

# Perceptions of North Carolina High School Agricultural Educators Regarding Students with Special Needs Participating in Supervised Agricultural Experience and FFA Activities

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*The purpose of this study was to examine the perceptions of North Carolina high school agricultural educators toward including students with special needs when implementing Supervised Agricultural Experience and participating in FFA activities. The population was all high school agricultural educators in North Carolina with 12 month employment (N = 307). A simple random sample of 172 was selected with a response rate of 45.9%. Participants completed a questionnaire that measured teachers' perceptions and collected demographic information. Data analysis indicated that teachers had positive perceptions toward including students with special needs when implementing SAE. Teachers perceived that FFA participation was beneficial for students with special needs, but there were more limitations for these students than for other students. Teachers most frequently perceived student ability as a barrier to working with these students in SAE and the FFA.*

Keywords: Supervised Agricultural Experience; FFA; Students with Special Needs

## Introduction

Historically, Agricultural Education has reached out to both young people and adults who, regardless of their abilities, could benefit from instruction in agriculture (Iverson, 1993). In recent years, the number of Career and Technical Education students identified as students with special needs has increased dramatically (North Carolina Department of Public Instruction, 2007). This trend was evident in North Carolina in 2009 when 42% of high school students enrolled in Agricultural Education in North Carolina were academically disadvantaged and 12.9% were disabled (North Carolina Department of Public Instruction, 2010).

Nationally, 14 percent of students enrolled in public education are served under the

Individuals with Disabilities Education Act (IDEA) (United States Department of Education, 2009). The federal regulations that mandate the responsibilities of educators to accommodate students with special needs are part of the Individuals with Disabilities Education Act (IDEA) of 2004. The various disabilities that make a student eligible for services provided for under IDEA are: specific learning disabilities, speech or language impairments, mental retardation, emotional disturbance, multiple disabilities, hearing impairments, orthopedic impairments, visual impairments, and other health impairments (United States Bureau of Labor Statistics, 2009).

The predominant model for organizing instruction in Agricultural Education involves the relationships among three major components: classroom and laboratory

instruction, SAE, and FFA (Phipps & Osborne, 1988). All three components have been shown to be beneficial to students with special needs. Dormody, Seevers, Andreasen, and VanLeeuwen (2006) concluded that emphasis should be placed on including students with special needs in FFA and SAE. In a study conducted by Schwager and White (1994), Oklahoma agriculture teachers determined that SAE was beneficial to students with special needs and these students should be encouraged to have an SAE program. Other studies have reported specific concerns about students with special needs competing in Career Development Events with non-special needs students (Boone, Watts, Boone, & Gartin, 2008). Cooper, Bocksnick, and Frick (2002) reported that FFA involvement assisted students with special needs in overcoming struggles with self-esteem and independence. Nonetheless, the National FFA Organization recognized there is legislation requiring agricultural educators to provide equal opportunities for involvement to all students of Agricultural Education, regardless of any disability (Ploss, Field, & Frick, 1996).

Elbert and Baggett (2003) concluded there was a need for research on students with disabilities in Agricultural Education. Trends have shown the population of students with special needs has increased in Agricultural Education; therefore, teachers must be both willing and prepared to meet their unique demands (Stair, 2009). Examining teachers' perceptions of working with students who have special needs in FFA and SAE could provide insight into how to help teachers best meet the needs of these students. If students perceive a teacher has low expectations of them it could have a harmful impact on their academic performance (Repps & Dormody, 1993).

Preparation for teaching students with special needs may influence teachers' perceptions toward these students. General education teachers who had substantial training in special education held significantly higher positive attitudes toward teaching students with special needs than those with little or no training (Avramidis, Bayliss, & Burden, 2000). Pense (2007) recommended that further research be conducted to describe the challenges an Agricultural Education teacher experiences by

including students with disabilities in their programs. Independent variables such as: teacher's age, years of teaching experience, interaction with an individual with special needs beyond the classroom, and the amount of training received pre-service and through in-service could explain differences in teachers' perceptions of working with students with special needs in SAE and FFA activities. Having this information could guide the development of improved in-service or pre-service training to help teachers cope with the demands of working with these students. It would also provide insight into what support state and local education agencies should provide to teachers working with students with special needs.

