

An Assessment of the Needs of Middle School Agricultural Education Instructors in Georgia

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Abstract

Like their students, middle school agricultural education instructors are a unique group with special needs and concerns. However, the needs of middle school teachers and their programs may be misunderstood and overlooked in the professional world when compared to secondary teachers and programs. While middle school programs are still relatively new to the world of agricultural education and are expected to continue to grow across the country, little focus has been placed on the needs of these programs and their teachers. In order to ensure the success of these teachers and to promote the longevity of quality middle school agricultural education programs, it is necessary to identify what teachers need to be successful. This study focused on Georgia middle school agricultural education instructors' perceived levels of needs in various competency areas. A needs assessment was used to gather data from current Georgia middle school agricultural education instructors. The findings of this study indicate that Georgia middle school agricultural education instructors' greatest overall needs for in-service training were in community and FFA competency areas. Determining the needs of this group of teachers will help provide adequate in-service instruction to ensure that middle school teachers have ample opportunities to be successful both inside and outside of the classroom.

Keywords: Middle School Agricultural Education; Needs Assessment

Agriculture is one of America's leading industries. It has been an integral part of our country's growth and development throughout history. Consequently, Agricultural Education has deep roots in our country, as well as in the state of Georgia. In turn, the industry of agriculture has also had a large impact on education. Although agriculture was taught in many schools prior to 1917 (Moore, 1987), in 1917 agriculture officially became a part of our public school system as a result of the Smith-Hughes National Vocational Education Act. Moore (1987) calls the passage of the Smith-Hughes Act more of an "AMEN" to the teaching of agriculture rather than the start of it. This act allowed vocational courses, such as agricultural education, to be taught in public schools throughout the country and established guidelines for implementation and curriculum development for these programs. Students, primarily boys, who desired to become agriculturalists were now able to learn about agriculture in a structured classroom and laboratory atmosphere. Since the inception of the Smith-Hughes Act, agricultural education programs have spread throughout the country.

With the spread of school-based agricultural education came several positive changes over the years. For many years, agricultural education was explicitly for high school students. In 1988, the National FFA Organization made a change to their constitution to allow middle school students

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FFA membership. This acceptance of middle school programs was significant because investing in students during middle grades can have serious and enduring effects on shaping the career patterns and life choices of these middle grade students (Anderman & Maehr, 1994). Middle grade agricultural education programs can provide students with an early exposure to the world of agriculture and increase self-understanding in preparation for careers (Frick, 1993). Hughes and Barrick (1993) insisted that preparing students for productive employment and career development involves more than job training and begins before high school. McEwin and Thomason (1989) also suggested that middle school students participate in activities which help them begin the career selection and preparation process. Today, more than 11,000 teachers deliver cutting-edge agricultural education curriculum to students in all 50 states as well as Puerto Rico and the Virgin Islands (National FFA Association, 2010). Further, in 2009, there were approximately 1520 agricultural education instructors in the United States and of these, approximately 440 taught exclusively in middle schools (Kantrovich, 2010).

Middle schools are unique entities that must be recognized independently from secondary and elementary schools because of the nature of their students (Merenbloom, 1988). Middle school is a critical time for young adolescents. The National Middle School Association (2003) reported that it is imperative for a middle school's organization, curriculum and programs to be based on the developmental needs and interests of its students in order for these students to be successful. Educators must recognize the fact that middle grade students differ greatly from those in elementary and high school and develop their instruction accordingly (Eichhorn, 1966). The National Middle School Association (2003) also recognized that effective middle school teachers understand the uniqueness of this age group and the curriculum they teach and, therefore, look for appropriate and effective learning strategies. Consequently, it is imperative that middle school educators receive specific grade level preparation before they enter the middle school classroom and continue to receive appropriate continuing education throughout their career (National Middle School Education Association, 2003). It is important to staff middle grades schools with teachers who are experts at teaching young adults, and engage teachers in ongoing, in-service opportunities that target middle grade students (Jackson & Davis, 2000). Even as early as 1966, Eichhorn recognized that the key to effective middle grades education was the challenge for educators to consider middle school as a unique stage of human development.

