanced biological animal science programs per state was 29.00 in the one state reporting information. Veterinary Sciences was reported as a stand alone program in six states with an average of 3.85% (min = .56, max = 6.62, SD = 2.56) of programs offering the course. The average number of stand alone veterinary sciences programs per state was 4.83 (SD = 4.54) of the six states reporting information. Six states reported an average of 3.40% of their programs offer biotechnology as a stand alone program (min = .32, max = 6.90, SD = 2.63). The average number of stand alone biotechnology programs per state was 4.83 (SD = 7.47) in the six states. Anatomy and physiology was reported as a stand alone program in two states with an average of 2.45% (min = .56, max = 4.35, SD = 2.68) of the programs offering the course. The average number of stand alone anatomy and physiology programs per state was 2.50 (SD = .71) in the two states (see Table 14).

Table 14

*Stand Alone Program of High School & Technical Schools\**

	Percent of Programs in State					Total Number of Programs in State				
	Min	Max	<i>M</i>	<i>SD</i>	States	Min	Max	<i>M</i>	<i>SD</i>	States
Renewable Energy	100.00	100.00	100.00	0.00-	1	357.00	357.00	357.00	0.00	1
Agriculture and Natural Resources	2.17	100.00	47.94	42.58	11	1.00	350.00	94.17	116.09	12
Agricultural Mechanics	2.17	100.00	44.64	39.19	12	1.00	284.00	60.69	86.33	13
Horticulture	5.63	58.70	31.05	17.73	10	5.00	138.00	43.09	38.00	11
Aquaculture	.33	100.00	26.57	41.99	5	1.00	19.00	9.60	8.08	5
Plant Science	.84	100.00	25.16	37.63	6	1.00	44.00	16.17	16.92	6
Forestry	1.32	78.95	22.29	26.98	8	3.00	37.00	18.38	12.53	8
Large Animal Science	1.99	62.07	22.14	23.76	5	3.00	18.00	9.60	6.84	5
Landscaping	1.68	49.74	16.77	14.61	9	2.00	97.00	24.11	30.27	9
Agricultural Sciences	13.79	13.79	13.79	0.00	1	4.00	4.00	4.00	0.00	1
Agribusiness Management	5.24	28.72	13.75	7.77	8	2.00	56.00	19.50	21.36	8
Environmental Sciences	1.45	32.21	13.11	11.53	7	1.00	115.00	22.13	38.19	8
Wildlife Management	.66	34.48	12.46	19.09	3	1.00	10.00	6.33	4.73	3
Marine Biology	2.17	21.05	11.61	13.35	2	1.00	4.00	2.50	2.12	2

Table 14 (Continued)

*Stand Alone Program of High School & Technical Schools\**

	Percent of Programs in State					Total Number of Programs in State				
	Min	Max	<i>M</i>	<i>SD</i>	States	Min	Max	<i>M</i>	<i>SD</i>	States
Animal Processing	6.12	21.74	11.38	8.97	3	3.00	15.00	8.50	5.92	4
Small Animal Science	.56	31.88	11.23	11.83	6	1.00	44.00	16.17	13.23	6
Floriculture	5.04	17.22	10.99	4.36	8	3.00	26.00	15.00	7.71	8
Turf Management	4.08	17.39	10.30	6.47	5	2.00	26.00	10.60	9.84	5
Soil Science	4.08	15.97	9.58	5.99	3	2.00	57.00	21.50	25.04	4
Agriculture Leadership and Personal Development	8.12	8.12	8.12	0.00	1	29.00	29.00	29.00	0.00	1
Equine Sciences	6.12	9.52	7.70	1.67	4	3.00	34.00	13.75	14.01	4
Advanced Biological Animal Science	4.76	4.76	4.76	0.00	1	17	17	17	0.00	1
Veterinary Sciences	.56	6.62	3.85	2.56	6	1.00	11.00	4.83	4.54	6
Biotechnology	.32	6.90	3.40	2.63	6	1.00	20.00	4.83	7.47	6
Anatomy and Physiology	.56	4.35	2.45	2.68	2	2.00	3.00	2.50	.71	2

\* 1 state did not report total program numbers, only indicating program was offered, therefore the numbers of states reporting do not match.

\*\* 36% of reporting states reported data

### *Incorporated Program in High Schools and Technical Schools*

Respondents were asked to identify the total number of subject matter courses taught within their states. The percentages and total number of incorporated programs was calculated from the number of high school and technical school programs reported. The total numbers of incorporated programs were calculated to give a percentage of programs in the 36 states that reported numbers. Eleven states reported an average of 83.18% of their programs included soil sciences into existing courses (min = 31.25, max = 100.00, SD = 24.04). The average number of programs which offered soil science incorporated into existing courses was 131 programs (SD = 99.80) per state for the 11 states reporting. Plant science was incorporated into existing courses on an average of 80.85% (min = 31.25, max = 100, SD = 24.59) of the programs in 12 states. Twelve states offer plant science with an average of 117.25 (SD = 102.22) programs per state which were incorporating plant science into existing courses (see Table 15).

Twelve states reported an average of 79.38% of their programs offer agribusiness management by incorporating into existing programs (min = 8.79, max = 100, SD = 29.40). The average number of programs where agribusiness management was incorporated into existing courses was 114.25 (SD = 105.56) programs per state with 12 states reporting. Anatomy and physiology was reported by nine states with an average of 78.08% (min = 14.49, max = 100, SD = 34.62) of the programs incorporating anatomy and physiology into existing courses. The average number of programs per state where anatomy and physiology is incorporated into existing courses was 112.78 (SD = 105.84) programs with nine states reporting. Environmental sciences was incorporated into existing programs in an average of 72.66% (min = 2.20, max = 100, SD = 39.50) of the

programs in 11 states. Ten states incorporated horticulture into existing programs in an average of 72.16% (min = 25, max = 100, SD = 28.93) of the programs. The number of programs incorporating horticulture into existing courses was on average 98.40 (SD = 100.90) programs per state with ten states reporting (see Table 15).

Twelve states reported an average of 71.60% of their programs offer large animal science as incorporated into existing courses (min = 16.67, max = 100, SD = 30.79). Of the 12 states reporting large animal science incorporated into existing courses an average of 92.75 (SD = 94.65) programs per state have such offerings. Landscaping was incorporated into existing courses in 13 states with an average of 64.87% (min = 4.08, max = 100, SD = 36.92) of programs offering landscaping. The average number of programs incorporating landscaping into existing courses was 94.08 (SD = 110.90) programs per state with 13 states reporting. Floriculture was incorporated by ten states into existing courses in an average of 63.51% (min = 10.42, max = 100, SD = 38.39) of the programs. Of the ten states reporting floriculture incorporated into existing programs, the average number of programs offering floriculture this way was 91.40 (SD = 107.04) programs per state. Twelve states reported an average of 61.18% (min = 10.99, max = 100, SD = 42.03) of their programs offer agricultural and natural resources as incorporated into existing programs. The average number of programs incorporating agriculture and nature resources into existing was 94.75 (SD = 114.53) programs per state with 12 states reporting (see Table 15).