### Theoretical Framework

The theoretical framework for this study is based on Ajzen's theory of planned behavior. Ajzen's theory states individuals' attitudes, subjective norms in respect to a behavior, and perceived control over a behavior can predict behavioral intentions with a high degree of accuracy (Ajzen, 1991). In the case of this study, agricultural educators' attitudes, their subjective norms, and perceived control towards working with students with special needs in an Agricultural Education program could predict their intentions of including these students in SAE and the FFA.

Attitude toward a behavior refers to how favorably or unfavorably an individual evaluates a behavior (Ajzen, 1991). This study was designed to determine agricultural educators' perceptions of working with students with special needs when participating in SAE and FFA. A teacher's perception indicates his awareness of a specific attitude toward incorporating these students.

Second, subjective norms are social factors that refer to the social pressure an individual feels to perform a particular behavior (Ajzen, 1991). Regardless of whether agricultural educators are actually recruiting or including students with special needs, it is a professional expectation that they will do so. Teachers are told repeatedly by teacher educators, peers, and administration that it is their job to provide equal

opportunities for all students regardless of ability or background and to include them into their respective curriculum. A negative subjective norm could be the pressure agricultural educators may feel to win awards through SAE and FFA because programs that win awards receive praise and recognition.

The third determinant is perceived control, which refers to the individual's perception of how easy or difficult performing a specific behavior is based upon past experiences as well as anticipated obstacles or barriers (Ajzen, 1991). If agricultural educators perceive that working with students with special needs in the SAE or FFA is difficult, they may be less likely to recruit or find ways to include these students. Furthermore, if agricultural educators perceive there are barriers to include these students, they may not be motivated to do so.

According to Ajzen, agricultural educators will be more likely to incorporate students with special needs in the FFA and SAE, if they have positive attitudes toward working with these students, encouragement from their peers and administration to include special needs students, and they perceive that working with students with special needs is not impossibly difficult. When predicting an individual's intention of performing a behavior, the importance of attitudes, social norms, and perceived behavioral control is expected to vary across behaviors and situations (Ajzen, 1991). There may be some situations where only attitudes have a significant impact on intentions, others where attitudes and perceived behavioral control are sufficient to affect intentions, and still others where all three determinants independently impact intentions (Ajzen, 1991). This study focused on specifically evaluating teachers' attitudes and perceived behavioral control, with consideration to subjective norms that could impact teachers' intentions of incorporating students with special needs in SAE and FFA activities.

### **Purpose/Objectives**

The purpose of this study was to examine the perceptions North Carolina agricultural educators have related to including students with special needs in SAE and FFA activities. Additionally, this study examined the

relationships that existed between agricultural educators' perceptions and in-service training.

The objectives of this study were as follows:

1. Examine agricultural educators' perceptions toward working with students with special needs when implementing Supervised Agricultural Experience (SAE).
2. Examine agricultural educators' perceptions toward working with students with special needs within the FFA organization.
3. Identify perceived barriers that agricultural educators may have regarding working with students with special needs when implementing SAE.
4. Identify perceived barriers that agricultural educators may have regarding working with students with special needs within the FFA organization.
5. Determine the amount of in-service training related to students with special needs completed by agricultural educators.
6. Determine if a relationship existed between hours of in-service training agricultural educators received regarding working with students with special needs and agricultural educators' perceptions of including students in SAE and FFA activities.

