

## ABSTRACT

JONES, ALBERT DIXON. Assessing Student Motivation to Participate in FFA Career Development Events. (Under direction of Dr. Barry Croom).

Career Development Events (CDE's) have traditionally been a large part of the FFA program. The benefits FFA members receive from participating in Career development events have been documented in research, however little research has been conducted concerning the motivation of students to participate in career development events. This study examined the intrinsic motivation, extrinsic motivation, and amotivation of students regarding career development events, as well as to determine how students are recruited to participate in them. An adaptation of the Academic Motivation Scale, translated by Vallerand, et. al. (1992) was utilized to assess students' level of intrinsic motivation, extrinsic motivation, and amotivation with regard to career development event participation. This was combined with researcher-generated items to determine the individual(s) most responsible for students' decision to participate in career development events. The population for this study included high school FFA members in the Southeast FFA Region of North Carolina who had participated in career development events. Data were collected using paper-based questionnaires. A classroom set of questionnaires was sent to each high school agricultural education teacher in the Southeast Region, who was asked to administer the questionnaire to one of their classes. A total of 408 questionnaires from 26 teachers were completed, which represented 52 percent of all high school agricultural education teachers in the Southeast Region.

Descriptive statistics were used to analyze the responses on the questionnaires. High school seniors represented the largest percentage of respondents by grade level. Male students comprised 67% of the total respondents, 67% of FFA membership, and 53% of the career development event participants. Only 21% of all the respondents reported that they had been in at least one career development event. The career development event with the largest number of participants was the Agricultural Tools and Materials career development event. Statistical analysis revealed that students reported high levels of intrinsic motivation to participate in career development events. The means for the statements related to extrinsic motivation were also high. In particular, students agreed strongest with the statement that career development event participation would be helpful in finding a job later on. Students also indicated agreement with the idea that career development event participation would improve one's chances of entering the job market in a desired field, having a more prestigious job later on, as well as a higher paying job. Students disagreed with the statements related to amotivation. Students also indicated that the FFA advisor plays a key role in recruiting students to participate in career development events, and that they understood that career development event participation was a way to become involved and advance in the FFA.

Assessing Student Motivation to Participate in FFA Career Development Events

by  
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## **DEDICATION**

To my wife, Rebecca W. Jones for the extra measure of love and patience she has given me during my studies.

## BIOGRAPHY

Al Jones grew up on a small swine and grain farm in the Fountaintown Community of southeastern Duplin County. Early in his life he was instilled with a love of agriculture by his father and grandfather, as well as a love of education by his mother, who was a high school family and consumer sciences teacher. From the time he was in elementary school, Al knew that he wanted to pursue a career in agriculture. During high school, he enrolled in agricultural education courses and was an active member of the FFA at Richlands High School in Richlands, North Carolina. He served as chapter FFA president his senior year, as well as district president. He was salutatorian of his graduating class in 1992 and was named a North Carolina Teaching Fellow. In 1992-93 he was a state FFA officer for the North Carolina FFA Association. He received the American FFA Degree in 1993.

Al pursued his undergraduate degree in agricultural education at North Carolina State University, graduating *cum laude* in 1996. He immediately began work on his Master of Agricultural and Extension Education Degree at North Carolina State, graduating in 1997. He began teaching agriculture at Lakewood High School in Sampson County in the fall of 1997, and was able to return to Richlands High School as an agriculture teacher in 1998. He earned National Board Certification in 2004.

In 2006, Al began working on a sixth year certificate in agricultural and extension education at North Carolina State. Soon thereafter, he officially became a doctoral student.

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## **CHAPTER I: INTRODUCTION**

Agricultural education is a systematic program of instruction in the science, business, and technology of plant and animal production and/or the environmental and natural resources systems (National FFA Organization, n.d.). Secondary agricultural education programs deliver instruction via three major interrelated components. These components are classroom instruction, supervised agricultural experience, and FFA.

The National FFA Organization, formerly known as the Future Farmers of America, is a national student organization for middle school and secondary agricultural education students. FFA provides connecting activities, which are activities that establishes relationships between school and life (Talbert, et al., 2007). FFA connects classroom learning to life in the areas of leadership development, personal growth, and career success. FFA is an intracurricular component of agricultural education, meaning that instructional time in the classroom may be used for FFA instruction. FFA works in concert with the learning activities conducted within the context of classroom/laboratory instruction, as well as learning activities conducted through supervised agricultural experience (Talbert, et al., 2007, National FFA Organization, 2010). As such, FFA is considered to be an integral component of the total agricultural education program. It serves as a means by which agricultural education students, through participation in various FFA activities, develop leadership and interpersonal skills and grow professionally and as individuals (National FFA Organization, 2010).

The FFA is organized into three main levels: local, state, and national. The local level is composed of the individual school. The state level is normally operated through a state education agency. The national level is directed through the U.S. Department of Education (Talbert et al., 2007). Some states have intermediate levels between the local and state level. For example the North Carolina FFA Association is composed of two levels—the federation and the region—between the local and state level (North Carolina FFA Association, n.d.).

As of 2011, there were 540,379 FFA members, aged 12–21, in 7,489 chapters in all 50 states and three U.S. territories (National FFA Organization, 2011). In 2011, the North Carolina FFA Association had 18,553 members, making it the eighth largest FFA state association (North Carolina agricultural education, 2011).

Career development events are a major part of FFA programming. Career development events are competitive activities that provide students the opportunity to develop critical thinking skills, communication abilities, and enhance their ability to compete successfully in today's job market. Students typically begin participation in career development events by first being introduced to content information related to a given career development event in an agricultural education class. They may also be exposed to concepts related to a given career development event via their supervised agricultural experience program.

Generally, students are recruited by the agricultural education teacher in some way to participate in career development event activities beyond the local level. In fact, many

teachers use career development events as a way to motivate students to participate in the local agricultural education program (Myers, Dyer, & Breja, 2003). Other students choose to participate based upon their interest in the subject matter associated with the career development event (Croom, Moore, & Armbruster, 2009).

Students prepare for career development events with guidance from a coach, usually the agricultural education teacher. Sometimes teachers may utilize volunteers knowledgeable in the content of a given career development event to prepare students for competition (Torres & Sabo, 1998). Beyond the chapter level, students then compete at various levels of competition. In North Carolina, the number of levels of competition depends upon the career development event. For example, students participating in the dairy foods career development event would first compete at the state level while students participating in the floriculture career development event would first compete at the region level before advancing to the state (North Carolina FFA Association, n.d.).

Career development events are a form of experiential learning, where learners construct knowledge, skill, and value from direct experience (Connors & Mundt, 2001). Participating in career development events provides a means for students to practice agricultural concepts. Career development events provide a connection between the student and the agriculture industry, by allowing students to practice skills learned in the classroom or as part of a supervised agricultural experience program (Croom, Moore and Armbruster, 2009). For example, a student competing in the land judging career development event would have to determine soil texture at a given site, using procedures learned in an

agriculture class. Since career development events are tied to current practices in agriculture, students are able to experience the concepts demonstrated in a career development events as they would in a real-life situation.

The manner in which career development events are conducted in many agricultural education programs has a background in the educational philosophy of John Dewey. Dewey (1938) stated that basing education on personal experience enhanced the relationship between the teacher and the student, leading to improved learning outcomes for the student. This is illustrated in the way that students prepare for a career development either as an individual or as a team, usually consisting of four to six people. These smaller groups allow for more one-on-one instruction with the agriculture teacher. In addition, Dewey maintained that students learn through social exchanges with others (Sullivan, 1966). A good illustration of this is a team career development event, such as parliamentary procedure. Students typically prepare for this event by role playing various parliamentary procedure abilities. In such a setting, the students are able to critique their peers, share strategies for improvement, and learn to work as a team in order to be successful.

Besides providing a means for students to practice concepts related to course content, research suggests that participating in career development events is one way that students can learn essential job skills (Connors & Mundt, 2001). For example, career development events afford students the opportunity to engage in important career skills including teamwork, public speaking, debate, and writing (Russell, Robinson, and Kelsey, 2009).

In addition to developing skills and competencies related to agricultural careers, career development events provide a means for student recognition (Zirkle and Connors, 2003) by providing tangible awards like plaques and trophies, as well as intangible recognition such as collegiate scholarships to students, based upon their performance in a career development event.

### **Agricultural Education**

Career development events are an outgrowth of the instructional program in agricultural education. National agricultural education initiatives are administered through the U.S. Department of Education, via the Office of Vocational and Adult Education. In addition, The National Council for Agricultural Education, or The Council, a national organization of leaders in agricultural education whose mission is to promote high quality agricultural education programs in the United States, serves as a means for national leaders of agricultural education to collaborate in order to continuously improve the field of agricultural education (The Council, 2012). State-level leadership for agricultural education varies from state to state, and is provided via a variety of agencies and leadership structures. Each state adopts its own curriculum and associated materials. The specific courses taught in each program varies from school to school, but is designed to meet the needs of the local community (Talbert, Vaughn, Croom & Lee, 2007). For example, in a community where the main focus is livestock production, courses related to animal science or poultry science would be taught. An agricultural education program situated in an area with a heavy emphasis on the green industry would most likely teach horticulture courses.

There are over 800,000 students in grades seven through twelve currently enrolled in formal agricultural education program in all fifty states and three United States territories (National FFA Organization, n.d.). Agricultural education is delivered to students via three major components; this is commonly referred to as the three circle agricultural education model. The three components of the model are:

- Classroom/laboratory instruction, which is contextual learning and typically done during a formal, scheduled time during the school day;
- Supervised Agricultural Experience, which is a form of work-based learning where students practice what they have learned in the classroom in a planned, real-world setting under the supervision of an agriculture teacher (Croom, 1999).
- Student leadership organizations, such as the National FFA Organization. National FFA is the agricultural education organization for middle and high school students (National FFA Organization, n.d.).

The model is often visually depicted as three interconnected circles, each circle representing one of the three components:

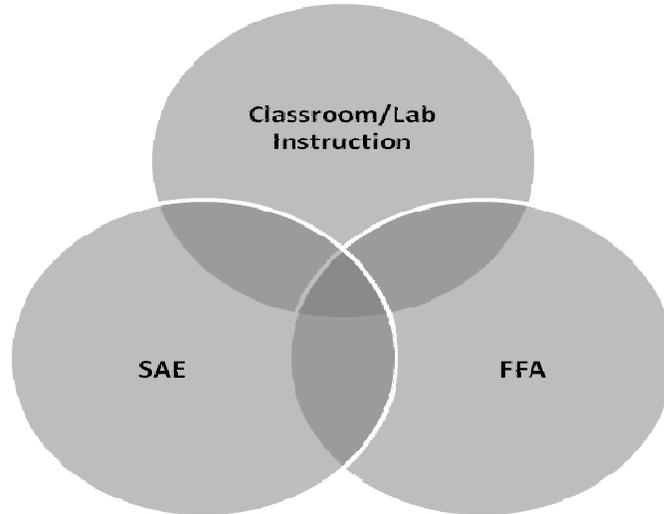


Figure 1

*The Three Circle Agricultural Education Model (National FFA Organization, n.d.)*

### **Career Development Events**

FFA activities and programs are designed to compliment formal instruction in the agricultural sciences (Bender et al., 1979). Two key components of the FFA are leadership and personal development. The organization at all levels has encouraged FFA members to develop life-essential skills such as citizenship and cooperation as part of their experience in the organization. Student participation in career development events is an effective strategy for learning these life-essential skills .

Career development events have been a long-standing component of the FFA program. Many of the earliest agricultural education programs, prior to the Smith-Hughes Act of 1917, conducted competitions among their students as a means for them to practice agricultural skills learned in the classroom. Various judging contests, the forerunners of

today's career development events, were conducted by agriculture teachers soon after the adoption of the Smith-Hughes Act in 1917 (Rayfield, Frazee, Brashears, & Lawver, 2009). The first state-level agricultural judging contests were held in 1919 in Alabama and Virginia, with the first national-level judging contest conducted specifically for high school agriculture students being held at the 1925 National Dairy Show in Indianapolis, Indiana. In 1926, agriculture students were invited to participate in the National Livestock Judging Contest at the American Royal Livestock Show in Kansas City, Missouri (National FFA Organization, n.d.). After the FFA was founded in 1928, judging contests continued to be an event during the National FFA Convention, but did not officially become a part of the FFA program until 1947 (Rayfield, Frazee, Brashears, & Lawyer, 2009).

As of 2012, there were 24 career development events recognized by the National FFA Organization, as shown in Table 1. These career development events consist of both individual events where only one student from each chapter, federation, region, or state competes, and team events, usually composed of three to six individuals from each chapter, federation, region, or state (National FFA Organization, n.d.).

Table 1

*National FFA Career Development Events*

<b>Career Development Event</b>	<b>Team or Individual Event</b>
Agricultural Communications	Team
Agricultural Issues	Team
Agricultural Mechanics	Team
Agricultural Sales	Team
Agronomy	Team
Creed Speaking	Team
Dairy Cattle Evaluation	Team
Dairy Foods	Team
Dairy Handlers	Individual
Environmental and Natural Resources	Team
Extemporaneous Public Speaking	Individual
Farm Business Management	Team
Floriculture	Team
Food Science and Technology	Team
Forestry	Team
Horse Evaluation	Team
Job Interview	Team
Livestock Evaluation	Team
Marketing Plan	Team
Meats Evaluation and Technology	Team
Nursery and Landscape	Team
Parliamentary Procedure	Team
Poultry Evaluation	Team
Prepared Public Speaking	Individual

The North Carolina FFA Association also conducts additional career development events that are unique to North Carolina (North Carolina FFA Association, n.d.). A list of these events as of the 2011-2012 school year is found in Table 2.