Eleven states reported agricultural mechanics was incorporated into existing courses in an average of 61.04% (min = 19.87, max = 100, SD = 34.96) of their programs. In the 11 states offering agricultural mechanics incorporated into existing

courses an average of 98.73 (SD = 110.75) programs per state was found. Thirteen states reported an average of 60.62% of their programs offer veterinary sciences incorporated into existing programs (min = 10.42, max = 100, SD = 40.22). The average number of programs with veterinary sciences incorporated into existing programs was 81.15 (SD = 109.22) per state with 13 states reporting. Small animal science was incorporated into existing courses in an average of 60.25% (min = 10.99, max = 100, SD = 33.14) of the programs in 13 states. In the 13 states offering small animal science incorporated into existing courses an average of 117.25 (SD = 105.17) programs per state was found. Eleven states reported an average of 59.60% of their programs offer biotechnology in existing courses (min = 5.49, max = 100, SD = 39.20). The average number of programs where biotechnology is incorporated into existing courses per state was 64.64 (SD = 87.75) programs with 11 states reporting (see Table 15).

Equine sciences was reported in thirteen states as incorporated into existing courses in an average of 57.93 (min = 6.62, max = 100, SD = 36.77) of the programs. The average number of programs where equine science is being incorporated into existing programs per state was 73.46 (SD = 96.27) programs in 13 states. Wildlife management was incorporated into existing courses in an average of 56.96% (min = 8.33, max = 100, SD = 41.63) of the programs in ten states. The average number of programs where wildlife management is incorporated into existing courses was 86.70 (SD = 116.11) programs per state with 10 states reporting. Animal processing was found to be incorporated into existing programs in nine states with an average of 52.00% (min = 1.32, max = 100, SD = 45.94) of the programs offering animal processing. Of the nine states which reported total numbers of programs offering animal processing incorporated into

existing courses, there was an average of 74.00 (SD = 109.92) programs per state (see Table 15).

Forestry was reported by ten states to be incorporated into existing programs with an average of 51.34% (min = 4.35, max = 100, SD = 41.94) of the programs with the offering. The average number of programs where forestry is incorporated into existing courses per state was 82.20 (SD = 107.84) programs with ten states reporting. Thirteen states reported an average of 51.32% of their programs offer turf management as being incorporated into existing courses (min = 2.20, max = 100, SD = 39.08). An average of 81.15 programs (SD = 109.22) per state with 13 states reporting turf management as incorporated into existing courses. Marine biology was reported by two states to be incorporated into existing courses with an average of 50.24% of programs offering (min = 10.75, max = 89.74, SD = 55.85). In the two states where marine biology is incorporated into existing courses on average of 145.50 (SD = 177.48) programs per state offer marine biology in existing courses. Twelve states reported an average of 42.74% of their programs incorporated aquaculture into existing programs (min = 9.93, max = 100, SD = 41.61). The average number of programs where aquaculture is incorporated into existing courses was 77.67 (SD = 115.01) programs with 12 states reporting (see Table 15)

Table 15

*Incorporated Program of High Schools and Technical Schools \**

	Percent of Incorporated Programs					Total Number of Incorporated Programs				
	Min	Max	<i>M</i>	<i>SD</i>	States	Min	Max	<i>M</i>	<i>SD</i>	States
Soil Science	31.25	100.00	83.18	24.04	11	15.00	316.00	131.00	99.80	11
Plant Science	31.25	100.00	80.85	24.59	12	5.00	316.00	117.25	102.22	12
Agribusiness Management	8.79	100.00	79.38	29.40	12	4.00	316.00	114.25	105.56	12
Anatomy and Physiology	14.49	100.00	78.08	34.62	9	3.00	316.00	112.78	105.84	9
Environmental Sciences	2.20	100.00	72.66	39.50	11	2.00	271.00	92.82	92.64	11
Horticulture	25.00	100.00	72.16	28.93	10	5.00	316.00	98.40	100.90	10
Large Animal Science	16.67	100.00	71.60	30.79	12	1.00	316.00	92.75	94.65	12
Landscaping	4.08	100.00	64.87	36.92	13	2	316.00	94.08	110.90	13
Floriculture	10.42	100.00	63.51	38.39	10	5.00	316.00	91.40	107.04	10
Agricultural and Natural Resources	10.99	100.00	61.18	42.03	12	4.00	316.00	94.75	114.53	12
Agricultural Mechanics	19.87	100.00	61.04	34.96	11	2.00	316.00	98.73	110.75	11
Veterinary Sciences	10.42	100.00	60.62	40.22	13	5.00	316.00	81.15	109.22	13
Small Animal Science	10.99	100.00	60.25	33.14	13	4.00	316.00	117.25	105.17	13

Table 15 (continued)

## Incorporated Program of High Schools and Technical Schools

	Percent of Incorporated Programs					Total Number of Incorporated Programs				
	Min	Max	<i>M</i>	<i>SD</i>	States	Min	Max	<i>M</i>	<i>SD</i>	States
Biotechnology	5.49	100.00	59.60	39.20	11	3.00	271.00	64.64	87.75	11
Equine Sciences	6.62	100.00	57.93	36.77	13	2.00	316.00	73.46	96.27	13
Wildlife Management	8.33	100.00	56.96	41.63	10	4.00	316.00	86.70	116.11	10
Animal Processing	1.32	100.00	52.00	45.94	9	2.00	316.00	74.00	109.92	9
Forestry	4.35	100.00	51.34	41.94	10	2.00	316.00	82.20	107.84	10
Turf Management	2.20	100.00	51.32	39.08	13	2.00	316.00	81.15	109.22	13
Marine Biology	10.75	89.74	50.24	55.85	2	20.00	271.00	145.50	177.48	2
Aquaculture	9.93	100.00	42.74	41.61	12	1.00	316.00	77.67	115.01	12

\* 47% of reporting states reported data

### *Middle School Programs*

The respondents were asked to identify the number of middle school programs in their state, along with the number of middle school FFA programs. Respondents were also asked to identify the number and types of middle school facilities that could be found in the respective states. Seventeen states reported that middle school agriculture programs could be found in their states, with an average of 16.24 (min = 1, max = 70, SD = 24.66) programs per state. Nine states reported that middle school FFA chapters could be found in their states with an average of 10.00 (min = 1, max = 48, SD = 14.91) chapters per state (see Table 16).

### *Middle School Facilities*

Agricultural business labs were reported by a total of two states with an average of two (min = 1, max = 3, SD = 1.41) labs per state. Six states reported agricultural mechanics labs, with an average of 20.00 (min = 1, max = 57, SD = 24.91) labs per state. Animal science labs were reported by five states with an average of 5.60 (min = 1, max = 15, SD = 5.46) labs per state. Four states reported aquaculture labs with tanks with an average of 9.25 (min = 1, max = 25, SD = 11.32) labs per state. Aquaponics labs were reported by one state with three labs (see Table 16).

One state reported crops with 38 laboratories. Floral design labs were reported by one state with one lab. Seven states reported greenhouses with an average of 13.71 (min = 1, max = 50, SD = 19.12) per state. One state reported meat processing facilities with one lab in the state. Small animals labs were reported by four states with an average of 7.75 (min = 1, max = 18, SD = 7.93) labs per state. One state reported one wood processing lab (see Table 16).

Computer labs were reported by one state with of 43 labs. One state reported landscaping labs with 43 labs. Agriscience labs were reported by one state with 25 labs. One state reported seven nursery labs and one state reported 18 garden labs (see Table 16).