### **Methods**

This study utilized descriptive explanatory research. Survey research methods were used to collect information to describe North Carolina agricultural educators' perceptions and perceived barriers of working with students with special needs in the Agricultural Education program. The population examined in this study was high school Agricultural Education teachers in North Carolina with a 12 month teaching contract during the 2009–2010 school year ( $N = 307$ ). The sampling frame used was the 2009–2010 North Carolina Agriculture Teachers Directory provided by the North Carolina FFA Association. The Agriculture Teachers Directory is maintained by state Agricultural Education supervisors who communicate with teachers at least on a monthly basis. This directory is updated annually and served as the most exhaustive list of agricultural educators in North Carolina. Agricultural Education teachers

with 10 month (including middle school teachers) or 11 month contracts were not included in the population. Agricultural educators with a 12 month teaching contract constituted the population of the study since they have extended time working with students particularly during summer SAE supervision visits and FFA activities. Additionally, middle school teachers were not included in the study because the concept of SAE is taught to middle school students, but they are not required to have SAE projects.

In survey research, information may be collected from a sample of individuals instead of every member of the population (Fraenkel & Wallen, 2006). A simple random sample of teachers was selected to complete the online survey instrument. The sample was obtained by assigning each agriculture teacher a number and then using an online number generator to randomly select individuals to participate in the study. The sample size was determined using Krejcie and Morgan's sampling formula (Krejcie & Morgan, 1970). Krejcie and Morgan's formula was based on a 95% confidence level and a degree of accuracy of .05. Using the sampling formula, 172 teachers were selected to participate in the study from a population of 307 high school agricultural educators on 12 month contracts.

The questionnaire was developed by the researcher with some questions being modeled after the Schwager and White (1994) study on Oklahoma agricultural educators' perceptions of working with students with special needs and SAE. Questions were formatted using a four-point Likert-type scale, multiple choice, or open-ended response. Content validity was determined by a panel of experts including Agricultural Education professors at two universities.

Reliability of the instrument was determined using the test/re-test method. A pilot study was conducted on 14 ( $n = 14$ ) agricultural educators with a 10 or 11 month teaching contract in North Carolina. These teachers were not included in the population but share similar characteristics with those who were included in the final sample. An e-mail message was sent to 40 teachers on 10 or 11 month teaching contracts requesting that they complete the questionnaire.

The teachers were notified that they would be asked to complete the questionnaire a second time 10 days later. Twenty teachers completed the questionnaire for the first round. Fourteen of the 20 original respondents completed the questionnaire again after the 10 day period. The instrument was then evaluated to determine if there were significant differences between the first and second round of responses. No statistically significant differences were found, so the instrument was determined to be stable over time.

To determine perceptions, teachers were asked to respond to specific statements using a four-point Likert-type scale. Likert scales are often used as an attitudinal scale in educational research (Fraenkel & Wallen, 2006). Four-point scales, such as the one used for this study, are often referred to as *Forced-Choice* Likert-type scales where respondents are not given the option to choose *Undecided* or *Neutral* when responding to specific statements. This compels the respondents to decide whether they tend to agree or disagree on some level with a particular statement. On the four-point scale used for this study, 1 represented *Strongly Disagree*, 2 represented *Disagree*, 3 represented *Agree*, and 4 represented *Strongly Agree*.

Teachers received a cover letter via e-mail explaining the study and how they were selected to participate. The e-mail message also contained a link to the website for the survey instrument. Teachers completed and submitted the questionnaire online. After the initial e-mail message, three follow up e-mail messages were sent roughly three weeks apart for a 12 week period, encouraging the selected teachers to participate. Dillman (2000) suggested that contacting participants four times is sufficient when conducting e-mail surveys. The researcher was not able to distinguish which teachers gave specific responses.

After the 12 week period, 77 teachers had responded to the survey resulting in a 44.8% response rate. One of the recommended procedures for controlling for non-response error is to compare respondents to non-respondents (Lindner & Wingenbach, 2002). Non-response error was controlled for by contacting 15% ( $n = 17$ ) of the non-respondents and asking them a selection of questions from

the instrument to determine if there were any differences between respondents and non-respondents. An independent *t*-test was used to determine if any statistical differences existed between the perceptions of respondents and non-respondents. No differences were found so the respondents were considered to be representative of the sample. Even though results from the respondents and non-respondents did not differ, due to a relatively low response rate, the results of this study are limited to the respondents.