Table 2

*North Carolina FFA Career Development Events*

<b>Career Development Event</b>	<b>Team or Individual Event</b>
Agricultural Tools and Materials Identification	Team
Agriscience Fair	Team or Individual
Envirothon	Team
Hunter Safety	Team
Introduction to Horticulture	Team
Land Judging	Team
Quiz Bowl	Team
Tractor Safety and Skills	Individual
Truck Safety and Skills	Individual
Vet Science	Team

In North Carolina the state winning team of the Envirothon is certified to compete in the national Environmental and Natural Resources career development event. Also, North Carolina FFA refers to the Dairy Foods career development event as Milk Quality and Products.

The conduct of various career development events vary from event to event. For example, most judging events involve placing classes of animals, agricultural products, or agricultural commodities; a practicum such as a grading activity where students evaluate animals, agricultural products or commodities based on some quality standard; and a written general knowledge test. Some events, such as land judging, simply require that the student evaluate the physical characteristics of a soil at a given site and record his/her answers on a written scorecard. Other events, namely truck safety and skills and tractor safety and skills, simply require the student demonstrate his/her ability to negotiate a truck or tractor through a

specified driving course, following established safety procedures (North Carolina FFA Association, n.d.).

Career development events remain an important component of today's FFA program (Scholer, 2012). The primary goal of career development events is to develop individual responsibilities, foster teamwork and promote communication while recognizing the value of ethical competition and individual achievement. These events are designed to be an outgrowth of classroom instruction and supervised agricultural experience, and are intended to be a reflection of current and emerging agricultural practices, workforce trends, and technology. The activities in each career development event include problem solving and critical thinking and teamwork skills. They encourage appreciation for diversity by reducing barriers to participation among members. They also develop general leadership and recognize individual and team achievement, and promote concentrated focus on future needs of members and society.

Research has shown that students receive many benefits from participating in career development events. Vaughn, Kieth, and Lockaby (1999) authored a theme article for *The Agricultural Education Magazine* where they compared the relevance of the FFA with its relevance when it was founded in 1928. According to the researchers, the FFA was a necessary component of agricultural education for three reasons. First, the FFA saved agricultural education in the public schools because after the FFA was founded, students were enthusiastic to become members, and as a result enrolled in agricultural education classes. Secondly, FFA provided competitive events that helped students develop self-

confidence and other vital character attributes. Finally, the FFA helped students develop social skills and positive values in young people. The researchers maintain that these same characteristics are still applicable to the modern agricultural education student. For example, competing in career development events provides students an opportunity for recognition and helps motivate students to set goals and complete tasks.

Byers (1975) authored a paper outlining principles for using local career development events and awards in the FFA. He discussed best practices related to how career development events should be conducted at the chapter level, how students should be prepared for participation in career development events, and how students should be recognized for career development event participation. One of the concepts he emphasized was that students should experience a greater level of motivation at the chapter level than at the state or national level.

Byers (1975) stated that agriculture teachers should make student participation in chapter level career development events a greater priority, rather than placing heavy emphasis in participating in state and national career development events. Because the majority of FFA members will never participate in a national-level FFA activity such as a national career development event, emphasizing local programming increases students' opportunities for participation. It was recommended that local FFA chapters only participate in career development events that relate to the curriculum taught in that chapter. Career development events are intended to be an opportunity for students to practice concepts learned in an agriculture class. Given the large number of career development events

conducted at the state and local level it is difficult, if not impossible for an agricultural education program to participate in all of them.

Byers (1975) stated that classroom instruction related to a given career development should be provided prior to the event. This serves to motivate students to participate in a given career development event, and also insures that students are prepared for the event. In addition, it was recommended that certain career development events be limited to certain classes. By doing this, career development events can more effectively be tied back to classroom instruction. For example, students in a horticulture class should not be expected to compete in livestock judging, since nothing about livestock is taught in horticulture.

Byers (1975) pointed out that the goal of career development events should be education, rather than winning. He described career development events as a vehicle to promote learning, while winning was a by-product of participating in the career development event. Byers (1975) stated that over-emphasizing winning could cause an agriculture teacher to depart from sound instructional principles and practices and even behave dishonestly.

Byers (1975) outlined several principles for using awards and recognition. First, only high-quality performance should be recognized, but all students who excel should be recognized. If a standard, rather than merely identifying the first, second, and third place students, is used to measure achievement in a career development event, it is possible for more students to receive recognition, and student motivation to excel will be increased. Byers (1975) noted that when students perform poorly in a career development event, they should not be recognized as if they have performed well. This serves only to cheapen

recognition given to truly deserving students. When students perform poorly, the agriculture teacher should provide instruction to help them correct areas where they were deficient. Secondly, Byers (1975) stated that awards should consist of symbols, such as ribbons, trophies, and certificates, rather than money. In addition, awards and recognition should be presented in a manner to be meaningful to the student. In general, if a student competes in a career development event, recognition or awards should be presented immediately after the career development event is concluded. Further, student motivation to participate in career development events can be enhanced by recognizing students frequently with smaller awards, rather than recognizing the single, best student at the end of the school year with a large trophy.

Spell (1978) discussed strategies for utilizing competition in career development events as a teaching tool in the agricultural education classroom. He described competition as an incentive for students. He stated that competition can stimulate and motivate students to excel in class. Through career development events, competition can help the student understand the importance of concepts taught in the agriculture class by allowing them to practice skills that are related to class content. Spell (1978) stated that this can lead to increased academic achievement in the agriculture class.

Mayfield (1978) discussed the philosophy of utilizing career development events in the agricultural education classroom, including how career development events can be misused, such as making the winning of awards the primary reason for career development event participation. Mayfield (1978) stated that for certain concepts test scores, as well as

student interest, were generally higher when students had participated in a FFA judging career development event related to that concept.

Hiller and Newman (2008) compiled a judging guide for 4-H leaders. In describing the value of judging programs in 4-H, they stated that judging events, such as livestock judging, teaches students to observe, recognize quality, improve their own work, make their own decisions and make them wisely, express themselves clearly, and appreciate the opinions of others. These same concepts are directly applicable to FFA judging career development events. Hiller and Newman (2008) also describe judging activities as a way to stimulate interest in a subject or as an incentive to produce better work.

### **Motivation**

According to the Oxford English Dictionary (“Motivation,” 2012), motivation is defined as the (conscious or unconscious) stimulus for action towards a desired goal, especially as resulting from psychological or social factors. Motivation is a reflection of an individual’s willingness to expend effort, and is the reason for certain behaviors. For example, an individual motivated by hunger would seek out food.

In the context of education, students’ motivation is a critical component to learning. However, motivation is often viewed in an extremely simplistic manner. For example, a teacher might attribute students’ poor performance on an exam to a lack of motivation; if the students were motivated to work harder, they would have made a higher grade on the exam. In this example, motivation is a construct that the student either has, or does not have. Another example would be the notion that an inspirational speech prior to a final exam,

where the teacher exhorts students to work hard and do their best, is all that is needed to increase the motivation of students to do their best. A more complex explanation illustrates motivation as an array of both positive and negative stimuli. For example, some students might be motivated to work towards higher grades because they view a high grade as a reward; other students fear receiving a low grade so they work hard to try to earn a high grade (Lowman, 1990).

There are two main types of motivation, intrinsic motivation and extrinsic motivation (Ryan and Deci, 2000). Intrinsic motivation refers to an action done because it is inherently interesting or enjoyable. For example, a student may choose to enroll in an agriculture course because of personal interest in the course. Extrinsic motivation involves an action that will lead to a distinguishable outcome. For example, the student may choose to participate in a career development event because the opportunity exists to win recognition. An intrinsically motivated person is moved to act because of the fun or challenge associated with a task or action, rather than because of external pressures or rewards (Ryan and Deci, 2000).

Intrinsic motivation is an important phenomenon in education, and has a number of important implications for classroom instruction. Intrinsic motivation results in high-quality learning for students, since students have an in-born desire to learn the content presented to them. Additionally, research has shown that interesting, challenging activities in education are important for maintaining and enhancing intrinsic motivation. One way this can be achieved is through the implementing of stimulating, informational educational environments

where learning activities are task-based and where the student can use both positive and negative feedback to better understand the task, and improve future performance (Deci and Ryan, 1985).

Extrinsic motivation is a construct that is applicable whenever an activity is done in order to attain some distinguishable outcome. Therefore, extrinsic motivation contrasts directly with intrinsic motivation.

### **Statement of the Problem**

Research has been conducted on a variety of concepts related to FFA and FFA participation. However, limited research has been conducted on why students are motivated to participate in career development events conducted by the FFA. As such, there is a lack of understanding of why students choose to participate in career development events. Studies that have been conducted to evaluate student motivation have indicated that students experience both intrinsic and extrinsic motivation but do not explain why, or they deal more with students choosing to enroll in FFA instead of dealing specifically with career development event participation. A study conducted by Russell, Robinson and Kelsey (2009) using qualitative research methodology examined student motivation to participate in career development events. While generalizing the results of the study to FFA members as a whole was not possible due to purposively selecting study participants, the researchers found that students in the study enjoyed competition, a form of intrinsic motivation, and being recognized for their efforts, a form of extrinsic motivation. Russell, Robinson and Kelsey (2009) recommended that further research be conducted in the area of student motivation to

determine how students are intrinsically motivated to participate in career development events, and why students choose not to participate in them at all.

Other studies found that high school students are often extrinsically motivated to join FFA and participate in FFA programs, including career development events (Myers, Dyer & Breja, 2003). In many cases peers, family members, and teachers can extrinsically motivate students to engage in certain school-based activities.

The implementation of career development events requires a significant amount of resources. This is one reason that career development events are periodically revised to reflect current agricultural practices. In addition, from time to time new events are added in response to new developments in the agricultural education curriculum which requires the expenditure of additional funds in order to implement the new career development event. For example, a new veterinary science career development event was piloted in 2012 (North Carolina FFA Association, n.d.). Over 30,000 dollars was budgeted for career development events in 2012 in North Carolina (North Carolina FFA Association, 2012). Given the amount of resources necessary to implement the various career development events in North Carolina, understanding what motivates students to participate in them would be desirable. Such knowledge would serve to refine career developments to more effectively meet the interests and needs of FFA members.

## **Research Questions**

The research questions addressed by this study were:

- What factors motivate students to participate in career development events?
- How are students recruited to be involved in career development events?

## **Definition of Terms**

Agricultural education – A program of instruction in and about agriculture and related subjects commonly offered in secondary schools, through some elementary and middle schools and some postsecondary institutes/community colleges also offer such instruction (Talbert, Vaughn, Croom, & Lee, 2007).

Agricultural education model – The agricultural education model describes the program's three major components: classroom and laboratory instruction, supervised agricultural experience (SAE), and agricultural youth organization activities (FFA). The agricultural education model illustrates the interrelationships between these three components with three connected circles, each circle representing one of the three components (Croom, 2008).

Amotivation – Neither intrinsically or extrinsically motivated (Deci and Ryan, 1985). Amotivation is a condition where a person's behavior lacks intentionality and a sense of personal causation. (Ryan and Deci, 2000).

Career Development Event (CDE) – A competitive activity involving one to six FFA members in the demonstration of material learned in classroom instruction and supervised

agricultural experience. Students may compete on the local, region, state, and national level (Croom, 1999).

Career-Technical Education (CTE) – An education program, offered in middle schools, high schools, area career and technical centers, community and technical colleges, and other postsecondary institutions, which prepares both youth and adults for a wide range of careers and further educational opportunities. These careers may require varying levels of education including industry-recognized credentials, postsecondary certificates, and two-and four year degrees. (Association for Career and Technical Education, 2012).

Chapter – The local, school-level component of the FFA. (Talbert, Vaughn, Croom, & Lee, 2007)

Extrinsic Motivation – A type of motivation where an individual performs an action that will lead to a distinguishable outcome (Ryan & Deci, 2000).

Federation – In North Carolina, the federation is the layer of FFA structure above the chapter level. They are composed of approximately five to ten chapters, have a group of student leaders, an agriculture teacher serving as FFA federation advisor, and hold certain federation-wide career development events.

Intrinsic Motivation – A type of motivation where an individual performs an action because of the pleasure and satisfaction that it will bring (Deci & Ryan, 1985).

National FFA Organization (FFA) – The FFA, formerly Future Farmers of America, is the national, intracurricular organization for middle and high school agricultural education students (Talbert, Vaughn, Croom, & Lee, 2007).

Region – In North Carolina, the region is the layer of FFA structure above the federation and below the state association. They are composed of a group of federations, have a group of student leaders, an agriculture teacher serving as FFA federation advisor, and hold certain region-wide CDE's.

Supervised Agricultural Experience – One of the components of the Three-Circle Agricultural Education Model. Supervised Agricultural Experience is a form of work-based learning where students practice what they have learned in the classroom in a planned, real-world setting under the supervision of an agriculture teacher (Croom, 1999).

State Association – The state association is the state level of organization for the FFA. State associations are usually administered through state education agencies (Talbert, Vaughn, Croom, & Lee, 2007).

### **Assumptions**

In the conduct of this study, the following assumptions were made:

1. Agricultural education students who participate in this study understand what career development events are, and have a basic understanding of how they fit into the agricultural education program.
2. Agricultural education students who participate in this study and have also participated in career development events know the names of the events in which they participated, and at what level (local, federation, region, state, national) they participated.

3. Agricultural education students who participate in this study are capable of articulating the reason(s) why they chose to participate in career development events.