Table 16

*Middle School Programs and Facilities*

	Min	Max	<i>M</i>	<i>SD</i>	States
Total Number of Middle School Programs	1	70	16.24	24.66	17
Totals Number of Middle School FFA Chapters	1	48	10.00	14.91	9
Agriculture Business Lab	1	3	2.00	1.41	2
Agricultural Mechanics Lab	1	57	20.00	24.91	6
Animal Science Labs	1	15	5.60	5.46	5
Aquaculture Labs with Tanks	1	25	9.25	11.32	4
Aquaponics Labs	3	3	3.00	0.00	1
Crops	38	38	38.00	0.00	1
Floral Design Labs	1	1	1.00	0.00	1
Greenhouse	1	50	13.71	19.12	7
Meat Processing Facilities	1	1	1.00	0.00	1
Small Animal Labs	1	18	7.75	7.93	4
Wood Processing Labs	1	1	1.00	0.00	1
Computer Labs	43	43	43.00	0.00	1
Landscaping Lab	43	43	43.00	0.00	1
Agriscience Lab	25	25	25.00	0.00	1
Nursery Lab	7	7	7.00	0.00	1
Garden Lab	18	18	18.00	0.00	1

### *High School Programs*

State supervisors were asked to provide the total number of high school programs and the total number of high school FFA chapters, along with the total number and type of facilities which could be found in the respondents' state. Thirty-three states reported an average of 136.30 (min = 1, max = 357, SD = 96.79) high school programs per state. Twenty-six states reported an average of 117.62 (min = 1, max = 357, SD = 91.90) high school FFA chapters (see Table 17).

### *High School Facilities*

Ten states reported an average of 74.80 (min = 1, max = 317, SD = 113.14) agricultural business labs per state. Agricultural mechanics labs were reported by 22 states with an average of 87.68 labs (min = 1, max = 317, SD = 87.99) per state. Animal science labs were reported by 16 states with an average of 31.38 (min = 2, max = 120, SD = 30.21) labs per state. Sixteen states reported aquaculture labs with tanks with an average of 26.69 labs (min = 4, max = 111, SD = 30.76) per state and eight states reported aquaponics labs on an average of 6.38 (min = 2, max = 15, SD = 4.72) per state. Biotechnology labs were reported by 11 states with an average of 3.55 (min = 1, max = 10, SD = 2.46) labs per state. Fourteen states indicated crops labs could be found in their states with an average of 28.36 labs (min = 1, max = 172, SD = 44.62) and 17 states reported floral design labs with an average of 27.71 labs (min = 2, max = 250, SD = 58.42) per state (see Table 17).

Table 17

*High School Programs and Facilities*

	Min	Max	<i>M</i>	<i>SD</i>	States
Total Number of High School Programs	1	357	136.30	96.79	33
Total Number of High School FFA Chapters	1	357	117.62	91.90	26
Agriculture Business Labs	1	317	74.80	113.14	10
Agricultural Mechanics Labs	1	317	87.68	87.99	22
Animal Science Labs	2	120	31.38	30.21	16
Aquaculture with Tanks	4	111	26.69	30.76	16
Aquaponics Labs	2	15	6.38	4.72	8
Biotechnology Labs	1	10	3.55	2.46	11
Crops	1	172	28.36	44.62	14
Floral Design Labs	2	250	27.71	58.42	17
Greenhouse	2	290	78.50	72.84	20
Meat Processing Facilities	1	12	5.78	4.41	9
Small Animal Labs	1	80	17.47	19.69	15
Computer Lab	2	194	92.00	96.56	3
Landscaping Lab	194	194	194.00	0.00	1
Agriscience Lab	31	111	71.00	56.57	2
Nursery Lab	32	32	32.00	0.00	1
Animal Science Farm	6	6	6.00	0.00	1
Garden Lab	80	80	80.00	0.00	1

Greenhouses were reported by 20 states with an average of 78.50 labs per state (min = 2, max = 290, SD = 72.84) and nine states reported meat processing facilities with an average of 5.78 labs (min = 1, max = 12, SD = 4.41) per state. Small animal labs were indicated by 15 states with an average of 17.47 labs per state (min = 1, max = 80, SD = 19.69) and three states reported computer labs with an average of 92 (min = 2, max = 194, SD = 96.56) labs per state. Landscaping labs were reported by one state with an average of 194 labs. Agriscience labs were reported by two states with an average of 71.00 (min = 31, max = 111, SD = 56.57) labs per state and nursery labs were reported by one state with 32 labs. One state reported six animal science farms and one state reported 80 garden labs (see Table 17).

#### *Technical Schools Programs*

Respondents were asked to indicate the total number of technical schools and FFA chapters, along with the number and type of facilities located at the technical schools. Fifteen states reported technical school programs with an average of 10.67 (min = 1, max = 57, SD = 14.26) programs per state (see Table 18).

#### *Technical Schools Facilities*

Agribusiness labs were reported by two states on an average of two (min = 1, max = 3, SD = 1.41) labs per state and seven states reported agricultural mechanics labs with an average of five (min = 1, max = 8, SD = 2.71) labs per state. Animal science labs were reported by two states with an average of 3.50 (min = 3, max = 4, SD = .71) labs per state. Aquaculture labs with tanks were reported by five states with an average of three (min = 1, max = 5, SD = 1.87) labs per state and aquaponics labs were reported by three states with an average of 1.67 (min = 1, max = 2, SD = .58) labs per state. Two states

indicated their states had biotechnology labs with an average of one (min = 1, max = 1) lab per state. Crops facilities were reported by two states with an average of 2.50 labs per state (min = 2, max = 3, SD = .71) and five states reported floral design labs with an average of 12.80 (min = 2, max = 30, SD = 13.97) labs per state. Greenhouses were reported by eight states with an average of 8.13 (min = 1, max = 20, SD = 7.32) greenhouses per state and one state reported three meat processing labs (see Table 18)..

Five states reported small animal labs with an average of 2.20 (min = 1, max = 4, SD = 1.30) labs per state and one state reported one wood processing lab. One state reported four computer labs. Landscaping was reported by one state with four labs and one state reported agriscience labs with two. Gardens were reported by one state with two labs (see Table 18).

#### *Average Number of FFA Members, Chapters and National Chapter Awards per State*

Data were collected from the National FFA on the number of members during 2007 – 2008 the year, along with the total number of chapters for each state and the number of chapters which were national chapter award chapters. The average number of members reported by all 50 states including Puerto Rico and the Virgin Islands was of 9,764.67 (min = 83, max = 66,225, SD = 13153.09). The average number of chapters in 2007-2008 was of 143.06 (min= 2, max = 987, SD = 155.37) chapters per state. National chapter awards were earned by an average of 12.15 (min = 0, max = 66, SD = 12.57) per state (see Table 19).

Table 18

*Technical Schools and Facilities*

	Min	Max	M	SD	States
Total Number of Technical School Programs	1	57	10.67	14.26	15
Agribusiness Labs	1	3	2.00	1.41	2
Agricultural Mechanics Labs	1	8	5.00	2.71	7
Animal Sciences Lab	3	4	3.50	.71	2
Aquaculture Labs with Tanks	1	5	3.00	1.87	5
Aquaponics Labs	1	2	1.67	.58	3
Biotechnology Labs	1	1	1.00	0.00	2
Crops	2	3	2.50	.71	2
Floral Design Labs	2	30	12.80	13.97	5
Greenhouse	1	20	8.13	7.32	8
Meat Processing Labs	3	3	3.00	0.00	1
Small Animal Labs	1	4	2.20	1.30	5
Wood Processing Labs	1	1	1.00	0.00	1
Computer Labs	4	4	4.00	0.00	1
Landscaping	4	4	4.00	0.00	1
Agriscience labs	2	2	2.00	0.00	1
Garden	2	2	2.00	0.00	1

Table 19

*Average Number of FFA Members, Chapters and National Chapter Awards per State*

	Min	Max	<i>M</i>	<i>SD</i>
Number of Members 07-08	83	66225	9764.67	13153.09
Total Number of Chapters	2	987	143.06	155.37
National Chapter Awards	0	66	12.15	12.57

*State and American Degrees Earned by FFA Members*

Data were collected from the National FFA Organization on the number of American Degrees which were awarded in 2007-2008. Respondents were asked to indicate the number of State FFA Degrees which had been awarded in 2008. On average 3.24% (min = 0, max = 9.23, SD = 2.21) of the members per state earned their State FFA Degree. An average of .69% (min = 0, max = 2.48, SD = .57) of the membership nationwide earned the American FFA Degree (see Table 20).

