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Supervision of Agricultural Educators in Secondary Schools: What Do Teachers Want From Their Principals?

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Abstract

The purpose of this multi-state study was to identify agricultural education teachers' perceived level of importance regarding selected instructional supervisory practices used in the nonformal components of agricultural education. The theoretical frame supporting this study was the theory of andragogy. Data were reported on the perceived importance of 28 instructional supervisor practices. Agricultural education teachers indicated that the instructional supervisor should understand and support the teaching and learning processes used in nonformal settings, provide them with resources, and observe them in aspects of their teaching that transcend the traditional classroom. Female agricultural education teachers perceived all nonformal instructional supervisory practices as more important than did male agricultural education teachers. Researchers recommend that agricultural educators and the principals who supervise them incorporate the supervision of teaching in the nonformal setting into evaluation protocols.

Keywords: instructional supervision; andragogical supervision; nonformal education; agricultural education teachers

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A recent report by Pearson (Unit, 2012) indicated that the United States ranked 25th out of 34 countries in math and science achievement. This has brought educational reform back to the forefront of a national dialogue. Lagging performance by United States' students has "produced a flurry of policy proposals to promote teacher quality or teacher effectiveness" (Kane, Taylor, Tyler & Wooten, 2010). Beginning with the national education reform movement found in A Nation at Risk (NAR; National Commission on Excellence in Education, 1983) and followed by the No Child Left Behind Act (NCLB) of 2001 (2002), an effort to place higher accountability for student achievement has fallen on the individual teacher (Ballard & Bates, 2008; Salinas & Kritsonis, 2006) causing a shift in teacher evaluation systems (Danielson & McGreal, 2000; Shelly, 2002). In an attempt to further reform teacher supervision and evaluation, the Obama administration implemented the Race to the Top initiative in 2009 which required state grant recipients to implement systems that would include gains in student achievement as part of teachers' yearly evaluation scores (Marzano & Toth, 2013).

Teachers are considered a critical component in "improving the efficiency and equity of schooling" (OECD, 2009, p. 3). Educational researchers (Darling-Hammond, 1999; Sanders & Rivers, 1996; Wright, Horn & Sanders, 1997) have acknowledged that teachers have a much

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greater impact than several other environmental or demographic variables in determining individual student achievement. Wright, Horn, and Sanders (1997) posited "the most important factor affecting student learning is the teacher" (p. 63).

Teacher evaluation systems are comprehensive and go well beyond determining teacher effectiveness based upon student achievement scores on standardized tests (Goe, Bell & Little, 2008). Teacher evaluation systems exist to meet two major purposes (Isoré, 2009); however theoretical misinterpretations and confusion regarding the terms *supervision* and *evaluation* are common with educational professionals and the general public alike. Supervision has been defined by Nolan (1997) as "an organizational function concerned with promoting teacher growth and leading to improvement in teaching performance and greater student learning" (p. 100); while alternatively, evaluation has been defined as "an organizational function designed to make comprehensive judgments concerning teacher performance and competence for the purpose of personnel decisions such as tenure and continuing employment" (Nolan, 1997, p. 100). Fredrich (1984) further delineated these concepts when he professed, "supervision is a formative, supportive approach to improving teaching competence: evaluation is a summative process that should culminate a period of supervision" (p. 12). These two purposes, historically, have seemed to be in conflict with each other (Cogan, 1973; Danielson & McGreal, 2000; Glanz, 1995; Nolan, 1997). However, Petrie (1982) averred that supervision and evaluation are not incompatible. Furthermore, Danielson and McGreal (2000) contended that teacher evaluation can be redesigned to include both formative supervision and summative evaluation in one comprehensive system.

Several models of instructional supervision are available to principals who supervise teachers (Danielson & McGreal, 2000). When implementing these models, high school principals utilize specific practices in the supervision of teachers; however limited descriptions of these practices have been recorded in the literature (Blase & Blase, 1999; Blase & Blase, 2004; Zepeda & Ponticell, 1998). Of these scant descriptions, Fulmer (2006) found that teachers had "a pervasive and negative perception of current and past supervision/evaluation processes" (p. 125-126); Blase and Blase (2004) and Blase, Blase, and Du (2008) found that teachers perceived principals' negative behaviors towards supervision as having a negative effect on classroom and school-wide performance; while other studies suggested that principals did not understand the teacher's role (Blase & Blase, 2004). Further, Moore and Camp (1979) agreed that administrators infrequently understand the role of the agricultural education teacher. Several other studies have presented teachers' concerns regarding the lack of instructional supervision by the principal (Despain & Juarez-Torres, 2012; Glickman, Gordon & Ross-Gordan, 2004; Thobega & Miller, 2003). One study by Zepeda and Ponticell (1998) found that teachers perceived that instructional supervision at its worst tended to occur only in formal teacher evaluations and was no more than a mere "dog and pony show" (p. 77).

Supervision has the potential to make a positive impact upon teachers and their implementation of the act of teaching (Blase & Blase, 2004; Glickman, Gordon & Ross-Gordan, 2004; Zepeda & Ponticell, 1998). Previous research (Ebmeier, 2003; Pajak, 2001) indicated the importance of teacher and principal relationships in the supervisory process. Teachers have indicated the perceived importance of a principal's supervisory practices such as developing collaboration in supervision (Ebmeier & Nicklaus, 1999; Thobega & Miller, 2003); giving praise when appropriate (Blase & Blase, 2004; Ovando, 2001; Zepeda & Ponticell, 2008), and having a visible presence in the classroom (Blase & Blase, 2004; Zepeda & Ponticell, 2008). However, Leithwood, Begley, and Cousins (1990) revealed that the relationship between instructional supervision and teaching has not been sufficiently investigated.