### **Limitations**

Agriculture teachers were asked to facilitate data collection. At the completion of data collection, 52% of the teachers in the southeast region had returned completed surveys. The research design of this study made it impractical to address non-response error since the teachers, rather than the students who would have completed the research instrument were the actual non-responders.

### **Summary**

Agricultural education is administered via a three-component model which includes classroom/laboratory instruction, work-based learning (SAE), and FFA. Career development events are one component of the FFA program. Career development events have been proven to be beneficial to students by providing means to learn employability skills and make career decisions. Research has shown that students find career development events to be beneficial, and many students who participate in career development events eventually enter agricultural careers.

While students find career development events beneficial, it is not well understood what motivates them to participate in career development events. It is believed that a better understanding of student motivation to participate in career development events will lead to

strategies to improve the existing program of career development events within the FFA, as well as increase participation in career development events.

## **CHAPTER II: THEORETICAL FRAMEWORK AND REVIEW OF RELATED RESEARCH**

### **Theoretical Framework**

The theoretical foundation of this study is based upon two concepts. These are Maslow's Hierarchy of Needs (1970), and the Self-Determination Theory (Deci and Ryan, 1985).

### **Maslow's Hierarchy of Needs**

Maslow has written extensively on motivation theory. According to Maslow, human motivation is based upon an individual seeking fulfillment and change through personal growth (Maslow, 1970).

In order to accomplish this, Maslow (1970) postulated that humans have a variety of needs that are arranged in a hierarchy such that the more basic needs must be met before the individual can be concerned with more sophisticated needs. Most people progress instinctively through the hierarchy in the same order, although the order can be altered based upon the experiences of the individual. For example a mother, motivated by love of her child, might deny herself the food that she needs to prevent her child from going hungry. This flexibility is indicative of both the biological and the social influences of human motivation (Weiten, 1989.)

The most basic needs are the physiological needs. These needs must be met in order for the individual to survive. The need for food, water, and oxygen are prime examples of physiological needs. If these needs are met, humans then seek the safety needs, such as

stability, security and protection from danger. For example, adequate shelter would represent fulfillment of a safety need. If these needs are met, humans then seek belongingness and love needs. Fulfilling these needs include activities such as finding a spouse, or belonging to a group. Once these needs are met, humans attempt to attain esteem needs, which are a desire for self-respect and the respect of others. The final set of needs is the needs for self-actualization. These are characterized by the desire for self-fulfillment, and to reach one's full potential in a career, intellectual endeavor, etc.

Maslow described a number of characteristics of self-actualized people. In general, Maslow stated that self-actualized people were fulfilled, and doing all that they were capable of doing. Self-actualization for Maslow meant that an individual came to find a meaning of life that is important to them. Self-actualized people are not likely to experience feelings of anxiety and fear, and are more interested in activities and goals that represent who they truly are, rather than material interests. (Maslow, 1970).

Maslow refined his original hierarchy of needs to include two additional sets of needs between the esteem needs and self-actualization (Maslow, 1970.) After the esteem needs are met, the individual must meet cognitive needs. Cognitive needs involve an individual's desire to attain knowledge and understanding. When cognitive needs are met, one then seeks to meet aesthetic needs, which are defined as a person's desire for order and beauty (Weiten, 1989). Meeting the cognitive needs and the aesthetic needs then forms the foundation necessary for an individual to become self-actualized.

Maslow's hierarchy is applicable to participation in career development events. Belongingness and love needs, esteem needs, cognitive needs, and self-actualization can all be at least partially met by student participation in career development events. For example, participating in a team career development event such as parliamentary procedure allows the student to experience being a part of a team. The student may experience esteem needs by the feeling of accomplishment that come from doing well in a career development event or from the feelings of acceptance from the other members of the team. The student can experience the fulfillment of cognitive needs via the learning of technical content necessary to be successful in the career development event. Finally, success in a career development event can steer a student closer to self-actualization if the other needs are met.

### **Self-Determination Theory**

Deci and Ryan (1985) have conducted extensive research in the area of Self-Determination Theory. Like Maslow's work, this theory is organismic; it assumes that human beings act on their internal and external environments to satisfy their full range of needs. People possess tendencies towards personal growth, mastering ambient challenges, and integrating new experiences into a coherent sense of self. These evolved tendencies do not happen automatically; they require ongoing social interaction. Therefore, social interactions can either support or inhibit one's tendencies towards active engagement and psychological growth ("Self-Determination Theory," 2011). In simpler terms, Self-determination theory maintains that it is human nature to engage in interesting activities,

maintain connections with social groups, and to combine both intrapsychic and interpersonal experiences and activities into one unit (Deci and Ryan, 2000).

According to literature published online by Edward Deci, Richard Ryan and other researchers, self-determination theory is broken down into five mini-theories, each of which explains one aspect of motivation (*Self-determination theory* 2011). These mini-theories are expanded in Table 3:

Table 3

*The Five Motivational Theories within Self-Determination Theory (Deci and Ryan 1985)*

<b>Theory</b>	<b>Description</b>
Cognitive Evaluation Theory (CET)	Refers to the effects of social interactions on intrinsic motivation and how factors such as rewards, interpersonal controls, and ego-involvements affect intrinsic motivation.
Organismic Integration Theory (OIT)	Addresses the different types of extrinsic motivation, or internalization, as well as the social contexts that promote or inhibit internalization. The more internalized the extrinsic motivation, the more autonomous the person will be when enacting the behaviors.
Causality Orientations Theory (COT)	Describes the differences in people's tendencies to orient towards different environments and regulate their behavior. COT evaluates the autonomy orientation, where the individual acts out of interest in and perceives a value of what is taking place; the control orientation where the person's focus is on rewards, gains, and approval; and the impersonal or amotivated orientation, where the person experiences anxiety concerning competence.
Basic Psychological Needs Theory (BPNT)	Explains the concept of evolved physiological needs and their connection to physiological health and well being. This theory holds that psychological well-being and full functioning is predicated on autonomy, competence, and relatedness.
Goal Contents Theory (GCT)	Based upon the distinctions between intrinsic and extrinsic goals, and their impact on motivation and wellness.

Many other theories treat motivation as a unitary concept; however Self-Determination Theory differentiates between types of motivation (Maurer, et al. 2012). The most significant distinction between the types of motivation is the difference between

intrinsic and extrinsic motivation. Self-Determination Theory explains the differences between the different types of motivation by evaluating the reasons for the goals that give rise to an action. It is important for a teacher to understand these different types of motivation, particularly when it is not possible to rely on intrinsic motivation for effective instruction, to foster successful teaching. Self-Determination Theory is specifically framed in terms of social and environmental factors that facilitate, rather than undermine intrinsic motivation (Ryan and Deci, 2000).

In the educational setting, a key question has to do with how students are motivated to value and self-regulate activities that are not normally intrinsically motivating. Jones (1958) described motivation as a means to bridge the gap between the learner's background and new learning experiences. Self-Determination Theory describes this problem in terms of fostering the internalization and integration of values and behavioral regulations (Ryan and Deci, 2000). Internalization is the process of taking in a value or regulation (Deci and Ryan, 1985). When an individual internalizes a behavior, the behavior becomes a part of how that person feels and thinks; it becomes a learned behavior. The individual assigns value to the behavior and performs it willingly. Internalization is thought of as a continuum, with an individual's motivation for a behavior ranging from unwillingness to active personal commitment. Increasing internalization gives rise to greater persistence, more positive self-perceptions, and better quality of engagement (Ryan and Deci, 2000). Self-Determination Theory holds that extrinsic motivation can vary greatly in its degree of autonomy. This refers to the degree to which the individual is motivated because of the value the individual

has placed on an action or behavior, rather than being told by someone else that the action or behavior is important. Research has shown that relying on rewards—whether tangible items such as gold stars or other prizes, or even intangible items such as grades—is not recommended because students often experience these items as controlling. Students often exhibit disinterest, even resistance or resentment if they feel that they are pushed into performing a task. However if the student self-endorses the task, they perceive the need or value of it. This self-endorsement can come intrinsically, or from an outside stimulus (Deci and Ryan, 1985).

Integration is fullest form of internalization. It involves not only acknowledging that a given behavior is important, but connecting the behavior with the individual's other values. Integration is the process by which a behavior imposed on the individual by outside forces becomes a self-determined behavior (Deci and Ryan, 2000).

Extrinsic motivation is described by the sub-theory within Self-Determination Theory known as Organismic Integration Theory (OIT). Organismic Integration Theory includes the concepts of amotivation, external regulation, and introjected regulation (Ryan and Deci, 2000).

Deci and Ryan (1985) define amotivation as neither intrinsically or extrinsically motivated. Ryan and Deci (2000) describe amotivation as a condition where a person's behavior lacks intentionality and a sense of personal causation. Amotivated individuals perceive their behaviors as caused by forces out of their control. They may experience feelings of listlessness, helplessness, depression, and self-disparagement. In an educational

context, unmotivated individuals generally question why they are going to school, and may eventually stop participating in educational activities. This is undesirable because in the short-term, the student would not be learning course content, and if this situation were to continue, the student could ultimately choose to withdraw from school entirely. While a variety of negative effects of dropping out of high school have been identified, from an increase in alcoholism to an overall lack of participation in society (McCaul, Donaldson Jr., Coladarci, & Davis, 1992), students who fail to finish high school are less likely to be active labor force participants than their better educated peers, and they frequently experience considerably higher unemployment rates when they do seek work (Sum, Khatiwada, & McLaughlin, 2009).

Introjected regulation describes a type of internal regulation that is controlling to the individual such that actions are performed to avoid guilt or anxiety or to attain ego-enhancements of pride. Introjected behaviors are not experienced as a full part of the self (Ryan and Deci, 2000). The regulatory thoughts that cause a person to perform an action are not necessarily explicit, and in general the regulation exhibited is more affective than cognitive (Deci and Ryan, 1985). An example of introjected regulation might be the high school FFA member, who chooses to participate in a career development event, not because of personal interest, but because “good FFA members participate in career development events.”

Finally, integrated regulation takes place when identified regulations have been fully assimilated to the self. This takes place when an individual brings new regulations into

congruence with one's other values and needs. The more internalized the reasons for an action become, the more one's extrinsically motivated actions become self-determined (Ryan and Deci, 2000). Integrated regulation occurs when the FFA member chooses to participate in a career development event because "I enjoy being involved in this career development event, it gives me a chance to learn new things." Table 2 illustrates the relationship between amotivation, extrinsic motivation, and intrinsic motivation.

Table 4

*A taxonomy of human motivation* (Ryan and Deci, 2000).

<b>Amotivation</b>		<b>Extrinsic Motivation</b>			<b>Intrinsic Motivation</b>	
<b>Regulatory Styles</b>		External Regulation	Introjection	Identification	Integration	
<b>Associated Processes</b>	Perceived non-contingency Low perceived competence, Non-relevance Non-intentionality	Saliency of extrinsic rewards or punishment Compliance Reactance	Ego involvement Focus on approval from self or others	Conscious valuing of activity Self-endorsement of goals	Hierarchical synthesis of goals Congruence	Interest Enjoyment Inherent Satisfaction
<b>Perceived Locus of Causality</b>	Impersonal	External	Somewhat External	Somewhat Internal	Internal	Internal
<b>Examples</b>	"I don't know why I am doing this."	"I participate in CDE's because my teacher told me to do so."	"I participate in CDE's because that is what good FFA members do."	"I am doing this because I want to."	"I am doing this because it is worth doing."	"I am doing this because I enjoy it."

It is conceivable that FFA members have a variety of reasons for participating in career development events. Some students might be intrinsically motivated to participate because they had an interest in the career development event before they ever participated. A student who entered agricultural education because of a desire to become a veterinarian might choose to participate in the Vet Science career development event because of a desire to learn more about veterinary medicine. Other students might experience extrinsic motivation to participate in a career development event because of encouragement from their agricultural education teacher or a desire to win recognition. Finally, some students might experience amotivation and cease participating in career development events, or fail to participate at all. Self-Determination Theory is an appropriate theory for this study because it is useful for explaining students' motivation to participate in career development events because it addresses intrinsic and extrinsic motivation, as well as amotivation.

### **Review of Literature**

The purpose of this study was to assess the motivation of agricultural education students to participate in FFA career development events. In examining the literature relevant to this study, several themes emerged. These included the benefits of career development events to students, student motivation to participate in the FFA and FFA programs, the role of the teacher in the administration of career development events, and competition and awards in career development events. Each of these themes can have an impact on student motivation.

## **Benefits of Career Development Events to Students**

Research has shown that students receive many benefits from participating in career development events. Bowen and Doerfort (1989) explored the occupational aspirations of students that participated in the FFA Computers in Agriculture program. They compared selected demographic characteristics and FFA activities of state FFA winners of the Computers in Agriculture program, proficiency awards, and public speaking contests. The researchers administered a questionnaire to 593 students. They found that most state winners in each category rated their FFA advisor as having the most influence over their decision to participate in their award area. They also determined that the majority of the participants aspired to professional positions in agriculture. However, the Computers in Agriculture winners had the lowest number of individuals planning agricultural careers.

Talbert & Balschweid (2004) conducted a study in 2003 to describe the career aspirations of FFA members related to career clusters, supervised agricultural experiences, career development event participation, and career related demographic indicators. The results were compared to a similar study conducted by the National FFA Organization in 1999. The researchers found that FFA members strongly associated their involvement in FFA activities with production practices in agriculture. Seventy percent of the respondents had participated in a career development event at some level, and 60% of respondents participated in a career development event focusing on leadership. Eighty-seven percent of the respondents indicated plans to pursue post-secondary education or technical training, and

one-third of all respondents indicated that their first choice of careers would be related to agriculture.