Table 20

*State and American Degrees Earned by FFA Members*

	Percentages of Total Degrees				Total Number of Degrees			
	Min	Max	<i>M</i>	<i>SD</i>	Min	Max	<i>M</i>	<i>SD</i>
State Degrees*	0	9.23	3.24	2.21	0	1316	271.09	265.24
American Degrees**	0	2.48	.69	.57	0	374	64.25	84.71

\* State degrees data was collected from reporting states

\*\* American degree data was collected from the National FFA website

*What Types of Certifications Can Students Earn?*

State supervisors were asked to indicate if students could earn certifications through high school agriculture programs. Seventeen (48.6%) respondents indicated that students could earn certifications through high school agriculture education programs in their state. Ten (29.4%) state supervisors indicated students could earn welding certification while four (12.1%) state supervisors indicated students could earn certification in electricity in their state. Students could earn certification in plumbing in three (9.1%) states, while four (12.1%) state supervisors indicated students could earn certification in carpentry and floriculture through their high school agricultural programs (see Table 21).

Table 21

*What Types of Certifications Can Students Earn?*

	N	%
Students Earn Certifications	17	48.6
Welding	10	29.4
Electricity	4	12.1
Plumbing	3	9.1
Carpentry	4	12.1
Floriculture	4	12.1

*Teachers Required to make Supervised Agriculture Experience Visits?*

When asked if teachers were required to make and report supervised agricultural experience (SAE) visits to students, 20 (57.1%) state supervisors required teachers to make SAE visits. Of the 20 respondents, 13 (36.1%) did not require teachers to report

those visits in any way. Eight (22.2%) state supervisors indicated teachers have to report SAE visits to their respective schools and five (13.9%) had to report visits to the school districts. Six (16.7%) respondents required teachers to report SAE visits to the state (see Table 22).

Table 22

*Teachers Required to make Supervised Agriculture Experience*

	N	%
Required to Make SAE Visits	20	57.1
None	13	36.1
Reported to school	8	22.2
Reported to School District	5	13.9
Reported to State	6	16.7

*Recommendations for the Number of Supervised Agricultural Experience Visits*

State supervisors were asked if there is an official recommendation on the number of supervised agriculture experience visits that teachers should make to students.

Twenty-three states responded to the question with an average of 2.83 visits per student recommended (min = 0, max = 6, SD = 1.53) (see Table 23).

Table 23

*Recommendations for the Number of Supervised Agricultural Experience Visits*

	Min	Max	M	SD	States
SAE Visits	0	6	2.83	1.53	23

*Authority to Require Teachers to Attend State Teachers Conference and Consequences*

State supervisors were asked to indicate if they had the authority to require teachers to attend state teachers' conferences and if they had the authority to enforce consequences for missing the event. Four (11.1%) respondents had the authority to require teachers to attend state teacher's conferences. Thirty (88.2%) state supervisors had no authority to require teachers to attend state conferences. Of the four respondents who had authority three (8.8%) had a conference with individual for not attending conferences and one (2.9%) respondent would send a letter to the teachers school administration (see Table 24).

Table 24

*Authority to Require Teachers to Attend State Teachers Conference and Consequences*

	N	%
Require Teachers to Attend State Teachers Conference	4	11.1
None	30	88.2
Conference with individual	3	8.8
Letter to school administrator	1	2.9

*Teachers Contracts*

Respondents were asked to indicate the number of teachers in the state and the length of time of the teachers' contracts. Thirteen states reported an average of 40.40 teachers per state on a 180 day contract (min = 0; max=141; SD = 48.40). Thirteen states reported an average of 65.77 teachers per state on a 200 day contract (min =0; max=158; SD = 57.52). Thirteen states had an average of 49.92 teachers per state on 220 day contracts (min = 0; max = 200; SD = 57.21). Thirteen states had an average of 103.85

teachers per state on 240 day contracts (min=7; max = 437; SD = 134.65). Nine and a half month contracts were found in two states with an average of 15.50 teachers per state (min=0; max = 31; (SD = 21.92). Two states had an average of 12 teachers per state on 10.5 month contracts (min=7; max = 437; (SD = 16.97). One state had one teacher on a 235 day contract and one state had six teachers on a 230 day contract. Three teachers in one state were on 225 day contracts while one teacher in a state had a 215 day contract. One state reported contracts of 210, 207, 200 + days as well as year round contracts (see Table 25).

Table 25

*Teachers Contracts*

	Min	Max	<i>M</i>	<i>SD</i>	States
180 Days	0	141	40.08	48.40	13
200 Days	0	158	65.77	57.52	13
220 Days	0	200	49.92	57.21	13
240 Days	7	437	103.85	134.65	13
9 ½ Months	0	31	15.50	21.92	2
10 ½ Months	0	24	12.00	16.97	2
235 Days	1	1	1.00	0.00	1
230 Days	6	6	6.00	0.00	1
225 Days	3	3	3.00	0.00	1
215 Days	3	3	3.00	0.00	1
210 Days	1	1	1.00	0.00	1
207 Days	1	1	1.00	0.00	1
200+	1	1	1.00	0.00	1
Year Round	1	1	1.00	0.00	1

\* Sixteen states reported data

*Number of State Supervisors Currently Employed*

State supervisors were asked to identify the number of supervisors in the respondent's state. Twenty-two (66.7%) of the state supervisors indicated they were the only supervisor. Seven (21.2%) respondents indicated two to three supervisors in the state and four (12.1%) respondents had four to six supervisors in the state (see Table 26).

Table 26

*Number of State Supervisors Currently Employed*

	N	%
1 supervisor	22	66.7
2-3 supervisors	7	21.2
4-6 supervisors	4	12.1

## CHAPTER V

### Summary, Conclusions, and Recommendations

#### *Purpose of the Study*

The purpose of this study was to determine what differences may exist among state agricultural education programs in the United States, including Puerto Rico and the Virgin Islands. How do agricultural education program laboratories/facilities differ across the country and in what ways? As a means of developing this study answers to the following questions were sought:

#### *Research Questions*

1. What is the role of lead state supervisors in supervising teachers?
2. Who is responsible for coordinating and communicating information about the Career Development Events at the state level?
3. Who is responsible for working with the State FFA Officer Team?
4. How is input from teachers sought during statewide curriculum changes?
5. What are state supervisors preferred means of communicating with agricultural educators?
6. What courses are taught in each state?
7. What subject matter is taught in existing courses?
8. What types of laboratories/facilities are available to agricultural education programs?
9. Based on state membership what percent of members receive State FFA and American FFA Degrees?

### *Summary*

The accessible population for the study included 52 individuals who were the lead state supervisors in the spring of 2009 including Puerto Rico and the Virgin Islands. Of the 52 mailed surveys 36 (69%) were returned. A majority of the respondents included males between the ages of 51 – 60 who were currently the lead state supervisor.

### *Research Question One*

A majority of state supervisors who responded to the survey communicated career development event information to the agriculture teachers along with assuming responsibility for coordinating the CDE schedule. A majority of lead state supervisors include teachers' opinions in making changes to career development events as well as when making changes to the agriculture education curriculum. A majority of the respondents make at least one visit to first year teachers.