Further, several studies have sought to determine the in-service needs of agricultural education teachers. Layfield and Dobbins (2002) and Washburn et al. (2001) identified using computers and technology in classroom teaching as high need areas. Layfield and Dobbins (2002) also reported preparing FFA degree applications; preparing FFA proficiency award applications; using multimedia equipment in teaching; and teaching recordkeeping skills as in-service areas with high need levels. They also identified the highest perceived level of needs for beginning agricultural education teachers to be utilizing a local advisory committee; developing local adult education programs; organizing fund-raising activities for the local FFA chapter; preparing agricultural/FFA contest teams; and developing supervised agricultural educational opportunities for students (Layfield & Dobbins, 2002). Duncan, Ricketts, Peake, and Uessler (2006) identified the need for assistance with advising students who have an interest in post-secondary education, preparing various FFA applications, and developing an effective public relations program as high need level constructs of agricultural education instructors. However, the aforementioned assessments focused largely on the needs of secondary agricultural education teachers.

While middle school agricultural education programs are expected to continue to grow across the country, they are still relatively new to the world of school-based agricultural education, subsequently, little focus has been placed on the needs of these programs and their teachers (Frick, 1993; Roberts & Dyer, 2002). In fact, the authors were only able to find one article that dealt solely with the needs of middle school agricultural education instructors (Rayfield & Croom, 2010). However, in one of the few studies that included an examination of the enrollment of middle school agricultural education programs nationally, (Rosetti, Padilla, & McCaslin, 1992) it was

recommended that the designers of middle school programs ensure that middle school programs are distinct from senior high school programs. Further, Roberts and Dyer (2002), determined that middle school agricultural education instructors had very different in-service needs compared to their secondary counterparts. Consequently, in order to ensure the success of these programs and to promote the longevity of quality middle school agriculture programs, it is necessary to identify what teachers need professionally and personally in order to provide appropriate, relevant instruction for their students and their program. The Association for Middle Level Education recommended that professional development for middle grades teachers should include appropriate content knowledge, pedagogical knowledge, and knowledge about the uniqueness of young adolescent learners (Flowers & Mertens, 2003). Flowers and Mertens (2003) recognized that a one-size-fits-all approach to professional development is not effective and middle level teachers have different needs for professional development than other teachers. Therefore, a wide variety of in-service opportunities should be offered to teachers in order to meet the specific needs of their program and students.

Conceptual Framework

Several studies regarding agricultural education teachers' needs have been conducted (Joerger, 2002; Layfield & Dobbins, 2002; Ricketts, Duncan, & Uessler, 2005; Washburn, King, Garton, & Harbstreet, 2001). However, the problem exists that little research has been conducted specifically on middle school agricultural education teacher needs. Most research is specific to secondary programs. Middle school agricultural education programs and FFA offer 6th, 7th, and 8th grade students the opportunity to explore the industry of agriculture and stimulate interest in related careers. According to Flanders (1998), middle school teachers and administrators emphasize that when compared to high school students, middle school students need different activities and tasks.

Much of the seminal research on human development supports the findings of Flanders. The development of a person throughout their life has been examined by several researchers from a variety of perspectives e.g. Pavlov, Bandura, Freud, Piaget, etc. And, while not all theories of human development share the same conclusions, there is unifying agreement from many that the age of 6-12 years is a distinct period of development. Consequently, the educational needs and subsequent teacher professional development needs for teachers who serve this age group could be very different from other groups of educators.

Research from other areas of education as well as from Agricultural Education has indicated that there are differences in needs between teachers of high school students and those of teachers of middle school students, therefore a key conceptual underpinning of this study is that middle school teachers have different needs from high school teachers (Roberts & Dyer, 2002; Rosetti, Padilla, & McCaslin, 1992). Conversely, many states deliver blanket professional development for agricultural education teachers with little or no regard for whether they teach middle school or high school.

Knowledge of the different needs experienced by middle school teachers could assist program managers and coordinators in providing relevant in-service opportunities that will help those teachers become more successful in the classroom. Given the growth of middle school programs in agricultural education in the United States and the unique needs of middle school students and their teachers, it is important for the agricultural education profession to analyze middle school efforts to help improve the programs (Rudd & Hillison, 1995). Rudd and Hillison (1995) recommended that given the existence of a variety of middle school agricultural education teachers, more attention needs to be given to the characteristics of knowledge, attitude, expectations, and time spent in the position in order to understand differences possessed by middle school agricultural education instructors. Middle school teachers have individualized, unique needs that must be addressed so that they are provided with opportunities to grow professionally and personally in order to operate successful agricultural education programs. This study was

designed to help identify these needs. Further, this study was developed to help meet the goals of the National Research Agenda for Agricultural Education. According to Doerfert (2011), a “key outcome” identified by the agenda included “Accurate and reliable data that describe the quality and impact of educational programs and outreach efforts at all levels [that] will be distributed to respective decision groups (e.g. students, parents, administration, industry, policy makers)” (p. 24). This research represents an attempt to fulfill this aspect of the agenda.