Threton & Pellock (2010) conducted a study to evaluate what students needed to know in order to participate in a national SkillsUSA competition, and if competencies needed for competition were associated with academic rigor. The findings of the study provided evidence that preparation for the SkillsUSA Occupational Health and Safety competition was a way to provide students with a real world connection to essential academic skills needed for successful transition to the world-of-work. Furthermore, the results indirectly provide evidence that the SkillsUSA Occupational Health and Safety contest is a way to integrate academic and technical standards.

### **Student Motivation to Participate in the FFA and FFA Programs**

There has been limited research conducted on the reasons that students choose to join FFA and participate in FFA activities. While recent research gives a glimpse of some of the factors which might influence student participation in career development events, this phenomenon is not well understood.

Reis & Kahler (1997) conducted a study to determine the factors that influenced students' enrollment in agricultural education programs. They collected responses from 55 secondary agricultural education programs in Iowa, which yielded responses from 1429 students. They found that the majority of them were most pleased with their experiences with career development events. They also found that the people that most influenced students to

enroll in agricultural education were the parents, agriculture teacher, friends, and former agricultural education students.

Rayfield, et al. (2008) conducted a study to determine what factors influenced student decisions to participate in FFA, and their level of involvement as a FFA member. The researchers collected data from 2,111 high school students in 41 rural high schools in Arizona, Florida, and Texas. This study showed that respondents' greatest deterrents to involvement in the FFA were saving money and preparing for college. The researchers stated that students who believe leadership activities have a positive impact are more likely to participate in them. The study also found that the student's circle of friends can have either a positive or a negative impact on FFA membership and participation.

Phelps, Henry, & Bird (2012) conducted a qualitative study as a part of a collective case study that utilized a combination of questionnaire and interview techniques in order to explore the factors influencing and discouraging youth to participate in the FFA. Four themes emerged which explain why youth choose to participate in FFA. One theme was personal gain, which included activities such as development of communication, organization, and leadership skills through FFA events. FFA members described learning team work and dedication in career development events.

### **The Role of the Agriculture Teacher in Administering Career Development Events**

A number of studies have indicated that the agriculture teacher is the key individual responsible for preparing students for career development events. Russell, Robinson, and Kelsey (2009) conducted a qualitative study to describe how secondary agricultural

education students in Oklahoma were motivated by their teachers to participate in career development events. They found six themes that teachers drew upon to motivate students. These themes were 1. drawing on the traditions and successes of the FFA chapter, 2. providing opportunities for students to compete, 3. promising students that they would gain life skills, 4. enabling students to have fun, 5. actively recruiting members who showed potential for doing well in career development events, and 6. making career development events an integral part of the classroom curriculum. Russell, Robinson, and Kelsey (2009) pointed to the role of the agriculture teacher as a motivating force to encourage student participation in career development events, utilizing both intrinsic and extrinsic methods.

Over the years, the field of agricultural education has broadened from an agricultural production focus to include topics such as agricultural issues, job interview skills, food science, and agricultural communications (Harris, 2008). This has also broadened the number and types of career development events offered to students. Harris (2008) conducted a study of 114 agricultural education teachers in Kansas to examine their professional development needs related to career development events. It was found that 83.3 % were interested in week-long or graduate courses related to career development event participation. It was found that teachers required additional professional development in order to prepare students for career development events. It was also found that teachers in general desired professional development in career development event preparation, and that the career development events which teachers voiced the greatest interest in receiving professional development were

generally the ones that had the lowest participation. This suggested that teachers tended to avoid preparing students for career development events with which they were not familiar.

White and Christiansen (1978) conducted a study to assess the FFA career development event activities in Texas as perceived by high school principals, parents, current FFA members, and agricultural education teachers. They collected data from 144 school districts, which represented 51 % of the school districts in the population of interest. They found that years of teaching experience did not significantly impact career development event participation.. They also found that there was no relationship between the number of teachers in an agricultural education program and the types of career development events entered.

Talbert & Balschweid (2004) stated that teachers should emphasize involvement in FFA activities, including career development events, at the local level. This is one way in which teachers can encourage non-members to participate in FFA.

Russell, Robinson, and Kelsey (2009) suggested a need to determine student interest in career development events, as well as the student's motivation to participate in career development events, from the student's point of view.

### **Competition and Awards in Career Development Events**

Croom, Moore, and Armbruster (2009) conducted a study at the 2003 National FFA Convention to determine why students participate in national level career development events. A survey instrument was administered to 2145 FFA members who participated in national career development events at the convention. A survey instrument for teachers was

completed by 206 adults who had prepared students or individuals for national career development events. The researchers found that teachers cited competition as the main reason for student participation in national career development events, while students stated that the most important reason for their participation was the acquisition of skills that will help them pursue a career after graduating from high school. Russell, Robinson, and Kelsey (2009) stated that students liked competition and being rewarded for their efforts, however it was emphasized that intrinsic motivating factors for students to participate in career development events were not well understood.

Jones (1958) conducted an analysis of the awards programs of the 4-H Club in New Mexico. This analysis included ten demonstration and judging competitions at the district and state level, over three consecutive years from 1954 through 1956. In addition, the number of awards won by each county at the district, state, and national competitions over a five year period from 1952 through 1956 was analyzed. Statistical data on file at the state 4-H office in New Mexico were used in the analysis. Jones (1958) stated that competition can be an effective means of motivating students to participate in educational activities, provided that students compete with others of comparable ability and experience. When students are expected to compete on an unequal playing field such as middle school students competing against high school students, negative outcomes may occur. The student may lose the desire to participate further, or may even resort to unethical conduct such as cheating in order to be successful.

Students who win career development events receive some sort of award or recognition for their efforts. This is a form of extrinsic motivation. Authorities are divided as to how beneficial tangible awards are to the furtherance of the educational goals of career development events. Jones (1958) discussed a number of potential reasons why tangible awards were both justified and undesirable for recognizing success in student competition. Awards were considered beneficial because they helped maintain interest of both adult leaders and student members. They also helped to raise the standard of accomplishment for students and helped students develop such desirable leadership characteristics as good sportsmanship.

Negative aspects of tangible awards included fostering competition among members on the same team which led to jealousy and ill-will, the use of dishonest practices in order to win recognition, and students' lack of interest in or value of the award itself. Jones (1958) stated that when emphasis is placed solely on winning, the student may develop such a strong competitive nature that the primary goal becomes winning the award. The true intention of the competition, which is improving the student's knowledge or skill set, is therefore lost on the student.

### **Summary**

Career development events are beneficial to students because they provide a means to develop new skills in agriculture which will be useful for further education and/or employment. Students who had participated in career development events viewed them in a positive light, and recognized their benefit in furthering their education.

Teachers generally administered the career development events with which they were familiar. It is beneficial to students to conduct career development events at the local level, as a means to encourage non-FFA members to participate in FFA.

While competition is an important part of career development event participation, students identify the acquisition of skills that will help them reach their career goals as the most important reason for career development event participation. Awards and recognition given for outstanding career development performance should not overshadow the true reason for career development events, which is enhancing the knowledge or skill level of the student.

## **CHAPTER III: METHODOLOGY**

### **Research Design**

Because of the concepts being investigated, a descriptive study was conducted. Survey data were used to evaluate student perceptions related to career development events. Survey research allows one to generalize from a sample to a population so that some inference can be made about a characteristic of the population. Further, survey research is an economical method to use to collect data.

A cross-sectional survey design was utilized. This design allows for the collection of data at one point in time and is most suitable for examining current attitudes and/or practices, measuring current population needs, and evaluating current programming (Creswell, 2009). Data were collected from respondents at one time.

### **Population and Sample**

The population examined was high school FFA members in the Southeast region of North Carolina who had participated in career development events. As of 2011, the Southeast region consisted of 13 counties located in the southeastern part of North Carolina. Within the Southeast region there are 56 middle school and high school agriculture teachers in 39 middle school and high school departments who teach approximately 5,000 agricultural education students. Additionally, there is one private school in the Southeast Region that provides FFA opportunities to students (Forrest & Emmons, 2011).

A cluster sample of all high school agricultural education programs was collected for this study. The study was conducted in this manner because, due to student privacy requirements, a FFA member list from which to draw a sample was unavailable.

The Southeast FFA Region was chosen for this study for two reasons. First, the Southeast region is a large region in terms of the number of agricultural education programs, which provided a large pool of potential respondents. Further, the agricultural education programs in the Southeast Region are traditionally very active in career development events. In the 2011-2012 school year, the students from the Southeast Region participated in every career development event conducted by the North Carolina FFA Association (North Carolina FFA Association, n.d.).

This study focused on high school students only, due to the relatively small number of career development events available to middle school students. The number of high school agricultural education programs represents a manageable and appropriate number of potential research subjects.

### **Instrumentation**

Both the instrument and all research methodology associated with this study were approved by the North Carolina State University Institutional Review Board of Human Subjects in Research. The data were collected using questionnaires delivered in written format. These questionnaires were administered by the students' agriculture teacher. The instrument consisted of four parts. The first part consisted of items to obtain demographic information from the respondent, such as year in school, number of years of FFA

membership, and gender. The second part of the instrument was a modified version of the Academic Motivation Scale, or AMS. The third part of the instrument consisted of nine questions developed to assess the role that others had on the student's choice to participate in career development events, and to assess the student's attitudes towards career development events. The final part of the instrument consisted of a list of all career development events. The respondent was asked to indicate the highest level (chapter, federation, region, state, and national) of participation for each career development event.

### **The Academic Motivation Scale (AMS)**

The Academic Motivation Scale is a means of measuring motivational factors in education. It is based upon the tenets of self-determination theory and is composed of 28 items. These items are divided into scales which assess three factors of motivation (to know, to accomplish things, to experience stimulation) related to intrinsic motivation, three factors (external, introjected, identified regulation) related to extrinsic motivation, and finally, amotivation (Vallerand et al., 1992).

The AMS is an adaptation of the Echelle de Motivation en Education (EME) which was developed in France. The AMS is a seven point scale, ranging from one ("Not at all") to seven ("Exactly"), with a midpoint of four ("Moderately").

The Echelle de Motivation en Education was translated from French to English by Vallerand et al., (1992) using the parallel back-translation procedure. This translation method was preferred because it helps to prevent bias on the part of the translators. The original scale was translated into the target language by a bilingual individual. It was then

back-translated to the original language by another bilingual individual, without the use of the original scale. Because this procedure involved a parallel approach, this process was repeated independently of the first back-translation. In this case, two social psychologists and two graduate students in social psychology who were familiar with Motivation Theory conducted the parallel back-translation procedure (Vallerand et al., 1992).

In the second step, the two back-translated scales were assessed by a committee consisting of the individuals who participated in the back-translation procedures and the original authors of the Echelle de Motivation en Education. The committee selected the items that had retained the original meaning and had also been conveyed in acceptable English. The committee also prepared the scale format and instructions (Vallerand et al., 1992).

The final step consisted of a pretest conducted with ten junior-college students in order to determine whether the AMS was clear and formulated in a way that the students understood. The students were asked to read the AMS and ask questions they had related to the items or instructions. The students' input led to minor modifications to the instructions (Vallerand et al., 1992).

The AMS was originally administered to 745 university students in Ontario, Canada in order to better understand their reasons for going to college, with respect to intrinsic and extrinsic motivation. In order to assess the temporal stability of the AMS, a second sample of college students completed the AMS twice over a one-month period.

Statistical analysis of the data revealed that the AMS has adequate levels of reliability and validity, as well as temporal stability. Since this study examined high school students, the researchers conducted reliability tests with high school students to determine if equivalent levels of reliability and validity could be attained. Statistical analysis included a confirmatory factor analysis, test for internal consistency, and analysis of variance on the subscale means. The confirmatory factor analysis assesses how well the theoretical model (the seven-factor model corresponding to the seven subscales) adequately represents the covariance matrix of the data. This was done by calculating a chi-square statistic, the Goodness of Fit Index (GFI), the Adjusted Goodness of Fit Index (AGFI), and the Normed Fit Index (NFI). These indices vary from 0 to 1 where 1 indicates a perfect fit for the model. Initial findings yielded a GFI of .89, AGFI of .87, and a .89 for the NFI. The model did not meet statistical non-significance, so correlations between pairs of measured-variable residuals were added to the model. This resulted in 26 correlated residuals added to the model. Statistical analysis yielded a GFI of .94, AGFI of .91, and a NFI of .93. The model still did not reach statistical non-significance, however the improvement in fit was highly significant, difference in  $\chi^2 = 479.63$ ,  $df = 26$ ,  $p < .001$ . Whether inclusion of these correlated residuals could bias the interpretation of the model was tested by correlating the initial parameter estimates from the initial model with those from the final model. This yielded a .98 correlation value, indicating that the model's interpretation was not biased. In summary, confirmatory factor analysis replicated the findings obtained with the original EME (Vallerand et al., 1992).

Internal consistency of the subscales was assessed using Cronbach's alpha. Values varied from .83 to .86, except for the Identification subscale which had an alpha value of .63. These values are similar to values obtained from the analysis of the EME, where the alpha values ranged from .76 to .86. The Identification subscale was also lower with a value of .62 (Vallerand et al., 1992).

Test-retest correlations for the AMS ranged from .71 to .83, with a mean test-retest correlation of .79. This analysis revealed that results were very similar to results obtained with the EME (Vallerand et al., 1992).

The seven subscales were analyzed by evaluating their means as a function of gender. Results showed that female students scored higher than males on the three intrinsic motivation subscales (knowledge, accomplishment, and stimulation) as well as on the identification and introjections subscales. However, there were no differences related to gender found on the other subscales (Vallerand et al., 1992).