Descriptive statistics, including measures of central tendency and variability were used to decide teachers' perceptions regarding including students with special needs in SAE and FFA activities. Perceived barriers to inclusion of students with special needs in these components of the agricultural education program were described using means, frequencies, and percentages. Relationships between teachers' perceptions related to working with students with special needs and hours of in-service were analyzed using Pearson product moment correlation coefficients. Based upon advice from the statistics department at North Carolina State University, mean scores from perception items were treated as interval data for the purpose of data analysis.

## Findings

The majority (64.9%) of the 77 respondents were male. Teachers' ages ranged from 23 to 63 with a mean age of 39.50 and a standard deviation of 11.07. Years of teaching experience ranged from 2 to 37 years. The mean number of years teaching was 14.52 with a standard deviation of 9.36. The sample number (*n*) for each question is different since not all participants responded to each item.

Objective one was to examine agricultural educators' perceptions toward working with students with special needs when implementing SAE. Table 1 describes the percentages of teachers that responded accordingly to each statement and a mean score for all the teachers' responses. Based on the responses, teachers perceived that students with special needs receive similar benefits from SAE as other students with 97.1% agreeing with this statement. Teachers also perceived that SAE is beneficial to students with special needs ( $M = 3.01, SD = 0.58$ ). Nearly three-quarters (74.5%) of respondents disagreed that students with special needs should not be required to have an SAE. Teachers believed that students with special needs should conduct an SAE program. However, 58.6% of teachers agreed that students with special needs have a more difficult time conducting a quality SAE project than other students.

Table 1  
*Perceptions of Teachers Regarding Students with Special Needs Participating in Supervised Agricultural Experience (SAE)*

Statement	<i>n</i>	Strongly	Disagree	Agree	Strongly	<i>M</i>	<i>SD</i>
		Disagree	%	%	Agree		
Receive similar benefits from SAE as other students	69	0.0	2.9	66.7	30.4	3.28	0.51
SAE helps students with special needs set career goals	69	2.9	10.1	75.4	11.6	3.12	0.58
SAE enhances the social skills of students with special needs	67	3.0	7.5	74.6	14.9	3.05	0.59
SAE is beneficial to students with special needs	69	2.9	2.9	73.9	20.3	3.01	0.58
Conduct projects that are closely related to classroom instruction in agriculture	69	1.4	13.0	78.3	7.2	2.96	0.51
Have a more difficult time conducting a quality SAE project than other students	70	7.1	34.3	52.9	5.7	2.91	0.71
Are capable of winning SAE awards	70	1.4	20.0	65.7	12.9	2.90	0.61
Are capable of keeping good SAE records	69	1.4	24.6	60.9	13.0	2.86	0.65
Should not be required to have an SAE	70	32.9	41.4	15.7	10.0	2.03	0.95

Note. 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree

Objective two was to examine agricultural educators' perceptions toward working with students with special needs within the FFA organization. Table 2 describes the percentage of teachers that responded to each statement and a mean for all the teachers' responses. Based on the responses, teachers perceived that FFA activities were beneficial to students with special needs ( $M = 3.18$ ,  $SD = 0.45$ ) and they should be expected to participate in FFA activities ( $M = 3.05$ ,  $SD = 0.73$ ). However, almost two-thirds (64.5%) of teachers perceived that

FFA activities were more limited for students with special needs than other students. Respondents were divided on whether students with special needs have more difficulty participating in FFA activities than other students with 47.3% choosing to disagree and 52.7% to agree. More than half of responding teachers (56.7%) perceived that students with special needs can receive accommodations at Career Development Events. Teachers perceived that students with special needs do not frequently win awards through their participation in FFA events ( $M = 2.38$ ,  $SD = 0.64$ ).