Purpose

Much research has been conducted on the needs of secondary agricultural education instructors but little research has been conducted specifically on the needs of middle school agricultural education instructors. The purpose of this study was to determine Georgia middle school agricultural education instructors’ perceived levels of professional and personal development needs. More specifically this study was designed to:

1. Determine the demographic characteristics and educational background of Georgia middle school agricultural education instructors.
2. Identify Georgia middle school agricultural education teachers’ perceived level of need in specific professional and personal growth areas.

Methods

A quantitative descriptive survey design was utilized to collect data (Creswell, 2009). A questionnaire was developed by the researcher to be administered to all participants. The questionnaire was modeled after a previously established instrument that measured the needs of agricultural education teachers (Duncan, Ricketts, Peake, Uessler, 2006). This instrument was chosen as a model because it identified needs constructs of secondary agricultural education teachers and served as a guide for developing a needs assessment for middle school teachers. The instrument was divided into two sections: demographics and scaled statements concerning professional and personal needs. The instrument contained items that were divided into the following constructs: Classroom, FFA, SAE, Community, Technical Agriculture, Technology and Personal Management. Respondents were asked to rate their need for in-service education for each item using a 5-point anchored scale. The scale options included no need (1), some need (2), moderate need (3), strong need (4) and great need (5). An open ended question was included for the participants to identify any other topics or activities believed to be important to the success of middle school agricultural education instructors.

The instrument was evaluated for face and content validity by a panel of three University of Georgia professors, one Auburn University professor, two Georgia Agricultural Education State Staff members and two Georgia high school agricultural education teachers. As a result of this evaluation, some design suggestions were recommended and the content of the instrument was found to be valid and appropriate for the study.

The population for this study included all Georgia middle school agricultural education instructors (N=66). A census study was attempted as all middle school agricultural education instructors were identified utilizing the Georgia Agricultural Education Teacher Directory. For the purpose of this study, all teachers in Georgia who teach agricultural education to students in grades 6, 7, and/or 8 were considered middle school agricultural educators. The paper instrument was administered at the state Agricultural Education conference in July 2013. All members of the population in attendance who completed a survey were recorded. A total of 48 surveys were returned by the completion of the conference. All middle school agricultural education instructors who were either not in attendance or did not submit a survey were mailed a letter the following week explaining the survey and research, a coded survey and a self-addressed, stamped envelope.

This led to an additional 8 completed surveys being returned within two weeks after the conference. Since some of the participants who completed the mailed instrument were not in attendance at the conference, they were not treated as late responders. Further, the high response rate provided little rationale for implementing measures to combat non-response error. A total of 57 participants completed the instrument, resulting in an overall response rate of 86.4%.

The reliability of the instrument was evaluated through an analysis of the collected data. Cronbach's alpha was calculated for each construct to determine reliability. The following results indicate an instrument with a high degree of internal consistency.

Table 1

Reliability Coefficients for Constructs

Construct	Number of Items	Cronbach's alpha
Classroom	25	.96
Personal Management	12	.91
SAE	13	.97
Technology	5	.93
Community	7	.93
FFA	14	.95
Program	9	.92
Technical Agriculture	20	.95

Findings**Objective 1. Determine the demographic characteristics and educational background of Georgia middle school agricultural education instructors**

This group of teachers were represented nearly equally by gender and most were 34 years old or younger and held a degree higher than the baccalaureate. The demographic characteristics of the teacher participants are reflected in Table 2.