The AMS was chosen for this study because it directly reflects the conceptual definition of intrinsic and extrinsic motivation, which refers to one's perceived reasons for engaging in a given activity. It provides a means to quantify the various motivational factors enumerated by Deci and Ryan's (1985) Self-Determination Theory. In addition, research has shown that the AMS has acceptable levels of reliability, validity, and temporal stability (Vallerand et al., 1992). The AMS is particularly useful in evaluating motivation because it assesses several types of motivation in a multidimensional fashion, rather than simply in terms of intrinsic or extrinsic motivation. This permits a finer analysis of the factors that

affect student motivation (Vallerand et al., 1992). A more thorough description of these factors is found in Table 5:

Table 5

*Factors Related to Motivation*

<b>Type of Motivation</b>	<b>Refers to:</b>
<b>Intrinsic Motivation</b>	
To know	A person’s natural tendency to want to know things. The human capacity for curiosity.
To accomplish things	The tendency of a person to interact with their environment in such a manner as to accomplish something meaningful.
To experience things	The tendency of a person to experience something for the intellectual, physical, and social stimulation it provides.
<b>Extrinsic Motivation</b>	
External	How certain external events regulate a person’s behavior.
Introjected	Behavior that is regulated by internalizing social norms.
Identified regulation	The tendency for a person to do things because they think they want to do them.
<b>Amotivation</b>	This measures the tendency of a person to do something because they feel forced to do it, not because they feel like they want to or need to do it.

The AMS was modified for the purpose of this study to make the scale’s statements fit the context of FFA career development events. The verbiage for the seven scales was modified for clarity. The scale ranged from one, “I completely disagree” two, “I mostly

disagree” three, “I disagree a little” four, “I neither agree or disagree” five, “I agree a little” six, “I mostly agree” and seven, “I completely agree.”

### **Validity and Reliability**

The content validity of the modified instrument was established using a panel of experts in the agricultural education field. Content validity refers to the appropriateness of the content and format of the instrument (Fraenkel & Wallen, 2010). The members of the panel were provided with a copy of the instrument and asked to provide feedback on the validity, clarity, and appropriateness of the instrument. Based upon the feedback received, the instrument was revised.

The instrument was piloted tested with a group of FFA members. A group of 20 FFA members participating in the 2012 North Carolina FFA State Leadership Conference were asked to complete the instrument. Data collected from the field test were analyzed using Statistical Package for Social Sciences (SPSS) version 19. A Cronbach’s alpha coefficient was calculated to determine the reliability of the statements utilized in the instrument. Cronbach’s alpha measures internal consistency, or how closely related a set of items are as a group. A high alpha value ( $>.70$ ) indicated that the items in the instrument contribute to the measurement of an underlying or latent construct (Cronbach, 1951).

Results of the data analysis were utilized from the pilot to further refine the instrument. For the purpose of field testing, the instrument was divided into two sections; part one consisted of the modified AMS, and part two comprised a group of questions to assess students’ attitudes concerning career development events and to determine who

encouraged them to participate in career development events. Part one was determined to have a Cronbach's alpha of .89. Part two yielded a Cronbach's alpha of .61. Part two was edited for clarity and completeness. This portion of the instrument was then field tested with twenty additional students at the 2012 North Carolina State FFA Leadership Conference. This second field test yielded a Cronbach's alpha of .71.

Stability was determined for the second part of the instrument which consisted of the 28 modified AMS items by utilizing test-retest methodology. This method involved administering the same instrument twice to the same group of respondents after a period of time has elapsed (Fraenkel & Wallen, 2010). The research instrument was administered to twenty students, and then re-administered to the same students ten days later. A mean score for each student's response to each of the 28 modified AMS items was calculated for both test events. A Pearson  $r$  of .99 was then calculated from the test mean scores and the retest mean scores.

Stability for the third part of the instrument, which included the nine questions designed to assess the role that others had on the student's choice to participate in career development events, and to assess the student's attitudes towards career development events, was evaluated using the same test-retest methodology. A Pearson product-moment coefficient was calculated from the mean scores of each of the nine items from the first test event and the second test event. This yielded a Pearson  $r$  of .73. This indicates a direct correlation between the first administration of the instrument and the second administration,

suggesting that the scores on this part of the instrument will remain stable over future administrations of the instrument.

### **Data Collection**

Data collection was facilitated by high school agricultural education teachers in the Southeast region. It was decided to solicit teachers to administer the instrument because response rates are usually higher when questionnaires are administered by an authority at the school, rather than sending the questionnaire to the students themselves (Fraenkel, & Wallen, 2010). The researcher met with the teachers in the Southeast region in attendance at the Southeast regional update meeting, held on the final day of the 2012 North Carolina Career-Technical Education Summer Conference. At that time, the researcher explained the purpose of the study, including the research questions to be answered. The researcher then described the role that the teachers would be asked to play in gathering the data. Teachers were asked to choose one of the classes that they were teaching in the fall 2012 semester, distribute and collect informed consent documents to the students and return them to the researcher. The teachers were asked to choose one class in order to simplify the data collection process for the teacher. Teachers were asked to administer the instrument to a level II class, such as horticulture II or agricultural mechanics II. If the teacher did not teach a level II class, they were asked to choose a class that they felt had a high number of students that had previously participated in career development events. They were then asked to administer a paper-based instrument. Teachers were asked to return informed consent forms and completed instruments to the researcher via U.S. Postal Service.

An e-mail message to all high school agricultural education teachers in the Southeast Region was sent on August 13<sup>th</sup>, 2012. This e-mail message included copies of the informed consent documents and a set of directions for the teacher and the study participants. This was done to insure that teachers had the opportunity to distribute the informed consent forms on the first day of classes, if they wished to do so. Paper-based instruments, paper copies of the informed consent document, a pre-addressed return envelope, and a letter to teachers explaining the purpose of the instrument and providing directions for administering and returning consent forms and instruments were mailed to the 50 high school teachers in the region. In multiple teacher programs, each teacher received instrument materials. Teachers were asked to complete all instrument administrations by September 10, 2012. Several additional steps were taken in order to improve response rate. An e-mail message was sent to all teachers on August 24, 2012 informing them that the instruments should have arrived, or would be arriving at their school within a few days. An additional reminder e-mail message was sent to all teachers who had not administered the instrument encouraging them to administer it to their students by the deadline. At the end of this period, only about 30% of teachers had not returned instruments. The researcher contacted teachers for which there was no record of returned instruments by direct e-mail message and by telephone.

At the conclusion of data collection, 52 % of all the high school agriculture teachers, or 26 teachers had returned completed research instruments. A total of 408 instruments were returned to the researcher. The design of this study involved agriculture teachers administering the instrument to one of their classes, collecting the completed instruments,

and returning them to the researcher. Therefore, when considering non-response error, the students were not the true non-respondents. Rather, the teachers who failed to return completed instruments were the non-respondents. To address non-response, a sample of completed research instruments submitted early during data collection and a sample of completed instruments submitted at the end of data collection was drawn. Independent sample t-tests were calculated for selected questions on the research instrument. When these results were compared, there were no statistically significant differences between the early respondents and the late respondents. Therefore, it was concluded that the results of this study could be generalized to the population of interest (Miller & Smith, 1983).

### **Analysis of Data**

This study used descriptive statistics to analyze the data. Data were tabulated and analyzed with Microsoft Excel.

The first procedure was to examine the demographics of the respondents in order to understand their characteristics. Descriptive statistics were generated for grade level, grades levels where the respondent was a FFA member, gender, and whether or not the respondent had ever participated in a career development event. In addition, descriptive statistics were generated to determine the percentage of respondents that had participated in each career development event.

The next procedure was to examine the first research question, which was to determine what factors motivate students to participate in career development events. This

involved generating descriptive statistics in the form of means and standard deviations for each of the 28 statements based on the AME.

The final procedure was to examine the second research question, which was to evaluate how students recruited to be involved in career development events. Means and standard deviations were generated for the responses to the 4 statements regarding the influence of others on students' decision to participate in career development events, and the 5 statements regarding students personal feelings regarding career development events.

### **Summary**

In summary, this study was descriptive in nature, utilizing a cross-sectional survey design to collect data at one point in time in order to examine current attitudes and/or practices. The population of interest was high school FFA members in the Southeast FFA region of North Carolina. A cluster sample of all high school agricultural education programs was used for this study. Data for the study were collected using self-administered questionnaires delivered in written format.

Content validity was established using a panel of agricultural education experts. The instrument was pilot tested with a group of FFA members. The data from the pilot test were analyzed and a Cronbach's alpha coefficient was calculated for the instrument. Stability was determined utilizing test-retest methodology. Stability for the third part of the instrument which included the nine questions designed to assess the role others had on a student's choice to participate in career development events, and to assess the student's attitudes towards career development events was evaluated using the same test-retest methodology.

Data collection was facilitated by high school agricultural education teachers in the Southeast FFA region. Each teacher was asked to administer the research questionnaire to one class that the teacher taught in the fall, 2012 semester. The teachers were asked to administer the questionnaire to a level II class if possible. At the conclusion of data collection, 26 teachers had returned completed instruments via US Mail, which represented a response rate of 52% of the teachers. A sample of early respondents and late respondents were compared, and no statistical differences were found between them. Therefore, the results of this study were generalizable to the target population.

Data were analyzed using Microsoft Excel. Descriptive statistics were generated for the demographic data collected, and descriptive statistics consisting of means and standard deviations were generated for students' responses to the items on the questionnaire.

## CHAPTER IV: FINDINGS

This chapter presents the findings of this study. Data related to each research question were analyzed using appropriate descriptive statistics. All students completed items one through four of the research questionnaire. There were 408 respondents. These items consisted of demographic information of the respondents including year in school, years of FFA membership, gender, and whether the student had participated in a career development event. There were 84 students that had participated in at least one career development event at some point during high school. These students completed items five through eight of the survey instrument, which dealt with student motivation regarding career development events, recruitment to participate, and the specific career development event(s) in which students had participated.

The population of this study included high school agricultural education students who had participated in at least one career development event in the Southeast Region of North Carolina. A census of each high school agricultural education program in the Southeast Region was conducted by asking each teacher (N=50) to administer the research questionnaire to one of his/her classes. The researcher compiled the frame for this study from the directory of teachers for the Southeast Region. A total of 408 students from twenty-six agricultural education teachers returned questionnaires. This represents a response rate of 52 % of the high school agricultural education teachers in the region.

### **Gender Characteristics of Respondents**

Table 7 illustrates the relevant gender characteristics of the respondents. There were 272 males and 136 females. There were 202 males and 101 females (N=303) that reported that they had been FFA members at least one school year. There were 105 students that reported that they had never been a FFA member. Of the students who reported being a FFA member for at least one year, 84 students (45 males and 39 females) had participated in at least one career development event. This represented 21% of all respondents.

### **Enrollment Characteristics of Respondents**

Table 6 illustrates the breakdown of students by grade level. High school seniors made up the largest group (N=122), followed closely by sophomores (N=121). Freshmen represented the smallest group (N=63). Freshman students were most likely included in this study for at least one of two reasons. First, the teacher may not have taught a level two course at the time data were collected. The teacher thus chose to administer the research questionnaire to a level one class, which was made up of some freshman students. In addition, some freshman students may have participated in a career development event as a middle school student.

Table 6

*Enrollment Characteristics of Respondents*

Grade Level	N	Male	Female	%
Freshman	63	38	25	15.44
Sophomore	121	85	36	29.66
Junior	102	68	34	25.00
Senior	122	81	41	29.90
Total	408	272	136	100.00

**Findings Related to Respondents' Participation in Career Development Events by Gender**

Table 7 summarizes the level of participation in FFA and in career development events as compared to the total number of respondents in the study (N=408). Overall, 74.2 percent of all respondents reported that they had been a FFA member at least one year, and 21 percent of all respondents had participated in a career development event.

Table 7

*FFA Membership and Career Development Participation by Gender*

Gender	FFA Membership		Career Development Event Participation	
	N	%	N	%
Male	202	49.5	45	11
Female	101	24.7	39	10
Total	303	74.2	84	21

## **Findings Related to Respondents' Participation in Career Development Events by Year in School**

It should be noted that three freshmen indicated that they had participated in a career development event. It is possible that their teacher returned the research instruments near the end of data collection, after the first career development of the year had been conducted. It is also possible that these students had participated in a middle school FFA career development event prior to entering high school.

Table 8

### *Participation in CDE's by Year in School*

Year in School	N	Percentage of Total FFA Membership
Freshman	3	0.99
Sophomore	21	6.93
Junior	22	7.26
Senior	38	12.54
Total	84	27.72

## **Findings Related to Factors that Motivate Students to Participate in Career Development Events**

The following is a summary of the data gathered from the second part of the research questionnaire. It consisted of 28 likert scale statements adapted from the AMS. The data was collected from 84 students who had participated in at least one career development event.

Table 9 summarizes the results from the items on the AMS related to intrinsic motivation—to know. Students agreed that they like learning new things in career

development events, (M=6.46, SD=0.97), and agreed that they experience satisfaction when learning new things in a career development event (M=6.30, SD=0.93). Students also reported agreement that they experience pleasure in broadening their knowledge (M=6.31, SD=1.01). Finally, students agreed (M=6.31, SD=0.90) that career development event participation allows them to learn about things in which they are interested.