### *Research Question Two*

A majority of state supervisors have a direct role in communicating and coordinating career development event information. In a majority of the respondent states, the executive secretary had primary responsibility for communicating and coordinating the CDE events. Other individuals involved in coordinating career developments events included state supervisors with FFA responsibilities, university faculty and Extension service personnel.

### *Research Question Three*

The majority of state supervisors indicated that the executive secretary is responsible for working with the state FFA officer team. The second person most likely

to work with the state FFA officer team is the lead state supervisor followed closely by the state supervisor with FFA responsibilities and university faculty.

#### *Research Questions Four*

State wide teacher's conferences were the most often used venue to include teacher's opinions on changes to high school agriculture curriculum. Other means of receiving teachers' input on changes to the curriculum included regional teachers meetings, surveys, use of email and state agricultural teacher's organization. Two respondents indicate there is no formal involvement of agricultural teachers in making changes to the agriculture education curriculum.

#### *Research Question Five*

Respondents were asked to indicate their top five choices of communicating with teachers. The most popular means of communication by state supervisors was email. List serve (group email) was the second most frequently used method of communication followed by telephone calls and websites and by teachers' conferences.

#### *Research Question Six*

A variety of courses and subject matter were taught in all responding states that returned the survey. Subject matter taught as stand alone courses included renewable energy, agriculture and natural resources, agricultural mechanics, horticulture, aquaculture, plant science, forestry, large animal science, landscaping, agricultural sciences, agribusiness management, environmental sciences, wildlife management, marine biology, animal processing, small animal science, floriculture, turf management, soil science, agricultural and leadership and personal development, equine sciences,

advanced biological animal science, veterinary sciences, biotechnology and anatomy and physiology.

#### *Research Question Seven*

State supervisors were asked to indicate the type of facilities that could be found in the middle school, high school and technical schools. The research indicates there were a variety of facilities among the state programs. Available facilities and labs included agricultural business labs, agricultural mechanics labs, animal science labs, aquaculture with tanks, aquaponics labs, biotechnology labs, crops, floral design labs, greenhouses, meat processing facilities, small animal labs, computer labs, landscaping labs, agriscience lab, nursery labs, animal science farms, and gardens. Greenhouse facilities were the most common among middle school programs with agricultural mechanics labs the most common facilities found in high school and technical programs.

#### *Research Questions Eight*

Data were collected from the National FFA website for all fifty states, including Puerto Rico and the Virgin Islands, on the number of American degrees awarded in 2008. When compared to national membership data less than one percent of the total membership received the American degree. Data for state degrees were determined from survey respondents. It was found that some state did not award any state degrees in 2008, while a majority of the states awarded the state degrees to an average of three percent of their membership.

## *Conclusions*

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

1. Lead state supervisors and executive secretaries are primarily responsible for coordinating and communicating career development event information to agriculture teachers.
2. State teacher conferences are the main source for state supervisors to solicit teachers' opinions in making changes to the career development events and high school agricultural curriculum.
3. The majority of state supervisors make at least one visit to first year agriculture teachers.
4. Executive secretaries are primarily in charge of working with the state FFA officer teams.
5. State supervisors communicate with agriculture teachers on an as needed basis, with email as the preferred method of communication.
6. A majority of the responding states do not keep data on the number of stand alone programs or subject matter taught in combined courses offered throughout their state.
7. A majority of the responding states do not keep data on the number and types of facilities found in agricultural education programs in their state.
8. Less than one percent of the National membership received American degrees in 2008, while some states had no FFA members receive the American degree in 2008.
9. Slightly more than three percent of the membership in responding states received the State degree; while some states had no FFA members receive State degrees in 2008.
10. Non-license certification can be earned by students in a majority of the responding states.
11. More than two-thirds of the state supervisors have no authority to require agriculture teachers to attend state teacher conferences.

12. Slightly more than half of states require teachers to make supervised agriculture experience visits to students; however, a third of the states do not require teachers to report those visits.
13. A majority of states do not keep data on teacher's contracts.
14. Two-thirds of the states have only one state supervisor.

### *Recommendations*

The researcher makes the following recommendations based on the results of this study:

1. All states should have some formal means of incorporating teacher's opinions into making changes to agricultural curriculum and career development events.
2. All state supervisors should make at least one visit the first year to all new agriculture teachers.
3. States should consider using a set schedule to communicate information to agriculture teachers on a regular basis for consistency.
4. All states should collect data on the types of programs offered and the facilities/labs available in their state.
5. If supervised agricultural experiences are required in a state, there should be some means of reporting those visits for counting SAE visits as a part of the teacher's contracts.
6. State supervisors should have more authority over teacher's attendance at state teacher conferences, which would ensure teachers receive up to date information.
7. States should encourage FFA members to apply for State and American degrees.
8. State supervisors should keep data on the length of all agriculture teachers' contracts in their state.
9. If this study is replicated it should incorporate questions regarding requirements for attaining state degrees, if they differ from national rules.

## REFERENCES

- Arrington, L. & Cheek, J. (1990). SAE scope and student achievement in agribusiness and natural resources education. *Journal of Agricultural Education*, 55 – 61. Retrieved September 7, 2008, from <http://pubs.aged.tamu.edu/jae/pdf/vol31/31-02-55.pdf>
- Ary, D., Jacobs, L., Razavieh, A. & Sorensen, C. (2006). *Introduction to research in education* (7<sup>th</sup> ed). California: Thomson Wadsworth.
- Barrick, K. (1980). *Relationship between State-Level Administrative Structure and the Role of State Supervisors of Vocational Agriculture*. Retrieved October 9, 2008.
- Barrick, K. (1985, December). Current and Expected Roles of Agriculture Supervisors. *Journal of Agricultural Education*, 27, 44 – 47. Retrieved October 9, 2008, from <http://pubs.aged.tamu.edu/jae/pdf/vol27/27-02-44.pdf>
- Cheek, J., Arrington, L., Carter, S. & Randell, R. (1994) Relationship of Supervised Agricultural Experience Program Participation and Student Achievement in Agricultural Education. *Journal of Agricultural Education*, 35(2), 1 – 5. Retrieved September 7, 2008, from <http://pubs.aged.tamu.edu/jae/pdf/vol35/35-02-01.pdf>
- Dillman, D. (2000). *Mail and internet surveys: The tailored design method* (7<sup>th</sup> ed). New York: John Wiley and Sons, Inc.
- Dyer, J. & Osborne, E. (1995). Participation in Supervised Agricultural Experience Programs: A Synthesis of Research. *Journal of Agricultural Education*, 36(1), 6-14. Retrieved December 21, 2008 from <http://pubs.aged.tamu.edu/jae/pdf/Vol36/36-01-06.pdf>
- Dyer, J. & Williams, D. (1997). Supervision of Supervised Agricultural Experience Programs: A Synthesis of Research. *Journal of Agricultural Education*, 38(4), 59-66. Retrieved December 21, 2008 from <http://pubs.aged.tamu.edu/jae/pdf/vol38/38-04-59.pdf>
- Frick, M. (1993). Developing a National Framework for a Middle School Agricultural Education Curriculum. *Journal of Agricultural Education*. Retrieved September 29, 2008, from <http://pubs.aged.tamu.edu/jae/pdf/vol34/34-02-77.pdf>
- Lynch, R. (2000). High School Career and Technical Education for the First Decade of the 21<sup>st</sup> Century. *The Journal of Vocational Education Research*, 25(2), Retrieved September 7, 2008.
- Mannebach, A. (1983). Achieving Quality Relationships with Business and Industry. *Agriculture Education Magazine*, 55(8), 4-13.