Table 2

Demographic Characteristics of Georgia Middle School Agricultural education instructors

Characteristic	n	%
Gender		
Male	26	45.6
Female	30	52.6
Marital Status		
Married	37	64.9
Single	18	31.6
Age (M = 35.7)		
Less than 25	5	9.5
25-34	25	47.3
35-44	12	22.8
45-54	6	11.4
More than 55	5	9.5
Teaching Experience as a Middle School Ag Teacher (M = 4.5)		
Less than 5 years	38	67.8
6-10 years	13	23.3
11-15 years	2	3.6
16-20 years	3	5.4
Total Years Teaching (M = 7.8)		
Less than 5 years	23	41.0
6-10 years	19	33.8
11-15 years	10	18.0
16-20 years	2	3.6
21-25 years	1	1.8
26-30 years	1	1.8
Highest Degree Earned		
Bachelor	22	38.6
Master	18	31.6
Specialist	14	24.6
Doctorate	2	3.5

Note. Percentages may not equal 100 due to some participants failing to answer some demographic questions.

2. Identify Georgia middle school agricultural education instructors' perceived level of need in specific professional and personal growth areas

Agricultural education instructors were asked to rate various items based on their perceived level of need using the following scale: (1) No Need, (2) Some Need, (3) Moderate Need, (4) Strong Need, (5) Great Need. The participants identified that they had moderate to strong needs for

professional development in many of the areas in question with the most need identified in writing grant proposals. The results of the top ten greatest specific areas of need are reflected in Table 3.

Table 3

Middle Schools Agricultural education instructors' Perceived Level of Need (N=57)

Competency	Rank
Writing grant proposals	1
Utilizing the Ag Career Network	2
Completing Secretary, Reporter and Treasurer books	3
Motivating students to learn	4
Recruiting business partners	5
Promoting involvement of FFA members	6
Coordinating activities with local agricultural organizations and agencies	7
Balancing priorities (FFA, school, family, self, etc.)	8
Developing an effective public relations program	9
Managing and reducing work-related stress	10

Note. Scale: 1 = No Need; 5 = Great Need

Items on the questionnaire were grouped into constructs or competency areas. When analyzed collectively, the participants identified that the area of community held the most need for their professional development. The results of perceived level of needs are reflected in Table 4.

Table 4

Perceived Level of Need by Competency Area (N=57)

Competency Area	M	SD
Community	3.01	1.21
FFA	2.99	1.26
Technical Agriculture Program	2.82	1.28
SAE	2.79	1.20
Technology	2.77	1.17
Personal Management	2.77	1.27
Classroom	2.74	1.28
	2.70	1.28

Further, participants were asked to indicate their preferred forms of in-service delivery for possible future in-service programs. The vast majority indicated that they preferred face-to-face professional development sessions at current teacher conferences. The results are indicated in Table 5.

Table 5

Preferred Forms of In-service Delivery (N=57)

Form of Delivery	%
Summer Courses	77.2
Midwinter & Summer Conference breakout sessions	75.4
Online course throughout the year	36.8
Weekday workshops during the school year (after school)	19.3
Saturday workshops during the school year	17.5
Other	5.3

Conclusions and Discussion

The purpose of this study was to identify needs of middle school agricultural education instructors in Georgia. Based on the responses, there was a wide range of needs for participants. These conclusions certainly cannot be generalized to other teachers that were not participants in the study but may hold some implications for further examination.

Several conclusions can be made about the demographic makeup of middle school agricultural education instructors in Georgia. Most of the teachers were female, under the age of 34 with less than 10 years of teaching experience. Therefore, most of the middle school agricultural education instructors in Georgia are relatively new and younger teachers of agriculture. An interesting finding from this study regards teaching experience. Approximately 68% of middle school agricultural education instructors had less than 5 years of experience teaching agriculture and 41% had less than 5 years total teaching experience. Recent agricultural education literature focusing on beginning teacher professional development needs considers teachers with zero to five years of teaching experience as beginning teachers (Washburn & Dyer, 2006). Therefore, it can be concluded that most middle school agricultural education teachers in Georgia were indeed beginning teachers.