Table 9

*AMS Results Related to Intrinsic Motivation—to Know*

Statement	Mean	Standard Deviation
I like to learn new things in a CDE.	6.46	0.97
I participate in CDEs for the pleasure that I experience in broadening my knowledge about subjects which appeal to me	6.31	1.01
Participating in CDEs allows me to continue to learn about things that interest me	6.31	0.90
I participate in CDEs for the satisfaction I experience when I learn new knowledge or skills	6.30	0.93

N=84 1=Completely Disagree, 2=Mostly Disagree, 3=Disagree a Little, 4=Neither Agree or Disagree, 5=Agree a Little, 6=Mostly Agree, 7=Completely Agree

The results related to students' intrinsic motivation—towards accomplishment are summarized in Table 10. In general, students agreed with these statements. They reported satisfaction when improving their performance in career development events (M=6.49, SD=0.84). They also expressed agreement with the statement that they experience satisfaction when surpassing themselves in their performance in career development events

(M=6.01, SD=1.17). Students agreed that they feel satisfaction when they are successful in performing difficult career development event activities (M=6.09, SD=1.37). Finally, students agreed that they felt general personal satisfaction when participating in career development events (M=6.06, SD=1.24).

Table 10

*AMS Results Related to Intrinsic Motivation--Towards Accomplishment*

Statement	Mean	Standard Deviation
I experience satisfaction when I improve my performance in a CDE	6.49	0.84
I feel satisfaction when I am in the process of accomplishing difficult CDE activities	6.09	1.37
Participating in CDEs allows me to experience a personal satisfaction	6.06	1.24
I participate in CDEs for the pleasure that I experience while I am surpassing myself in one of my personal accomplishments	6.01	1.17

N=84 1=Completely Disagree, 2=Mostly Disagree, 3=Disagree a Little, 4=Neither Agree or Disagree, 5=Agree a Little, 6=Mostly Agree, 7=Completely Agree

Results related to intrinsic motivation—to experience stimulation are shown in Table 11. Again, students agreed with these statements. Students reported experiencing a thrill from career development event competition (M=6.23, SD=1.06). They also showed interest in career development events (M=6.08, SD=1.25) and reported experiencing pleasure when feeling a deep involvement in a career development event (M=6.07, SD=1.12). Finally,

students mostly agreed that they experienced enjoyment when learning about various interesting subjects (M=6.36, SD=1.03).

Table 11

*AMS Results Related to Intrinsic Motivation--to Experience Stimulation*

Statement	Mean	Standard Deviation
I participate in CDEs for the enjoyment that I experience while learning about various interesting subjects	6.36	1.03
I enjoy the thrill of competing in CDEs	6.23	1.06
I participate in CDEs because I have a special interest in them.	6.08	1.25
I enjoy the pleasure that I experience when I feel deeply involved in the CDE	6.07	1.12

N=84 1=Completely Disagree, 2=Mostly Disagree, 3=Disagree a Little, 4=Neither Agree or Disagree, 5=Agree a Little, 6=Mostly Agree, 7=Completely Agree

The results for the statements related to extrinsic motivation—identified are shown in Table 12. Students reported agreement for the statement that career development event participation will help in preparation for future careers (M=6.23, SD=1.23). Students reported agreement with the statement that career development event participation will make it possible to enter the job market in a chosen field (M=5.83, SD=1.39). Students reported agreement with the statement that career development event participation will help with making choices regarding career orientation (M=6.08, SD=1.13), and that knowledge

obtained via career development event participation will improve worker competence (M=6.08, SD=1.17).

Table 12

*AMS Results Related to Extrinsic Motivation—Identified*

Statement	Mean	Standard Deviation
I think that CDE participation will help me better prepare for the career I have chosen.	6.23	1.23
I believe that the knowledge I obtain in a CDE will improve my competence as a worker	6.08	1.17
Participating in CDEs will help me make a better choice regarding my career orientation	6.08	1.13
I participate in CDEs because eventually it will enable me to enter the job market in a field that I like.	5.83	1.39

N=84 1=Completely Disagree, 2=Mostly Disagree, 3=Disagree a Little, 4=Neither Agree or Disagree, 5=Agree a Little, 6=Mostly Agree, 7=Completely Agree

The results from student responses related to extrinsic motivation—introjected are shown in Table 13. Students reported agreement with the statement that participating in career development events is a way of proving that they are capable of doing well (M=6.13, SD=1.18). Students also reported that they feel a sense of importance when they succeed in a career development event (M=6.33, SD=1.03). Students reported agreement that participation in career development events are a way to prove to themselves that they are intelligent

(M=5.98, SD=1.29). They reported that they agreed with the statement that they wish to prove to themselves that they can succeed in career development event competition (M=6.36, SD=0.90).

Table 13

*AMS Results Related to Extrinsic motivation—Introjected*

Statement	Mean	Standard Deviation
I want to show myself that I can succeed in CDE competition	6.36	0.90
When I succeed in a CDE I feel important	6.33	1.03
I participate in CDEs to prove to myself that I am capable of doing well.	6.13	1.18
I participate in CDEs to show myself that I am an intelligent person	5.98	1.29

N=84 1=Completely Disagree, 2=Mostly Disagree, 3=Disagree a Little, 4=Neither Agree or Disagree, 5=Agree a Little, 6=Mostly Agree, 7=Completely Agree

The results for students' responses to extrinsic motivation—external regulation are shown in Table 14. Students agree that career development event participation can help in finding a job later in life, (M=6.60, SD=0.73). This result compares with the first statement in Table 13, which deals with extrinsic motivation—identified. However, students reported a lesser degree of agreement with the idea that career development event participation leads to a more prestigious job in the future (M=5.80, SD=1.35). Students agreed that career development event participation will be helpful in entering an agricultural career (M=6.20,

SD=1.13), but agreed to a lesser degree that career development event participation leads to a higher salary in the future (M=5.25, SD=1.80).

Table 14

*AMS Results Related to Extrinsic motivation – External Regulation*

Statement	Mean	Standard Deviation
I believe that participating in CDEs could be helpful in finding a job later on	6.60	0.73
Participating in CDEs will help me enter an agricultural career	6.20	1.13
I participate in CDEs in order to obtain a more prestigious job later on	5.80	1.35
I participate in CDEs in order to have a better salary later on	5.25	1.80

N=84 1=Completely Disagree, 2=Mostly Disagree, 3=Disagree a Little, 4=Neither Agree or Disagree, 5=Agree a Little, 6=Mostly Agree, 7=Completely Agree

Finally, the statements related to amotivation are shown in Table 15. Overall, students showed the smallest degree of agreement with these statements. Students disagreed with the statement that they are wasting their time participating in career development events (M=1.38, SD=1.14). They disagreed that they once had good reason for career development event participation, but wonder if they should continue (M=2.45, SD=1.88). Students disagreed that they don't understand why they participate in career development events (M=1.72, SD=1.37), and that they don't know what they are doing by participating in career development events (M=1.51, SD=1.12).

Table 15

*AMS Results Related to Amotivation*

Statement	Mean	Standard Deviation
I once had good reasons for competing in CDEs however, now I wonder whether I should continue	2.45	1.88
I can't see why I participate in CDEs	1.72	1.37
I don't know what I am doing by participating in CDEs	1.51	1.12
I really feel that I am wasting my time participating in CDEs	1.38	1.14

N=84 1=Completely Disagree, 2=Mostly Disagree, 3=Disagree a Little, 4=Neither Agree or Disagree, 5=Agree a Little, 6=Mostly Agree, 7=Completely Agree

**Discussion**

Means and standard deviations were calculated for each of the statements related to the factors that motivate students to participate in career development events. There were very little differences between the mean scores for these 28 statements. The same was true for the standard deviations for each of the statements. The results of these calculations indicated that students generally agreed with the statements related to intrinsic motivation and extrinsic motivation. These calculations also indicated that students generally disagreed with the statements related to amotivation.

Students indicated the strongest agreement with the statements related to intrinsic motivation—to know. The mean score for these four statements was 6.35. The four

statements related to extrinsic motivation—external regulation yielded the lowest mean score of 5.96. This still indicated students' agreement with these statements.

### **Findings Related to how Students are Recruited to be Involved in Career Development Events**

The following is a summary of the data found in Table 16 related to student recruitment to participate in career development events. Respondents agreed that their advisor was the reason they first began to participate in career development events ( $M=4.36$ ,  $SD=0.86$ ). Respondents also agreed that their FFA advisor is key to their success in career development events ( $M=4.43$ ,  $SD=0.84$ ). Respondents agreed that their families' encouragement was the reason they chose to participate in career development events ( $M=3.44$ ,  $SD=1.08$ ). They also agreed that their friends encouraged them to begin participating in career development events ( $M=3.70$ ,  $SD=1.10$ ). Overall, respondents did rate the role of the advisor in recruitment to participate in career development events higher than the role of friends and family.

Table 16

*Factors Related to Student Recruitment*

Factor	Mean	Standard Deviation
If it wasn't for my FFA advisor, I would not be very successful in CDEs	4.43	0.84
I started participating in CDEs because my advisor encouraged me to	4.36	0.86
I started participating in CDEs because my friends encouraged me to	3.70	1.10
I started participating in CDEs because my family encouraged me to	3.44	1.08

N=84 1=Strongly Disagree, 2=Disagree, 3=Neither Agree nor Disagree, 4=Agree, 5=Strongly Agree

**Findings Related to Student Perceptions and Preferences Regarding Career Development Event Participation**

Table 17 is a summary of the data related to students' perceptions and preferences regarding career development event participation. Items related to FFA participation scored highest among the students who completed the research instrument. Respondents agreed that they participated in career development events because of a desire to be involved in the FFA (M=4.48, SD=0.74), and that career development event participation can lead to increased chances for FFA advancement (M=4.49, SD=0.74). Fewer students agreed that career development event participation was the main reason for FFA membership (M=3.56, SD=1.10). This represented 56% of the students that had participated in a career development event. They agreed that they participated in career development events because

they like to travel (M=3.98, SD=0.90), and they agreed that they enjoyed missing classes to participate in career development events (M=3.83, SD=1.18).

Table 17

*Student Perceptions and Preferences Regarding CDE Participation*

Factor	Mean	Standard Deviation
Participating in CDEs is a way to increase my chances of advancing in the FFA	4.49	0.74
I participate in CDEs because it is an opportunity to be involved in FFA	4.48	0.74
I participate in CDEs because I like to travel	3.98	0.90
I like it when I miss class(es) to participate in CDEs	3.83	1.18
Being able to participate in CDEs is the main reason I am a FFA member	3.56	1.10

N=84 1=Strongly Disagree, 2=Disagree, 3=Neither Agree nor Disagree, 4=Agree, 5=Strongly Agree

Many students that had participated in career development events had participated in more than one. Table 18 illustrates the number of career development events participated in per student. The largest group of students (N=52) had participated in one to three career development events. Significantly fewer students (N=15) had participated in four to six career development events. Three students reported participation in more than 16 events.

Table 18

*Number of Career Development Events Entered per student*

Career Development Events Per Student					
1-3	4-6	7-9	10-12	13-15	16+
52	15	9	3	2	3

N=84

Table 19 summarizes the number of respondents that participated in each career development event, and their level of participation. Students were asked to indicate their highest level of participation in each career development event. If they had not participated in a given career development event, they were asked to mark “Have not participated.” The largest number of students (N=30) participated in Agricultural Tools and Materials. Twenty-nine of these students were freshmen when they participated. This is because Agricultural Tools and Materials is intended for first-year FFA members. The career development event with the second-highest participation was Hunter Safety (N=26), while the career development event with the third-highest participation was Agricultural Mechanics (N=22). The career development event with the lowest number of participants was Horse Evaluation-Junior (N=1). Extemporaneous Public Speaking, Farm Business Management—Junior, and Marketing Plan each had only two participants. Milk Quality and Products had the third-lowest participation (N=3).

The FFA level with the highest participation in career development events was the state level (N=145.) It should be noted that the FFA level with the second highest participation was at the local or FFA chapter level (N=130). The reason that these numbers

are greater than the total number of career development event participants is because some students participated in more than one career development event.

Table 19

*Career Development Event Participation*

Career Development Event	N	Level of Participation				
		Chapter	Federation	Region	State	National
Agricultural Tools & Materials	30	8	7	4	11	0
Hunter Safety	26	9	1	8	8	0
Agricultural Mechanics	22	7	1	8	5	1
Introduction to Horticulture	18	5	1	7	5	0
Land Judging	18	3	1	3	10	1
Tractor Safety & Skills	15	7	4	0	4	0
Forestry	14	4	0	7	3	0
Creed	13	11	1	1	0	0
Agricultural Sales	12	4	0	0	7	1
Food Science & Technology	12	3	1	0	8	0
Parliamentary Procedure	12	3	2	3	4	0
Dairy Evaluation & Management	11	4	0	0	7	0
Floriculture	10	3	0	3	4	0
Land Judging—Junior	10	1	0	3	6	0
Meats Evaluation	9	3	0	0	5	1
Poultry Evaluation	9	3	0	0	6	0
Farm Business Management	8	4	0	0	4	0
Livestock Evaluation	8	3	1	0	4	0
Agricultural Issues	7	2	1	1	2	1
Agricultural Sales—Junior	7	2	0	0	4	1
Agronomy	7	2	0	0	5	0
Dairy Cattle Handlers	7	4	0	0	3	0
Job Interview	7	3	2	1	1	0
Nursery Landscape	7	2	0	1	4	0

*Table 19 Continues*

*Table 19 Continued*

Career Development Event	Level of Participation					
	N	Chapter	Federation	Region	State	National
Agricultural Communications	6	3	0	0	2	1
Agriscience Fair	6	4	0	0	2	0
Quiz Bowl	5	2	0	0	3	0
Prepared Public Speaking	5	3	0	1	2	0
Truck Safety & Skills	5	4	0	0	1	0
Envirothon	4	1	1	0	2	0
Livestock Evaluation—Junior	4	1	0	0	3	0
Vet Science	4	2	0	0	2	0
Milk Quality & Products	3	1	0	0	2	0
Extemporaneous Public Speaking	2	1	0	1	0	0
Farm Business Management—Junior	2	1	0	0	1	0
Marketing Plan	2	2	0	0	0	0
Horse Evaluation—Junior	1	1	0	0	0	0
<b>Total</b>	<b>358</b>	<b>130</b>	<b>24</b>	<b>52</b>	<b>145</b>	<b>8</b>

### Summary

Of the 408 respondents in this study, the largest group was males who had never participated in a career development event. Seniors represented the largest percentage of respondents by grade level, while freshmen made up the smallest percentage of respondents by grade level. Male students comprised 67% of the total respondents, 67% of FFA membership, and 53% of the career development event participants.