Table 2  
*Perceptions of Teachers Regarding Students with Special Needs Participating in FFA Activities*

Statement	<i>n</i>	Strongly Disagree		Strongly Agree		<i>M</i>	<i>SD</i>
		%	%	%	%		
Receive similar benefits from FFA participation as other students	74	0.0	2.7	63.5	33.8	3.31	0.52
FFA activities enhance the social skills of students with special needs	73	1.4	0.0	74.0	24.7	3.22	0.51
FFA activities are beneficial to students with special needs	76	0.0	2.6	76.3	21.1	3.18	0.45
Want to join FFA	74	2.7	8.1	68.9	20.3	3.07	0.63
Should be expected to participate in FFA activities	75	2.7	16.0	54.7	26.7	3.05	0.73
FFA activities help students with special needs set fulfilling career goals	75	2.7	14.7	73.3	9.3	2.89	0.58
FFA activities are more limited for students with special needs than other students	76	9.2	26.3	59.2	5.3	2.61	0.73
Have more difficulty participating in FFA activities than other students	74	8.1	39.2	43.2	9.5	2.54	0.78
Cannot receive accommodations at Career Development Events	74	10.8	45.9	29.7	13.5	2.46	0.86
Frequently win awards with their participation in FFA events	74	5.4	54.1	37.8	2.7	2.38	0.64

*Note.* 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree

Objective three was to identify perceived barriers that agricultural educators may have with regard to working with students with special needs when implementing SAE. Teachers were asked to report their top three barriers out of a list of potential challenges to including students with special needs when conducting SAE. Table 3 summarizes their responses. Respondents identified

*Opportunities to conduct SAE* most frequently as a barrier to working with students with special needs in conducting SAE ( $n = 43$ ). Student ability was the second most frequently identified barrier ( $n = 37$ ). Facilities for SAE placement not being adequate to meet students' needs also seemed to be a concern with these teachers when implementing SAE ( $n = 29$ ).

Table 3

*Perceived Barriers to Working With Students with Special Needs When Implementing SAE*

Column Heading?	<i>n</i>	%
Opportunities	43	55.8
Student Ability	37	48.0
Facilities	29	37.7
Parental Support	27	35.0
Time	23	29.8
Supervision	21	27.2
Student Behavior	14	18.2
Paraprofessional Support	11	14.3
Accommodations	11	14.3

*Note.* *n* = number of respondents that selected the barrier as one of their top 3 barriers.  
% = percentage of respondents who listed barrier as one of the top 3 barriers.

Objective four was to identify perceived barriers that agricultural educators may have when working with students with special needs in FFA activities. Teachers were asked to report their top three barriers, from a list of potential barriers, to working with students with special needs in FFA involvement. With no attempt to rank the barriers, Table 4 summarizes teachers' responses regarding their perceived barriers to working with students with special needs when

participating in FFA. Student ability (*n* = 46) and time (*n* = 34) were identified the most frequently as barriers to working with these students when participating in FFA activities. Parental support was the third most frequently perceived barrier identified by agricultural educators when working with these students in FFA. Paraprofessional support and facilities where FFA events are held were identified the least frequently.

Table 4

*Perceived Barriers To Working With Students with Special Needs in FFA*

Heading?	<i>n</i>	%
Student Ability	46	59.7
Time	34	44.1
Parental Support	29	37.7
Supervision	26	33.7
Accommodations	21	27.3
Student Behavior	19	24.7
Facilities	17	22.1
Paraprofessional Support	16	20.8

*Note.* *n* = number of respondents that selected the barrier as one of their top 3 barriers.  
% = percentage of respondents who listed barrier as one of the top 3 barriers.

Objective five was to determine the total hours of in-service training related to students with special needs completed by high school agricultural education teachers. Of the respondents, 88.3% completed in-service of some form related specifically to working with students with special needs. A total of 816

hours of training was completed by respondents. (*M* = 12.01, *SD* = 14.98).

Objective six was to determine if a relationship existed between hours of in-service training regarding students with special needs and teachers' perceptions of working with students when implementing SAE and participating in FFA activities. According to



Davis (1971), the relationships between hours of in-service training and teachers' perceptions of

working with students with special needs when implementing SAE were negligible (Table 5).