Considering the fact that the majority of the respondents fell into the category of new or beginning teachers, much of this research could possibly be compared to other studies related to needs of beginning teachers. In fact, previous needs assessment research has primarily been conducted on beginning teachers in agricultural education (Duncan, Ricketts, Peake, & Uessler, 2006; Edwards & Briers, 1999; Garton & Chung, 1996; Heath, Dimock, Adams, & Zuhn, 1999; Joerger, 2002; Layfield & Dobbins, 2002; Mundt & Connors, 1999). Each assessment resulted in similar yet different needs among participants. Garton and Chung (1996) found completing reports for local/state administrators, motivating students to learn, preparing FFA degree applications, and developing an effective public relations program to have the highest levels of need among beginning agricultural education instructors. Mundt and Connors (1999) found classroom management/student discipline, time/organizational management, and managing the activities of the FFA chapter to be perceived needs of beginning agricultural teachers. Edwards and Briers (1999) found assisting students in preparing for and succeeding in FFA degree and award programs; using the Internet as a teaching tool; balancing time among personal and professional life; and using support groups to promote the program to be highly ranked in-service needs. Joerger (2002) found issues related to maintaining and utilizing an advisory council and its members to be the highest in-service needs in his study of beginning agricultural education teachers. Dormody and Torres (2002), who studied teachers with 10 years of teaching experience or less specifically, reported that the competency needing the most in-service preparation for both beginning and experienced teachers was using technology in the classroom. Edwards and Briers (1999) and Peiter, Terry, and Cartmell (2003), who also specifically studied beginning teachers, found assistance was needed in the areas of computer-assisted instruction and implementing other new technologies. However,

none of the studies above specifically addressed the needs of beginning middle school teachers. As a result of this study, there appears to be significant overlap in topics but certainly not complete duplication.

The individual competency with the greatest need for in-service education as perceived by the teachers was writing grant proposals. Current economic conditions present a stress to many. Roberts and Dyer (2004) suggested that the recent trend of reducing educational budgets may be evidenced by teachers, as indicated by the greatest need in writing grant proposals for external funding since operating a successful agricultural education program often requires funding beyond school district budgets. They recommended that workshops be delivered to address this issue. Cannon, Kitchel & Duncan (2010) also found writing grant proposals as the highest rated program management need of secondary Career and Technical Education teachers in Idaho. With budget strains on school systems and little to no formal training offered by the state in the area of writing grant proposals, it is no surprise that teachers indicate a strong need for assistance in this area. The desire to supplement programs with grant monies is growing in an effort to provide additional funding to run successful middle school agricultural education programs.

The second and third highest competency of need as indicated by respondents is utilizing the Ag Career Network (ACN) and completing Secretary, Reporter and Treasurer Books. The ACN is a new reporting system available to teachers through the National FFA Organization. Little training on using the new system has been provided to Georgia agricultural education teachers. Therefore, it is anticipated that teachers would indicate a strong need to learn how to utilize this recordkeeping system. Secretary, Reporter and Treasurer Books are also tools utilized by FFA chapters to maintain accurate records and teach recordkeeping to FFA members. Based on the high level of need for these two competencies, we can conclude that FFA recordkeeping skills are areas in which middle school agricultural education instructors need additional in-service training. Again, no other research was found to specifically identify these competencies as a high need level. However, several studies indicate FFA award applications and recordkeeping tasks as strong need levels and each of these competencies are related to FFA award applications and recordkeeping tasks. Duncan, Ricketts, Peake and Uessler (2006) reported that teachers, especially beginning teachers, indicated a need for more pre-service and in-service preparation opportunities related to preparing FFA proficiency award applications and FFA degree applications. Garton and Chung (1996), Layfield and Dobbins (2002), Joerger (2002), and Peiter et al. (2003) also reported studies that indicated teachers needed preparation related to preparing FFA awards and degree applications. Layfield and Dobbins (2002) even identified preparing FFA degree applications and proficiency award applications as well as teaching recordkeeping skills as the most important in-service needs. Garton and Chung (1996) also found preparing FFA degree applications as a high need level.

The fourth highest competency of need was motivating students to learn. Previous research by Garton and Chung (1996), Edwards and Briers (1999), Joerger (2002), Peiter, et al (2003) and Roberts and Dyer (2004) support the need for additional training in this competency area. Mundt and Connors (1999) found that consistently, classroom management and student discipline come to the forefront as problems for beginning teachers. In fact, the need for assistance in motivating students to learn is frequently found in all areas of education, not only the middle school agricultural education program. Veenman (1984) identified the two problems most often perceived by beginning elementary and secondary teachers as student discipline and motivating students. Varah, Theune, Parker (1986) also identify motivating students as the highest ranking need of beginning teachers. Even as far back as 1969, Fuller cites one primary problem of education as motivating students.