Only 21% of all the respondents reported that they had been in at least one career development event. Forty-five male students indicated they had participated in career development event, while 39 females indicated they had participated.

With regards to career development event participation, the largest number of students had participated in one to three career development events. The career development event with the largest number of participants was the Agricultural Tools and Materials career development event. Thirty students reported competing in this event. The career development event with the lowest level of participation was the junior-level Horse Evaluation career development event.

The state level had the largest amount of participation. It was not surprising that the fewest number of respondents reported participating at the national level, yet it is notable that the second largest level of participation was at the chapter level.

Data analysis related to the first research question revealed that students reported high levels of intrinsic motivation to participate in career development events. Mean scores in all areas of intrinsic motivation—motivation to know, motivation towards accomplishment, and motivation to experience stimulation were all above 6.0.

The means for the statements related to extrinsic motivation were also high. In particular, students agreed strongest with the statement that career development event participation would be helpful in finding a job later on. Students also indicated agreement with the idea that career development event participation would improve one's chances of entering the job market in a desired field, having a more prestigious job later on, as well as a

higher paying job; however the mean scores for these two items were slightly lower than for the other statements related to extrinsic motivation.

Overall, students disagreed with the statements related to amotivation. They disagreed strongest with the statement that they were wasting their time participating in career development events.

In examining the second research question, students indicated that the FFA advisor plays a key role in recruiting students to participate in career development events. Students agreed that their advisor was the main individual that encouraged them to become involved in career development events, and was also the primary reason they were successful in career development events. Respondents agreed that their friends and families played a significant role in recruiting them to participate in career development events.

Students agreed that career development event participation was a way to become involved in the FFA. Students also agreed that career development event participation was a good way to advance in the FFA, with regards to the FFA degree program, scholarships, and other awards. However, students overall did not feel that career development event participation was the main reason they joined FFA, as responses indicated only slight agreement with this statement. Students also indicated only slight agreement that they enjoyed missing classes to participate in career development events.

## **CHAPTER V: CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS**

The purpose of this study was to examine the factors that motivate agricultural education students to participate in career development events, as well as to determine how students are recruited to participate in career development events. It also determined the overall level of participation in career development events, as well as the number of participants for each career development event. The study included 408 respondents from the Southeast FFA region of North Carolina. Eighty-four of these respondents had participated in career development event.

### **Conclusions**

Based upon the findings in this study, the following conclusions for each of the research questions can be drawn.

#### **Research Question 1: What factors motivate students to participate in career development events?**

Students that participate in career development events experience high levels of both intrinsic and extrinsic motivational factors. Among students that participate there is very little difference in the levels of intrinsic and extrinsic motivation. Very few career development event participants experience amotivation.

Among respondents who were FFA members, only 27% had participated in at least one career development event. Agricultural educators need to be concerned about this high level of non-participation in career development events.

## **Research Question 2: How are students recruited to be involved in career development events?**

The FFA advisor is the individual with the greatest influence over a student's decision to participate in career development events. While students' friends and family members play some role in whether or not a student chooses to participate in career development events, the FFA advisor is most often the person who encourages a student to become involved in career development events. Additionally, students believe that the FFA advisor plays an important role in insuring their success in career development events.

### **Implications and Discussion**

Overall, students in this study that participated in career development events experienced high levels of both intrinsic and extrinsic motivation. These results suggest that, in the process of competing in various career development events, students experience a strong desire to acquire new knowledge, experience feelings of personal accomplishment, and feel a sense of academic/psychological stimulation.

Deci and Ryan (1985) determined that intrinsic motivation results in high-quality learning for students, since students have an in-born desire to learn the content presented to them. Additionally, research has shown that interesting, challenging activities in education are important for maintaining and enhancing intrinsic motivation. One way that instructors can foster intrinsic motivation is through the implementing of stimulating, informational educational environments where learning activities are task-based and where the student can use both positive and negative feedback to better understand the task, and improve future

performance (Deci and Ryan, 1985). In many ways, this describes the typical career development event experience for many FFA members. Career development events are generally task-based, where students apply concepts learned in the agriculture class in order to successfully complete an activity, such as placing a class of beef cattle and providing oral reasons to support the student's placings, or demonstrating proficiency in floriculture by tying a floral bow. In addition, the career development event usually challenges the student to extend beyond the content learned in class—students often have to augment this foundational knowledge with additional practice and preparation in order to be successful in the career development event.

Research by Ryan and Deci has shown that one of the keys to effective extrinsic motivation in educational settings is the degree of internalization the student experiences. This refers to the process of taking in a value or regulation; in other words the student comes to perceive that the task he or she is being asked to perform is valuable or has purpose. Increasing internalization gives rise to greater persistence, more positive self-perceptions, and better quality of engagement (Ryan and Deci, 2000). The findings of this study indicate that students not only enjoy participating in career development events, they have internalized these events such that they perceive value in them. The students perceived that career development event participation could enhance career prospects in the future, including increasing the likelihood of entering an agricultural field, and positively impacting their salary in their chosen career field. While the statements related to career preparation are forms of external regulation, students seem to view this type of regulation in a positive light.

The idea that the students in this study have internalized career development event participation is supported by research conducted by Croom, Moore, & Armbruster (2009) which suggests that students participate in CDE's because participation will enhance their career options in the future.

It would be beneficial for FFA advisors to have an understanding of intrinsic and extrinsic motivation. Such knowledge would facilitate the FFA advisor's ability to convey the value of career development event participation to FFA members.

While students in this study demonstrated high levels of intrinsic motivation to participate in career development events, it must be remembered that students also demonstrated high levels of extrinsic motivation. As a result, awards and recognition for career development event participation are important. It would be advantageous for the FFA to evaluate the awards/recognition afforded to FFA members for their participation in career development event, to insure that the awards and the recognition students receive is meaningful. Tangible awards, such as plaques, trophies, and certificates are certainly positive symbols of success in a given career development event. However, since many students indicate that they are participating in career development events for career development reasons, it may be advantageous to offer awards for outstanding performance in a career development event that will assist the student in attaining career goals. One possible award, rather than a tangible award, was suggested by Croom, Moore, and Armbruster (2009) when they recommended the awarding of college scholarships for high performance in a career development event.

In this study, students viewed the FFA advisor as the individual with the greatest impact on their success in career development events. First, they agreed with the idea that the FFA advisor was the main individual that recruited them to participate in career development events. Secondly, they agreed that they would not be very successful in their career development event participation without the efforts of their FFA advisor. This supports the premise that the FFA advisor is the most important factor in the overall effectiveness of the agricultural education program, including activities related to career development events. For example, it is ultimately the advisor's responsibility to make the decision regarding what career development events will be facilitated in the agricultural education program. Additionally, the FFA advisor is usually the individual most responsible for training students for career development event competition (Croom, Moore, & Armbruster 2009).

It would be beneficial in future study to determine how FFA programming related to career development events in the local agricultural education program is planned. Are the activities of the local FFA chapter being selected exclusively by students, exclusively by the FFA advisor, or by both students and advisors collaborating together? The method by which career development events are chosen could have an impact on the type of student motivation.

Self-determination theory maintains that it is human nature to engage in interesting activities, maintain connections with social groups, and to combine both intrapersonal and interpersonal experiences and activities into one unit (Deci and Ryan, 2000). This study

dealt with intrinsic and extrinsic motivation of FFA members, utilizing a modified version of the AMS in order to quantify the intrinsic and extrinsic motivational factors that the respondents experienced. It would be desirable that future research involving student motivation in agricultural education examine the various interpersonal/social interactions presented in Self-Determination Theory, and how they influence participation in various programs in agricultural education.

### **Recommendations for Further Research**

This study focused on a small population of FFA members in the Southeast FFA region of North Carolina. Additionally, the response rate for this study was much less than 70 percent. Both factors, particularly the response rate of this study, limit the ability to generalize findings to the overall population of FFA members. For example, Talbert and Balschweid (2006) found that 56% of FFA members participated in career development events. In this study, the rate of participation in career development events was less than half the rate reported by Talbert and Balschweid. Because of this study's response rate, it is impossible to know if this unusually low rate of participation is an accurate reflection of the population of interest. Therefore, it is recommended that this study be replicated with a revised research methodology, with emphasis on the sampling procedure used, in order to achieve a higher response rate. This would improve the ability to generalize the results to the population of interest. For example, in this study agriculture teachers were asked to facilitate data collection. They were responsible for obtaining informed consent, administering the research questionnaire, and returning these materials to the researcher. A more effective

means of data collection might involve the researcher personally administering the research questionnaire to each cluster. This would insure that an adequate number of respondents participate in the study, and would also allow the researcher to monitor data collection in order to insure that procedures were followed properly. In addition to replicating the study in order to gain a higher rate of response, it is also recommended that the study be replicated with other FFA members in other regions of North Carolina and the United States in order to see if the results of this study, as well as other research related to career development events, are supported in other regions or state FFA associations. In addition to revising sampling methods used for this study, it would be beneficial for future researchers to evaluate and revise the instrumentation used. While the AMS, with items modified to reflect career development participation, was deemed to be appropriate for use to gather the necessary data, it is possible that other more applicable questions could be asked of students to more accurately determine the levels and types of motivation they feel concerning career development event participation. It is recommended that a qualitative study of student motivation to participate in career development events be conducted, in order to determine if additional or different questions should be included in order to more accurately measure student motivation to participate in career development events.

This study evaluated the motivational factors of students who had actually participated in a career development event. Seventy-nine percent of the respondents in this study had never participated in a career development event. It is unclear if this is because students said “no” to participation in career development events, or because the FFA advisor

did not promote career development event participation in the local agricultural education program. It is recommended that research be conducted to evaluate reasons that agricultural education students do not participate in career development events. While there may be little that can be done to change the attitudes of FFA advisors who do not offer the opportunity to participate in career development events to their students, a greater understanding of why students choose to not participate in career development events would make it possible to correct those factors that discourage their participation. It is further recommended that such research include all high school agricultural education students, both FFA members and non-members.

Additionally, this study did not address the motivation that FFA advisors feel to participate in career development events. Research by Croom, Moore, & Armbruster (2009) suggests that competition is one factor that motivates FFA advisors to train students for career development events. This is an example of extrinsic motivation; however the level of intrinsic or extrinsic motivation that FFA advisors experience regarding career development event participation is unclear. Therefore, it is recommended that further research be conducted to compare the motivational factors of career development event and non-career development event participants, as well as the motivational factors of FFA advisors. Such research would provide a clearer picture of why students do, and why they do not choose to participate in career development events. It would also allow researchers to compare the motivational factors of FFA advisors and students, and examine how the motivation of FFA advisors affects the level of career development event participation of their students. This

knowledge would make it possible to further enhance career development event programming in order to maximize the benefits students receive from participating in them.

### **Recommendations for Practice**

The results of this study revealed that many students participated in at least one career development event activity at the chapter level. This indicates that some teachers are setting up local career development events, possibly as a way to select the students that will participate in the career development event at the next level, or possibly as a teaching tool in the agriculture class. In general, the focus of career development event programming in North Carolina has been towards those activities which take place above the local level. However, it appears from the results of this study that this focus is missing the majority of FFA members. The findings of this study suggest that an increased focus on career development event programs at the FFA chapter level would provide more opportunities for students to participate in a career development event, thus exposing more FFA members to the benefits of career development event participation. It is recommended that the North Carolina FFA Association address ways that it can facilitate the conduct of local-level career development event activities. While it is not the intention of the researcher to suggest that the state association regulate career development events at the local level, state agricultural education staff could provide greater access to resources which FFA advisors could use to enhance the conduct of chapter-level career development events. For example, state FFA staff could make available resources such as testing materials for general knowledge tests used in previously held state level career development events. These materials could be used

by agriculture teachers for the facilitation of local-level career development events. In addition, state FFA staff should continue to offer opportunities for FFA advisors to receive professional development training related to career development event content.

Agricultural education teachers should re-examine the purposes of career development events, and evaluate the role of career development events in their FFA programs. Do all FFA members have the opportunity to participate in career development events? Are a select few students allowed or encouraged to participate in many career development events while other students participate in none? Do students participate in career development events for personal growth, or to earn awards for themselves and the FFA chapter?

In light of the fact that FFA members place an emphasis on the career development opportunities associated with career development events, it is recommended that the North Carolina agricultural education staff continue to evaluate and revise career development events, in order to assure that they remain aligned with current agricultural practices. It is important to insure that the experience students obtain through career development event competition is an accurate representation of the agricultural industry.