Table 5

*Relationships between Hours of In-service Training and Teachers' Perceptions of Working With Students with Special Needs when Implementing Supervised Agricultural Experience (SAE)*

Statement	<i>n</i>	<i>r</i>
Receive similar benefits from SAE as other students	69	0.11
SAE helps students with special needs set fulfilling career goals	69	-0.12
SAE enhances the social skills of students with special needs	67	-0.10
SAE is beneficial to students with special needs	69	-0.07
Conduct projects that are closely related to classroom instruction in agriculture	69	0.08
Have a more difficult time conducting a quality SAE project than other students	70	-0.14
Are capable of winning awards as a result of their SAE	70	0.18
Are capable of keeping good SAE records	69	0.20
Should not be required to have an SAE	70	-0.18

According to Davis (1971), a moderate association ( $r = -0.42$ ) existed between hours of in-service and teachers' perception that FFA activities are more limited for students with special needs than other students (Table 6). Teachers with fewer hours of in-service perceived that FFA activities were more limited for students with special needs than other students. A low positive correlation ( $r = .24$ ) was found between hours of in-service and the perception that students with special needs

benefited from FFA activities. Additionally, a low positive correlation ( $r = .24$ ) was found between hours of in-service and the perception that these students received similar benefits from FFA participation as other students. A correlation of  $r = .29$  or less indicated a low association between the two variables according to Davis (1971). Hours of in-service appeared to have some influence on teachers' perceptions of including students with special needs in FFA activities.

Table 6

*Relationship between Hours of In-service and Teachers Perceptions of Working With Students with Special Needs when Participating in FFA Activities*

Statement	<i>n</i>	<i>r</i>
Receive similar benefits from FFA participation as other students	74	.24
FFA activities enhance the social skills of students with special needs	73	.17
FFA activities are beneficial to students with special needs	76	.24
Want to join FFA	74	.17
Should be expected to participate in FFA activities	75	.00
FFA activities help students with special needs set fulfilling career goals	75	-.18
FFA activities are more limited for students with special needs	76	-.42
Have more difficulty participating in FFA activities than other students	74	.06
Cannot receive accommodations at Career Development Events	74	-.11
Frequently win awards with their participation in FFA events	74	.22

### Conclusions

Based upon the results of this study, the following conclusions were drawn:

- Agriculture teachers employed on 12 month contracts have positive perceptions toward students with special needs participation in the FFA and SAE components of the agricultural education program. However, their perception of special needs students' ability to receive recognition for their participation was higher for SAE activities than for FFA activities.
- Teachers in this study identified fewer opportunities for SAE involvement as the major barrier to students with special needs participating in SAE programs, with 55.8% of the teachers listing opportunities for SAE involvement as one of the top three barriers. While student ability was listed as a barrier by 48% of the teachers, ability was not the major concern.
- Teachers in this study perceive student ability to be a greater barrier for students with special needs participating in FFA activities than in SAE component of the program. The additional time required in working with special needs students on FFA activities is also a major concern for many teachers.
- Most teachers have had in-service training on the topic of including students with special needs that may have impacted their perceptions of including students with special needs in FFA and SAE programs. The amount of in-service training had an overall positive relationship regarding the FFA component, but was not evident regarding including students in SAE.

### Implications

Overall, teachers indicated they perceived SAE programs and FFA involvement as beneficial to students with special needs. They reported that these students with special needs should be encouraged to have SAE projects and should be expected to participate in FFA activities. These perceptions indicated favorable

attitudes regarding the impact Agricultural Education could have on students with special needs, which are reflected in similar studies of working with students with special needs in Agricultural Education (Elbert & Baggett, 2003; Ploss, Field, & Frick, 1996; Schwager & White, 1994;). Based on Ajzen's theory of planned behavior, if teachers have positive attitudes they will be more likely to work with or include these students into their programs. These are positive findings in terms of agricultural educators understanding that all students, regardless of ability, should be included in the total Agricultural Education program.