- Moore, G. (1994). Education: Children and Youth, *Encyclopedia of Agricultural Sciences*, 2. Retrieved April 13, 2009 from <http://www.cals.ncsu.edu/agexed/leap/aee500/edu.html>
- National Association of Supervisors Agricultural Education (n.d.) *National Association of Supervisors Agricultural Education Welcome*. Retrieved March 30, 2009, from <http://www.teamaged.org/stateleaders/index.html>
- National FFA Organization (2007). *Official FFA Manual*.
- Phipps, L., Osborne, E., Dyer, J. & Ball, A. (2008). *Handbook on Agricultural Education in Public Schools*. Clifton Park, NY: Delmar Learning.
- Robinson, J., Shaver, P. & Wrightsman, L. S. (1991). Criteria for scale selection and evaluation. In J.P. Robinson, P.R. Shaver, & L.S. Wrightsman (Eds). *Measures of personality and social psychological attitudes*. (pp. 1 – 16) New York: Academic Press.
- Rowan, B., Bossert, S. & Dwyer, D. (1983). Research on Effective Schools: A Cautionary Note. *American Educational Research Association*, 12(4).
- Smith, S., Lawrence, L., Gartin, S. & Odell. (1990). Major Problems Encountered in Administrating Vocational Agriculture as Perceived by State Vocational Agriculture Supervisors in the United States. *Journal of Agricultural Education*, 31, 45 – 48. Retrieved October 17, 2008, from <http://pubs.aged.tamv.edu/jae/vol31/31-02-45.pdf>
- Straquadine, G. (1987, October). Vocational Agriculture Program Quality and Factors Influencing Program Quality. *The Journal of the American Agriculture Teacher Education Association*.
- The National FFA Organization – History. (2008). *The National FFA Organization – History*. Retrieved December 2, 2008, from [http://www.ffa.org/index.cfm?method=c\\_about.History](http://www.ffa.org/index.cfm?method=c_about.History)

APPENDIX A

*Questionnaire*

## State Supervisors Roles in Agricultural Education Curriculum: A National Study



Becky Ridgeway  
Graduate Student  
Agriculture and Extension Education  
Davis College of Agriculture, Forestry and Consumer Sciences  
West Virginia University  
Morgantown, WV 26506

# State Supervisors Roles in Agricultural Education Curriculum: A National Study

**Instructions:** Answer the following questions to the best of your ability.

1. Who is in charge of communicating Career Development Event information to agriculture teachers? (Check all that apply)

- a. Head State Supervisor
- b. Executive Secretary
- c. State Supervisor with FFA responsibilities
- d. University Faculty
- e. Extension Service
- f. Other (please specify \_\_\_\_\_)

2. Who is in charge of coordinating the Career Development Event contest schedule? (Check all that apply)

- a. Head State Supervisor
- b. Executive Secretary
- c. State Supervisor with FFA responsibilities
- d. University Faculty
- e. Extension Service
- f. Other (please specify \_\_\_\_\_)

3. How are teachers involved in making changes to Career Development Events? (Check all that apply)

- a. No formal involvement
- b. Regional teacher meetings
- c. State wide teachers conferences
- d. Surveys
- e. Regional representatives
- f. State agriculture teachers organization officers
- g. Email
- h. Other (Please specify \_\_\_\_\_)

4. Prior to changes being made to high school agriculture curriculum, how do you seek the opinions of agriculture teachers? (Check all that apply)

- a. No formal involvement
- b. Regional teacher meetings
- c. State wide teachers conferences
- d. Surveys
- e. Regional representatives
- f. State agriculture teachers organization officers
- g. Email
- h. Other (Please specify \_\_\_\_\_)

5. Who is responsible for working with the State FFA Officer Team? (Check all that apply)

- a. Head State Supervisor
- b. Executive Secretary
- c. State Supervisor with FFA responsibilities
- d. University Faculty
- e. Other (please specify \_\_\_\_\_)

6. As head state supervisor, how many times a year do you visit first year teachers?

- a. 0 times a year
- b. 1 time a year
- c. 2 times a year
- d. 3 times a year
- e. 4 or more times a year

7. How often do you communicate with the agriculture teachers in your state?

- a. As needed – no formal schedule
- b. Weekly
- c. Bi-weekly
- d. Monthly
- e. Quarterly
- f. Other (please specify: \_\_\_\_\_)

8. I use the following methods to communicate with the agriculture educators in my state. Place a check mark in the second column for each communication method that you use. **Then**, using the third column rank the top **five** methods in order of frequency of use using 1 for the most frequently used, 2 for the second most frequently used, etc.

	I use the following communication methods ( <b>check all that apply</b> ).	Rate your top <b>five</b> methods of communicating with agriculture educators. ( <b>1-5</b> )
Email		
Mail (postal)		
Telephone calls		
Website		
List serve (group email)		
Newsletters (postal)		
Electronic newsletters		
Visits to schools		
Teacher conferences		
Chapter banquets		
State conventions		
Regional (state) meetings		
Regional (national) meetings		
National meetings/ conventions		
Fax		
Other (please specify)_____		
Other (please specify)_____		

9. **Please indicate the number** of programs in your state that teach the following courses as a stand alone program and the number that incorporate the content into an existing course. (List retrieved from the National Agriculture, Food and Natural Resources Career Cluster Content Standards)

	Stand Alone Program	Incorporated into existing course
Agribusiness management		
Agriculture and natural resources/ Agriculture production		
Agriculture mechanics		
Anatomy and physiology		
Animal processing		
Aquaculture		
Biotechnology		
Environmental sciences		
Equine sciences		
Floriculture		
Forestry		
Horticulture		
Landscaping		
Large animal science		
Marine biology		
Plant science		
Small animal science		
Soil science		
Turf management		
Veterinary sciences		
Wildlife management		

10. What facilities can be found in your state agriculture education programs? Using the three categories provided, **please indicate the number** of programs with each of the following laboratories/facilities.

	Middle School Programs	High School Programs	Technical School Programs
First, please indicate the number of programs and the number of FFA chapters in your state.			
Total number of agriculture programs			
Total number of FFA Chapters			
Of the programs listed above, please indicate the number of each with the following:			
Agriculture business labs			
Agricultural mechanics lab			
Animal science labs			
Aquaculture labs with tanks			
Aquaponics labs			
Biotechnology labs			
Crops/grains farms			
Floral design labs			
Greenhouse			
Meat processing facilities			
Small animal labs			
Wood processing labs			
Other (Please specify: _____)			
Other (Please specify: _____)			

9. How many FFA members in your state received the State FFA Degree in 2008?  
\_\_\_\_\_
10. Can students earn certifications/technical degrees through their agriculture education programs?
- \_\_\_\_\_ a. Yes (Please continue with question #13)  
\_\_\_\_\_ b. No (Please skip to question #14)
11. What types of non-license certificates can students earn through your state's agriculture education program? (check all that apply)
- \_\_\_\_\_ a. Welding  
\_\_\_\_\_ b. Electricity  
\_\_\_\_\_ c. Plumbing  
\_\_\_\_\_ d. Carpentry  
\_\_\_\_\_ e. Floriculture  
\_\_\_\_\_ f. Other (please list) \_\_\_\_\_
12. Are teachers required to make SAE visits?
- \_\_\_\_\_ a. Yes (Please continue with question #15)  
\_\_\_\_\_ b. No (Please skip to question #16)
13. Are teachers required to report the SAE visits they conduct? (check all that apply)
- \_\_\_\_\_ a. No  
\_\_\_\_\_ b. Yes reported to school  
\_\_\_\_\_ c. Yes reported to school district  
\_\_\_\_\_ d. Yes reported to state
14. What is the state recommended number of SAE visits a teacher should be make per student per year?  
\_\_\_\_\_