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## APPENDICES

**Appendix A**  
**IRB Approval Letter**



919.515.2444 (phone)  
919.515.7721 (fax)

From: Carol Mickelson, IRB Coordinator  
North Carolina State University  
Institutional Review Board

Date: July 17, 2012

Title: Measuring a student's motivation to participate in a career development event

IRB#: 2721

Dear Albert Jones

The research proposal named above has received administrative review and has been approved as exempt from the policy as outlined in the Code of Federal Regulations (Exemption: 46.101. b.1 and b.2.). Provided that the only participation of the subjects is as described in the proposal narrative, this project is exempt from further review.

NOTE:

1. This committee complies with requirements found in Title 45 part 46 of The Code of Federal Regulations. For NCSU projects, the Assurance Number is: FWA00003429.
2. Any changes to the research must be submitted and approved by the IRB prior to implementation.
3. If any unanticipated problems occur, they must be reported to the IRB office within 5 business days.

Please forward a copy of this letter to your faculty sponsor, if applicable. Thank you.

Sincerely,

A handwritten signature in cursive script that reads "Carol Mickelson".

Carol Mickelson

**Appendix B**  
**Informed Consent Form**

## **Your Opinion Counts!**

North Carolina State University is working to develop new and improved career development events for the Future Farmers of America organization. In order to improve career development events, we would like to know your opinion about them. This helps us focus our efforts on the things that matter the most to you.

In a few days, you will be asked to complete a questionnaire that asks your opinion about the FFA career development events program. You'll be asked to tell us the career development events in which you have participated, and tell us why you chose to participate in them. The questionnaire should take about 15 minutes of your time. When you are finished, please give it to your teacher. Please keep the NCSU pen you used to complete the study as our gift to you.

### **Before you begin...**

...the survey, please know that your participation in this research study is voluntary. You have the right to participate in this study, but you can also choose not to participate or to stop participating at any time, without any risk. If you do not understand something in this questionnaire, or if at any time you have questions about your participation, do not hesitate to ask Dr. Barry Croom or your teacher for clarification.

The answers you provide on your questionnaire will be kept confidential to the full extent allowed by law. Data will be stored securely in a locked filing cabinet inside a secure office area. No reference will be made in oral or written reports which could link you to the study. Please do not put your name on the questionnaire. Just put your completed questionnaire into the large brown envelope provided at the front of the room.

Regardless of whether or not you complete a questionnaire, please keep the NCSU pen given to you by your teacher as our gift to you.

If you have questions at any time about the questionnaire please contact Dr. Barry Croom, Box 7607, Raleigh, NC 27695 or by telephone at 919-515-1759. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Deb Paxton, Regulatory Compliance Administrator, Box 7514, NCSU Campus (919/515-4514).

**Consent to Participate**

“I have read and understand the above information. By returning consent form, I agree to participate in this study with the understanding that I may choose not to participate or to stop participating at any time without penalty or loss of benefits to which I am otherwise entitled.”

**Student’s signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Parent’s or Guardian’s signature** \_\_\_\_\_ **Date** \_\_\_\_\_

## **Appendix C**

### **Email to Teachers**

**From:** Albert Jones  
**Sent:** Mon 8/13/2012 1:59 PM  
**To:**  
**Subject:** Your help needed: Agricultural Education Research Project

Dear colleague,

My name is Al Jones. I teach agriculture at Richlands High School in Onslow County and I am currently working on my dissertation in Agricultural & Extension Education at NC State University. My research concerns the identification of the motivation factors that influence why FFA members choose to participate in FFA career development events. Your participation in this research study will enable us to better understand why students choose to participate in CDE's, which will enable them to be more successful in CDE competition.

To complete my dissertation, I need your help. In a few days, I will be sending you copies of my research questionnaire, along with informed consent forms and complete instructions, for your students to complete. The questionnaire is intended primarily for level II classes, however if you have a number of students in a level I class who have participated in FFA CDE's, you may want to give the questionnaire to that class.

Please be on the look-out for these materials. I am asking, if you are willing to participate, that you return everything to me by Sept. 10. I know some of you may want to distribute the informed consent form with your syllabus and other beginning of the semester materials. For your convenience, I have attached a copy of this form for your use.

I deeply appreciate your assistance with this project. The Southeast Region has a long track-record of excellence in every aspect of agricultural education and FFA. It is my hope that your assistance will lead us all to better ways to provide greater opportunities for our students.

Respectfully,

Al Jones  
Principal investigator  
NCSU graduate student  
[adjones@ncsu.edu](mailto:adjones@ncsu.edu)  
910-324-4191

Dr. Barry Croom, Faculty Advisor  
Professor of Agricultural & Extension Education  
[dbcroom@ncsu.edu](mailto:dbcroom@ncsu.edu)  
919-515-1759

## **Appendix D**

### **Reminder Email to Teachers**

**From:** Albert Jones  
**Sent:** Fri 8/24/2012 2:37 PM  
**To:**  
**Cc:** dbcroom@ncsu.edu  
**Subject:** RE: Your help needed: Agricultural Education Research Project

Hello again,

By now, many of you have probably received the informed consent forms and student questionnaires for my research project. If you haven't yet, it should be there "any day." If you have any questions about these materials, please contact me.

Once again, thank you for helping me with this project!

Al

## **Appendix E**

### **Second Reminder Email to Teachers**

**From:** Albert Jones  
**Sent:** Wed 9/5/2012 10:22 PM  
**To:**  
**Cc:** dbcroom@ncsu.edu  
**Subject:** REMINDER: Your help needed: Agricultural Education Research Project

Hello again,

I hope everyone has had a smooth start to the new school year. I wanted to give you a friendly reminder about the research questionnaires I sent you. If you haven't already done so, please have your students complete the informed consent forms and the questionnaires and mail back to me by next Monday, Sept. 10. Your participation is very important to the success of this project.

If you have already sent your materials back to me, please accept my sincere appreciation!

Once again, thank you for your assistance with this research project!

Al Jones  
Principal investigator  
NCSU graduate student  
[adjones@ncsu.edu](mailto:adjones@ncsu.edu)  
910-324-4191

**Appendix F**  
**Third Reminder Email**

**From:** Albert Jones  
**Sent:** Thu 9/27/2012 10:21 AM  
**To:**  
**Subject:** help needed

\_\_\_\_\_

I wanted to check with you and see if you had returned that survey I sent out several weeks ago. If you haven't yet, would you be able to give it to one of your classes and send it back to me in the next couple of days? I am trying to finish up my dissertation by the end of October and I don't quite have enough of them back yet to run my data. If you should need any more copies or anything, let me know and I'll get them to you.

If you already sent it back, I really appreciate it! I got a big handful at RLC and I can't remember if you were one of them or not! If you don't mind, email me back to let me know you sent it.

thanks!

Al Jones  
Principal investigator  
NCSU graduate student  
[adjones@ncsu.edu](mailto:adjones@ncsu.edu)  
910-324-4191

**Appendix G**  
**Research Questionnaire**

## Your opinion counts!

Please take a moment to complete this questionnaire. North Carolina State University is working to develop new and improved career development events for the Future Farmers of America organization. In order to improve career development events, we would like to know your opinion about them. This helps us focus our efforts on the things that matter the most to you. Your answers are confidential and no one at this school, including your teacher will see your individual answers. Please do not write your name on this questionnaire. **Your participation is voluntary. If you choose not to participate, please leave the questionnaire blank and return it to your teacher. Thank you!**

For each item, fill in the bubble that corresponds to your answer. You may mark your answers with a pen or a pencil.

1. I am a

- Freshman
- Sophomore
- Junior
- Senior

2. I have been a FFA member my \_\_\_\_\_ year(s): (mark all that apply)

- Freshman
- Sophomore
- Junior
- Senior
- I have not been a FFA member

3. I am a

- Male
- Female

4. Please indicate if you have participated in any CDE's at the chapter, federation, state, or national level of the FFA.

- I have participated in at least one CDE since I have been in FFA
- I have never participated in a CDE in FFA.

**If you have participated in a CDE, please continue with question 5. If you have never participated in a CDE, please stop. Thank you!**

5. The following statements are meant to help us better understand why you chose to participate in a CDE(s). Please mark how much you agree with the following statements.

	I completely disagree	I mostly disagree	I disagree a little	I neither agree or disagree	I agree a little	I mostly agree	I completely agree
1. I believe that participating in CDEs could be helpful in finding a job later on.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I like to learn new things in a CDE.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I think that CDE participation will help me better prepare for the career I have chosen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I enjoy the thrill of competing in CDEs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I really feel that I am wasting my time participating in CDEs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I experience satisfaction when I improve my performance in a CDE.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I participate in CDEs to prove to myself that I am capable of doing well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	I completely disagree	I mostly disagree	I disagree a little	I neither agree or disagree	I agree a little	I mostly agree	I completely agree
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8. I participate in CDEs in order to obtain a more prestigious job later on

9. I participate in CDEs for the satisfaction I experience when I learn new knowledge or skills

10. I participate in CDEs because eventually it will enable me to enter the job market in a field that I like.

11. I participate in CDEs because I have a special interest in them.

12. I once had good reasons for competing in CDEs however, now I wonder whether I should continue

	I completely disagree	I mostly disagree	I disagree a little	I neither agree or disagree	I agree a little	I mostly agree	I completely agree
13. I participate in CDEs for the pleasure that I experience while I am surpassing myself in one of my personal accomplishments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. When I succeed in a CDE I feel important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Participating in CDE's will help me enter an agricultural career	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I participate in CDEs for the pleasure that I experience in broadening my knowledge about subjects which appeal to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Participating in CDEs will help me make a better choice regarding my career orientation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I enjoy the pleasure that I experience when I feel deeply involved in the CDE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. I can't see why I participate in CDEs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	I completely disagree	I mostly disagree	I disagree a little	I neither agree or disagree	I agree a little	I mostly agree	I completely agree
20. I feel satisfaction when I am in the process of accomplishing difficult CDE activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. I participate in CDE's to show myself that I am an intelligent person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I participate in CDE's in order to have a better salary later on	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Participating in CDE's allows me to continue to learn about things that interest me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. I believe that the knowledge I obtain in a CDE will improve my competence as a worker	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. I participate in CDE's for the enjoyment that I experience while learning about various interesting subjects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	I completely disagree	I mostly disagree	I disagree a little	I neither agree or disagree	I agree a little	I mostly agree	I completely agree
26. I don't know what I am doing by participating in CDE's	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. Participating in CDE's allows me to experience a personal satisfaction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. I want to show myself that I can succeed in CDE competition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. The following statements are meant to help us better understand other peoples' influence on you to participate in CDE's. For each statement, please indicate how much you agree or disagree with it by selecting the appropriate response.

	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. I started participating in CDE's because my advisor encouraged me to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I started participating in CDE's because my family encouraged me to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I started participating in CDE's because my friends encouraged me to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. If it wasn't for my FFA advisor, I would not be very successful in CDE's	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. The following statements are meant to help us better understand your personal feelings about CDE's. Please indicate how much you agree or disagree with each statement by selecting the appropriate response.

	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. I participate in CDE's because it is an opportunity to be involved in FFA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I participate in CDE's because I like to travel.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I like it when I miss class(es) to participate in CDE's	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Participating in CDE's is a way to increase my chances of advancing in the FFA (officer positions, winning awards, receiving scholarships, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Being able to participate in CDE's is the main reason I am a FFA member	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Please mark the highest level in which you participated (chapter, federation, region, state, or national) for each CDE. If you have never participated in a particular CDE, mark "Have not participated."

	Chapter	Federation	Region	State	National	Have Not Participated
Agricultural Communications	<input type="checkbox"/>					
Agricultural Issues	<input type="checkbox"/>					
Agricultural Mechanics	<input type="checkbox"/>					
Agricultural Sales	<input type="checkbox"/>					
Agricultural Sales--Junior	<input type="checkbox"/>					
Agricultural Tools & Materials	<input type="checkbox"/>					
Agriscience Fair	<input type="checkbox"/>					
Agronomy	<input type="checkbox"/>					
Creed	<input type="checkbox"/>					
Dairy Cattle Handlers	<input type="checkbox"/>					
Dairy Evaluation and Management	<input type="checkbox"/>					
Dairy Evaluation and Management--Junior	<input type="checkbox"/>					

	Chapter	Federation	Region	State	National	Have Not Participated
Envirothon	<input type="checkbox"/>					
Extemp. Public Speaking	<input type="checkbox"/>					
Farm Business Management	<input type="checkbox"/>					
Farm Business Management--Junior	<input type="checkbox"/>					
Floriculture	<input type="checkbox"/>					
Food Science & Technology	<input type="checkbox"/>					
Forestry	<input type="checkbox"/>					
Horse Evaluation	<input type="checkbox"/>					
Horse Evaluation--Junior	<input type="checkbox"/>					
Hunter Safety	<input type="checkbox"/>					
Introduction to Horticulture	<input type="checkbox"/>					
Job Interview	<input type="checkbox"/>					
Land Judging	<input type="checkbox"/>					
Land Judging--Junior	<input type="checkbox"/>					

	Chapter	Federation	Region	State	National	Have Not Participated
Livestock Evaluation	<input type="checkbox"/>					
Livestock Evaluation-- Junior	<input type="checkbox"/>					
Marketing Plan	<input type="checkbox"/>					
Meats Evaluation	<input type="checkbox"/>					
Milk Quality and Products	<input type="checkbox"/>					
Nursery Landscape	<input type="checkbox"/>					
Quiz Bowl	<input type="checkbox"/>					
Poultry Evaluation	<input type="checkbox"/>					
Prepared Public Speaking	<input type="checkbox"/>					
Parliamentary Procedure	<input type="checkbox"/>					
Tractor Safety & Skills	<input type="checkbox"/>					
Truck Safety & Skills	<input type="checkbox"/>					
Vet Science	<input type="checkbox"/>					