In-service needs of least importance, as perceived by the respondents were those of preparing taxes, planning and conducting student field trips, conducting parent/teacher conferences and developing classroom procedures. Although many of these competencies are not specifically identified in other research as areas of low need, similar results were reported in other studies by Edwards and Briers (1999), Garton and Chung (1996), Joerger (2002) and Layfield and Dobbins

(2002). Garton and Chung (1996) specifically indicate little need for planning and conducting student field trips, planning banquets, and conducting parent/teacher conferences. Edwards and Briers also (1999) list several classroom procedure tasks such as utilizing seating charts and rotational plans for special grouping and maintaining progress charts as low need levels as perceived by teachers.

Based on the individual responses of this study, the highest level of perceived need by overall competency area is community concerns followed by FFA competencies. Research by Edwards and Briers (1999) supports this finding as they report the highest ranked in-service needs to be assisting students in preparing for and succeeding in FFA degree and award programs and using support groups to publicize the program. Additionally, maintaining an advisory committee, and utilizing an advisory committee to promote the local agriculture and FFA programs, acquire resources to support the local program and utilizing advisory committee members as resources for classroom, laboratory, SAE, and FFA activities were identified by Joerger (2002) as the highest in-service needs of beginning agricultural education teachers.

The least level of need by competency area was in the capacities of classroom and personal management. Mundt and Connors (1999) contradict these findings as they indicate classroom management/student discipline, and time/organizational management to be areas in which beginning agricultural teachers identified as the most pressing challenges. Edwards and Briers (1999) also found the highest ranked in-service needs to be balancing quality time among different life roles such as teacher, spouse, or parent. Perhaps this finding represents a facet of the difference between needs of middle school and secondary teachers.

Participants were asked to indicate their preferred forms of in-service delivery for possible future in-service programs. Based on the responses, teachers strongly favor summer courses, followed closely by winter and summer conference breakout sessions as their preferred form of in-service delivery. The least favorable forms of delivery are weekday and Saturday workshops during the school year. These responses are logical due to the fact that agricultural education instructors' time during the school year is spent working with students in various capacities and they have little time to spare for in-service training.

According to the findings of this study, in-service programs offered to Georgia middle school agricultural education instructors should focus on topics that will help teachers utilize and incorporate community organizations in their agricultural programs. Topics relevant to FFA issues, especially in the area of recordkeeping should also be addressed to assist middle school teachers in improving their FFA chapters. These topics should also be addressed by university teacher education programs throughout Georgia to better prepare their students for possible teaching positions on the middle school level.

Implications and Recommendations

The results of this study will assist Georgia state staff and Georgia Vocational Agricultural education instructors Association leadership in preparing in-service agricultural education programs, breakout sessions and professional development opportunities for middle school agricultural education instructors. Results may also be used by agricultural education teacher education programs to supplement their curriculum to address some of the issues identified by the participants. Recommendations are specific to middle school agricultural education instructors in Georgia, however, other states could benefit from the findings and suggestions as well. It is also important to realize that perceived needs may be different from actual needs (Cannon, Kitchell & Duncan, 2010).

Layfield and Dobbins (2002) noted that beginning teachers often have different needs than experienced teachers. Based on the demographic data, it can be concluded that there is a potential need for mentoring programs due to the large number of young middle school agricultural education instructors with few years of experience.

Further research related to this study could be conducted in several areas. First, this study could be expanded to include middle school agricultural education instructors from other states. Further, a more in-depth study of Georgia middle school agricultural education instructors which could include the use of focus groups, could be conducted to determine if need levels are affected by factors such as age, teaching experience, geographic location, or type of community. And finally, this study should be administered again in five to ten years to determine if any changes have occurred in teacher needs. Birkenholz and Harbstreit (1987) reported that in-service coordinators should periodically monitor the needs of teachers since they change over time and provide in-service programs based upon current needs.

Meeting all of the in-service needs of all teachers and programs is difficult, if not impossible, due to the wide range of middle school content and variety of programs across the state (Ewing, Gill, Radhakrishna, & Clark, 2009). However, if middle school agricultural education instructors are to be kept up to date with curriculum, technology and changing program requirements, it is imperative that an effort be made to identify current needs and trends related to middle school agriculture.

With the steady increase in middle school agricultural education programs across the state, identifying any trends in middle school agricultural education will be beneficial in determining the direction of these new programs. More specifically, determining the needs of this group of teachers will help provide adequate training to ensure that middle school teachers have ample opportunities to be successful both inside and outside of the classroom. Successful teachers will lead successful programs which will directly impact high school agricultural education programs that feed off of these middle school programs.

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