15. As state supervisor, do you have the authority to require teachers to attend state teacher conferences?

- a. Yes (Please continue with question # 18)
- b. No ( Please skip to questions #19)

16. What are the consequences if a teacher does not attend the state teacher's conference?

- a. None
- b. Conference with individual
- c. Funding of programs is withheld
- d. Note in personnel file
- e. Letter of Reprimand
- f. Letter to school administrator
- g. Other (please specify)\_\_\_\_\_

17. How many teachers do you currently have on each type of contract?

- a. 180 Days/9 month
- b. 200 Days/10 month
- c. 220 Days/ 11 month
- d. 240 Days/12 month
- e. Other (please specify: \_\_\_\_\_)

18. How many state supervisors are currently employed in your state?

- a. 1 supervisor
- b. 2 – 3 supervisors
- c. 4 – 6 supervisors
- d. 7 – 9 supervisors
- e. 10 – 13 supervisors
- f. 14 – 17 supervisors
- g. 18 plus supervisors

19. How many years experience do you have being a state supervisor?

- a. Less than one year
- b. 1 – 5 years
- c. 6 – 10 years
- d. 11 – 15 years
- e. 16 – 20 years
- f. 21 – 25 years
- g. 26 years or more

20. How many years experience do you have as the lead state supervisor?

- a. Less than one year
- b. 1 – 5 years
- c. 6 – 10 years
- d. 11 – 15 years
- e. 16 – 20 years
- f. 21 – 25 years
- g. 26 years or more

21. Before holding your current position, were you an agriculture teacher?

- a. Yes (Please continue to question #24)
- b. No (Please skip to question #25)

22. How many years experience do you have as an agriculture teacher?

- a. Less than one year
- b. 1 – 5 years
- c. 6 – 10 years
- d. 11 – 15 years
- e. 16 – 20 years
- f. 21 – 25 years
- g. 26 years or more

23. Were you a member of the FFA as a student in high school?

- a. Yes
- b. No (Please skip to question #28)

24. Did you earn your State FFA Degree?

- a. Yes
- b. No

25. Did you earn your American FFA Degree?

- a. Yes
- b. No

26. What is your gender?

- a. Male
- b. Female

27. Using the categories provided, please indicate your age.

- a. 20 – 30 years of age
- b. 31 – 40 years of age
- c. 41 – 50 years of age
- d. 51 – 60 years of age
- e. 61 - 70 years of age
- f. Over 70 years of age

28. What is your ethnicity?

- a. Black, non Hispanic
- b. American Indian or Alaskan Native
- c. Asian or Pacific Islander
- d. Hispanic
- e. White, Non Hispanic
- f. Other (please specify) \_\_\_\_\_

Comments:

If you have any questions regarding this survey, please feel free to contact me at  
bridgewa@mix.wvu.edu

Or my advisor, Dr. Deborah Boone at: Debby.Boone@mail.wvu.edu  
(304) 293-4832

*Thank you for taking the time and effort to complete this survey*

APPENDIX B

*Cover Letter to Questionnaire*

January 9, 2009

Dear State Supervisors:

Agricultural education influences many young individuals in today's world. What these individuals learn every day in the classroom is a direct result in what you do every day in leading your states agriculture education programs. You are a valuable resource to the success of not only the teachers in your state, but to the many individuals that are affected by those teachers every day in their classrooms.

I am Becky Ridgeway, a graduate student in Agriculture and Extension Education at West Virginia University. Under the direction of my advisor, Dr. Deborah A. Boone, I am conducting a research study to explore differences among agricultural education programs throughout the nation. The results of this study will be used to prepare a thesis to partially fulfill the requirements for a Masters of Science degree in Agriculture and Extension Education at West Virginia University. West Virginia University's IRB acknowledgement of this research is on file.

Your participation in this research is completely voluntary. You may stop filling out this survey at any time or skip any questions that you do not wish to answer. However, the completion of this survey is vital to the success of this study. The survey should only take you about 20 minutes and your results will be held as confidential as possible. There are no penalties if you choose not to participate. You will notice a code number at the bottom left hand corner of your return envelope. This number is only used to keep track of non-respondents and will be destroyed before the data are analyzed making it impossible to track your individual response.

Please place the completed questionnaire in the self addressed pre-paid envelope and drop it into the mail box by February 1, 2009. Thank you, we genuinely appreciate your time and efforts.

Sincerely:

Becky Ridgeway  
Graduate Student

Deborah A. Boone, Ph.D  
Assistant Professor

## APPENDIX C

### *Follow-Up E-mail*

On January 9, 2009, you were sent a survey on Supervisor's Roles in Agricultural Education Curriculum: A National Study and as of today I have not received your reply. Your response to this survey is vital, providing as much information as available to my research. I hope you will take the time to complete the survey and return it as soon as possible. If you have already mailed the survey back please disregard this e-mail. If I do not receive your survey by February 9, 2009, you will be receiving a second mailing of the survey. Thank you for your contribution to my study.

If you have any questions, please feel free to contact me:

Becky Ridgeway

Graduate Student, Agriculture and Extension Education

Davis College of Agriculture, Forestry and Consumer Science

West Virginia University

2050 Agricultural Sciences Building

P.O. Box 6108

Morgantown, WV 26505-6108

304-293-4832 ext. 4477

bridgewa@mix.wvu.edu

APPENDIX D

*Second Cover Letter to Questionnaire*

February 9, 2009

Dear State Supervisors:

On January 9, we sent you a questionnaire about state supervisors responsibilities and agricultural curriculum throughout the nation. As of today, we have not received your reply. We have enclosed a second copy of the survey and hope you will take the time to complete and return. If you have already returned the first survey there is no need to complete this one, we sincerely appreciate your participation.

Agricultural education influences many young individuals in today's world. What these individuals learn every day in the classroom is a direct result in what you do every day in leading your states agriculture education programs. You are a valuable resource to the success of not only the teachers in your state, but to the many individuals that are affected by those teachers every day in their classrooms.

I am Becky Ridgeway, a graduate student in Agriculture and Extension Education at West Virginia University. Under the direction of my advisor, Dr. Deborah A. Boone, I am conducting a research study to explore differences among agricultural education programs throughout the nation. The results of this study will be used to prepare a thesis to partially fulfill the requirements for a Masters of Science degree in Agriculture and Extension Education at West Virginia University. West Virginia University's IRB acknowledgement of this research is on file.

Your participation in this research is completely voluntary. You may stop filling out this survey at any time or skip any questions that you do not wish to answer. However, the completion of this survey is vital to the success of this study. The survey should only take you about 20 minutes and your results will be held as confidential as possible. There are no penalties if you choose not to participate. You will notice a code number at the bottom left hand corner of your return envelope. This number is only used to keep track of non-respondents and will be destroyed before the data are analyzed making it impossible to track your individual responses.

Please place the completed questionnaire in the self addressed pre-paid envelope and drop it into the mail box by February 23, 2009. Thank you, we genuinely appreciate your time and efforts.