To what degree do agricultural educators intend to include or recruit these students? Incorporating Ajzen's (1991) theory, if teachers' perceived control is impacted by their perception that conducting an SAE program for a student with special needs is more difficult than for other students, it could impact their intent to encourage students with special needs to take on these projects regardless of how beneficial they may feel SAE is to the student. The same is true for FFA involvement. Teachers perceived that FFA activities were more limited for students with special needs and yet they perceived these activities would be beneficial for the students. Do the benefits of being involved outweigh the challenges of including these students to the extent that teachers will actively recruit students to join or participate in FFA? Teachers may conclude that activities are more limited for students with special needs because they are unaware that accommodations can be made to support these students' at FFA competitive events. While over half of teachers reported that accommodations for Career Development Events were available, the other 43.2% of teachers were still unaware that accommodations exist.

Another consideration is whether or not agricultural educators perceive FFA members with special needs can be successful when participating in FFA activities or competitive events. This study did not address agricultural educators' perceptions of whether these students can be successful in FFA competitive events, but if the perception exists that students with special needs will not help win FFA competitions or

awards could this influence the teacher's willingness to include them in the opportunity to participate? FFA members win awards through their SAE projects in the form of proficiency awards or through competition in activities such as Career Development Events. Respondents in this study indicated that students with special needs were more likely to win accolades for their SAE projects than through FFA Career Development Events. Completing a proficiency award application is an individual task where the FFA advisor can directly assist the student, whereas a Career Development Event may require a student to work with other students or independently.

Other studies have reported specific concerns about students with special needs competing in Career Development Events with other students (Boone, Watts, Boone & Gartin, 2008). If FFA advisors perceive that accommodations for students with special needs do not exist or that success is not obtainable, they may be less likely to encourage them to participate in these activities and therefore the students do not even have the opportunity to win any awards through FFA involvement.

Based on Ajzen's (1991) theory, teachers' perceived control, when overcoming obstacles or barriers to working with students with special needs, may impact their intended behaviors to include them in SAE programs or FFA activities. If teachers perceive that overcoming these obstacles are too difficult or completely out of their control, their willingness to actively include and incorporate these students may be negatively affected. Teachers identified student ability as the top barrier in each of these areas. The most consistent finding was that teachers' willingness to integrate students is related to the nature and severity of the students' disability (Soodak, Podell, & Lehman, 1998).

Number of in-service training hours is positively correlated to how teachers perceived working with students with special needs when participating in FFA activities. Teachers who reported more in-service training perceived that FFA opportunities were not as limited for students with special needs. A study by Avramidis, Bayliss, and Burden (2000) emphasized the importance of pre-service and in-service training and the favorable impact on

teachers' attitudes toward working with students with special needs in an educational setting.

### **Recommendations for the Profession**

1. State FFA associations, as well as the National FFA Organization, should have a consistent, public policy regarding accommodations for students with special needs who are participating in Career Development Events or who are applying for proficiency awards and they should make teachers aware they exist.
2. Develop in-service training opportunities that specifically address how to modify SAE projects to meet the needs of students with special needs and how teachers can utilize accommodations to better involve students with special needs in the FFA.
3. Pre-service Agricultural Education programs should provide training and practice regarding accommodating students with special needs in FFA and how to provide opportunities for students in SAE. This training could be incorporated in the form of an entire course in the degree program or integrated throughout the agricultural education curriculum.

### **Recommendations for Research**

1. Qualitative research should be conducted regarding teachers' perceptions of working with students with special needs when implementing SAE or participating in FFA activities. This type of research would provide further insight into teachers' perceptions and address potential factors that may lead to these perceptions.
2. Further research should be conducted to determine if pre-service (teacher education) programs impact agricultural educators' perceptions of working with students with special needs.
3. Research should be conducted to assess the needs of pre-service teachers regarding working with students with special needs in the total Agricultural Education program. Findings could be utilized to incorporate appropriate training prior to their professional semester.

4. Further research should be conducted to determine how or if the severity of students' needs or disabilities impact teachers' perceptions of working with these students in the total Agricultural Education program.
5. Further research should be conducted to determine agricultural educators' perceptions of success when working with students with special needs in FFA.
6. Research regarding teachers' perceptions of working with students with special needs should be replicated on a state and national level.

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