Sincerely,

Becky Ridgeway  
Graduate Student

Deborah A. Boone, Ph.D  
Assistant Professor

APPENDIX E

*Second Follow-Up E-mail*

On February 9, 2009, you were sent a survey on Supervisor's Roles in Agricultural Education Curriculum: A National Study and as of today I have not received your reply. Your response to this survey is vital to my research. I hope you will take the time to complete as much of the survey as possible and return it as soon as possible. If I do not receive your survey by March 2, 2009, I will be contacting you by phone. If you would be willing to conduct the survey over the phone, please contact me with a time which is convenient for you. If you have already mailed the survey back please disregard this e-mail. Thank you for your contribution to my study.

If you have any questions, please feel free to contact me:

Becky Ridgeway

Graduate Student, Agriculture and Extension Education

Davis College of Agriculture, Forestry and Consumer Science

West Virginia University

2050 Agricultural Sciences Building

P.O. Box 6108

Morgantown, WV 26505-6108

304-293-4832 ext. 4477

bridgewa@mix.wvu.edu

APPENDIX F

*Question Comments*

Q1. Who is in charge of communicating Career Development Event information to agriculture teachers?

Program Advisors  
St CDE Comm Ch.  
State CDE Coordinator  
Contractor working for state supervisor  
Career & Tech - FFA Staff  
Nat Res/Ag Ed Specialist  
Teacher, any  
2 Part time employees

Q2. Who is in charge of coordinating the Career Development Event contest schedule?

Program Advisors  
State FFA Board  
State Ag. Teachers Board  
Other state staff, volunteers  
State CDE Comm. With Ag. Teachers  
State CDE Coordinator  
Industry Reps  
Career & Tech - FFA Staff  
Teacher, any  
Same as #1  
2 part time employees

Q3. How are teachers involved in making changes to Career Development Events?

Advisory Board  
Advisory committee recommend to state teachers organization  
CDE Advisory Committee from Teacher Professional Organization  
CDE Board of Directors from ag. Teachers org. All teachers can make recommendations  
CDE Committee or State FFA Exec Board  
CDE Committees  
CDE Committees  
CDE Revision Committee  
Consult with those conducting CDEs  
Contest Rules Committee  
Follow Nation Rules  
Knowledgeable teachers among contest  
[State] [Association] CDE Committee  
Only if teacher is a CDE supt  
Program/Pathway Meetings  
State CDE Committee  
State Instructors Advisory Committee  
State wide CDE Committee

Summer Conferences  
Teacher chairs for all CDEs  
Teachers involved in those contest

Q4. Prior to changes being made to high school agriculture curriculum, how do you seek the opinions of agriculture teachers?

Advisory Board  
Advisory committee recommend to state teachers organization  
CDE Advisory Committee from Teacher Professional Organization  
CDE Board of Directors from ag. Teachers org. All teachers can make recommendations  
CDE Committee or State FFA Exec Board  
CDE Committees  
CDE Committees  
CDE Revision Committee  
Consult with those conducting CDEs  
Contest Rules Committee  
Follow Nation Rules  
Knowledgeable teachers among contest  
[State] [Association] CDE Committee  
Only if teacher is a CDE supt  
Program/Pathway Meetings  
State CDE Committee  
State Instructors Advisory Committee  
State wide CDE Committee  
Summer Conferences  
Teacher chairs for all CDEs  
Teachers involved in those contest  
Agriculture Educators Association  
Committee  
Content Committee  
Curriculum Meetings  
Does not have a formal ag. Ed. Curriculum  
listserv/blog  
Local Control on Curriculum  
[State] AG ED Academic Integration Committee  
No statewide curriculum, local control  
Participation on development and review panels  
Research and Curriculum Team and Face to face meetings  
Selected teachers serve on state course of study committee  
Summer Conferences  
Vocational Board/State Advisor

Q5. Who is responsible for working with the State FFA Officer Team?

Program Advisors  
[State] Leadership Development Coordinator  
State FFA Officer Coordinator (Part-time employee)  
FFA Program Manager through the Exec. Sec.  
Office specialist  
Leadership Development Coordinator  
State FFA Advisor  
Primarily Exec. Secretary  
Foundation Person (1/2 time)

Q6. As head state supervisor, how many times a year do you visit first year teachers?

3 to 4 workshops a year and frequent contact  
Additional if needed  
Between 2 - 5  
District staff do [sic] visits  
None at school, 3 times at first year teacher meetings  
State FFA Advisor  
They are seen at presentations directed at them, field staff directly visits each  
Visited at least twice a year by state staff - not state supervisor

Q7. How often do you communicate with the agriculture teachers in your state?

And as needed  
And as needed  
But usually weekly  
Electronic newsletter  
Email list serve  
Exec Director is weekly  
Multiple times a day  
Normally once a day  
Normally twice a month  
Website - Continually updated

Q10. What types of non-license certificates can students earn through your state's agriculture education program?

Agriscience Product  
Animal Care  
Animal Science  
Animal Science  
Canine care  
Certified Professional Horticulturist  
CTE Certification - Academic credit through Ag. Courses  
Equine Care

Equipment Operation Certification  
Greenhouse Operations  
Horticulture  
Horticulture  
Landscaping  
Landscaping  
LaS Animal  
Outdoor Power  
Outdoor Power Equipment  
Pesticide Application  
Pesticide Application  
Pesticide Applications  
Pesticide Certification available through [State] Dept. of Ag  
Plant Science  
Tech Prep articulation  
Tractor Driving  
Vegetable Production

Q11. Are teachers required to make SAE visits?

Reported to BOE at local level or to get reimbursement for miles

Q13. What is the state recommended number of SAE visits a teacher should be make per student per year?

Local Control  
Local decision  
No Recommendation  
None recommended  
Prior to school, after school, one time during the school year, before school ends  
There is no official recommendation

Q14. As state supervisor, do you have the authority to require teachers to attend state teacher conferences?

Strongly Suggested

Q15. What are the consequences if a teacher does not attend the state teacher's conference?

Do not get credit of incentive funding grant  
No Re-Licensing Points  
Peer Pressure  
Stipend withheld  
We do send letters to all administrators telling them about the conference to encourage their teachers to attend

Q17. How many state supervisors are currently employed in your state?

0 full time

1 75 Teacher services, professional dev. Staff/FFA Advisor

1 Director of our projects, in charge of K-12 Ag. Ed. In partnership w/[University]

1 FFA Exec Sec

2 part time employees

8 Field Staff

Program Manager and Program Advisors

Program Specialist

SED rep w/10% Ag responsibility

Q20. Before holding your current position, were you an agriculture teacher?

FFA Exec Sec 16 years

Comments

CDEs are not restricted to the [City] events; they include Parlio Pro, Public Speaking, Creed, etc

Good Job!

I am unable to report some of the data due to state and dept of ed. Policy

Nice Instrument!

Our extended contracts are based on days past the school year and range from 0 to 60

Our programs have multiple pathways, but are basically comprehensive, rural programs

Some question vague and could have been interpreted in a variety of ways

Sorry we did not have some of the info here, but we have only partial data in some areas

We need ag. Ed in the [University]

We need district and state leaders for ag. Ed

We need full time state FFA advisor

We need funding for ag. Ed. Program

We need state leaders for ag. Edu

VITA

BECKY L. RIDGEWAY

June 2003	Graduated – Linganore High School Frederick, MD 21703
August – July 2006	Frederick Community College Frederick, MD 21702
September – December 2007	Student Teacher Jefferson High School Shenandoah Junction, WV
December 2007	Bachelor of Science in Agriculture Agricultural and Extension Education West Virginia University Morgantown, WV 26506
August 2008 – May 2009	Graduate Teaching Assistant AGEE 101 – Global Food & Agriculture Industry West Virginia University Morgantown, WV 26506
May 2009	Master of Science Agriculture and Extension Education West Virginia University Morgantown, WV 26506