Gender differences related to teacher perceptions of instructional supervision have also been identified in a small number of studies. Since men and women communicate differently (Looy, 2001; Murphy & Zorn, 1996), it is not surprising that female teachers have exhibited statistically significant perception differences in the importance of observation practices that lead to instructional improvement (Card, 2007); location of supervision (Paulsen & Martin, 2013),

levels of teacher mistreatment by supervisors (Blase, Blase, & Du, 2008); and the impact of instructional supervision upon professional growth (Fraser, 1980). In his unpublished dissertation, Card (2007) recommended "further research should investigate the perspectives of male and female teachers as they relate to supervisory practices" (p. 116). Further research regarding instructional supervision has been deemed crucial (Blase & Blase, 2004; Okeafor & Poole, 1992). Zepeda and Ponticell (1998) concluded, "far more research is needed from many contexts examining teachers' perceptions on supervision" (p. 71).

In his seminal philosophical credo, Dewey (1897) defined education as a social process. Educational actions and processes can be delivered in formal or nonformal settings (Coombs, Prosser, & Ahmed, 1973; Etling, 1993; Kleis, Lang, Mietus, & Tiapula, 1973). Formal education is defined by Coombs et al. (1973) as "the hierarchically structured, chronologically graded educational system running from primary school through the university and including in addition to general academic studies, a variety of specialized programs and institutions for full-time technical and professional training" (p. 11), in other words, schooling. Alternatively, nonformal education is defined by Kleis et al. (1973) as

> any intentional and systematic educational enterprise (usually outside of traditional schooling) in which content, media, time units, admission criteria, staff, facilities and other system components are selected and/or adapted for particular students, populations, or situations in order to maximize attainment of the learning mission and minimize maintenance constraints of the system. (p. 6)

Based on these definitions, formal and nonformal educational delivery systems permeate the agricultural education model (Etling, 1993). The classroom and laboratory components of the agricultural education model utilize many facets typical of formal educational settings. The Supervised Agricultural Experience (SAE) and National FFA Organization (FFA) components share numerous characteristics of nonformal educational activities. Administrators and agricultural education teachers have indicated the importance of SAE and FFA in several studies (Rush & Foster, 1984; Hilton, 1981; Swortzel, 1996; Thompson, 1986).

Etling (1993) posited that each component of the agricultural education program "provides powerful learning opportunities" (p. 74). He further concluded that the most effective teachers are those who are able to facilitate learning in both formal and nonformal settings. Due to the nature of this career and technical education program, agricultural education provides unique settings for instructional supervision by high school principals.

Theoretical Framework

The theory of andragogy (Knowles, 1980) provided the theoretical framework for this study. Defined as "the art and science of helping adults learn" (Knowles, 1980, p. 43), this theory purports that adults learn differently than children and should therefore be taught differently. Knowles (1980) explained that adulthood could be defined in one of four ways: 1) biologically—the age at which one can reproduce, 2) legally—the age at which one has the right to vote, etc., 3) socially—the time at which one begins performing adult roles, or 4) psychologically—where the self-concept of the individual determines the need for personal responsibility. When considering learning however, Knowles (1980) considered the psychological definition of adulthood the most crucial.

Modern andragogical theory is based on the work of Lindeman (1926) who penned five key assumptions about adult learners. These assumptions focused on factors such as the adult learners' motivation to learn, orientation to learning, experience, need for self-direction, and greater individual differences among learners. Knowles (1990) further developed Lindeman's (1926) assumptions into an andragogical model comprised of six immutable assumptions of adult learners: 1) the need to know why learning is personally valuable, 2) a self-concept of being responsible for one's own decisions, 3) experiences which are greater in volume and quality

compared to that of children, 4) a readiness to learn to deal with real-life situations, 5) an orientation to learning that takes into consideration immediacy of application, and 6) a motivation to learn that is intrinsic and leads to personal satisfaction.

Each of these key assumptions has been deemed a critical underpinning in designing adult learning programs (Merriam, Caffarella & Baumgartner, 2007). However it may be the adult learner's experience that provides the key differentiating factor between andragogy and pedagogy (Kidd, 1973). Knowles (1990) opined that adult learners define themselves based upon their personal experiences. "The implication of this fact for adult education is that in any situation in which the participants' experiences are ignored or devalued, adults will perceive this as rejecting not only their experience, but rejecting themselves as persons" (Knowles, Holton & Swanson, 2011, p. 65).

Teachers by definition are considered adults. The instructional supervision process has been described by Sullivan and Glanz (2000) as "the process of engaging teachers in instructional dialogue for the purpose of improving teaching and increasing student achievement" (p. 24). To enhance teacher growth, Kachur, Stout, and Edwards (2010) proffered "it is essential to draw from the research literature on adult learning" (p. 23). Lieberman (1995) stated that teachers "learn best through active involvement and through thinking about and becoming articulate about what they have learned. Processes, practices, and policies built on this view of learning are at the heart of a more expanded view of teacher development that encourages teachers to involve themselves as learners" (p. 592). Effective instructional supervision then should take into consideration the teacher as an experienced and active adult learner (Bradford, Brown & Cocking, 1999).

Andragogical supervision has been conceptualized by Ellis and Bernhardt (1989) as a framework for providing instructional supervision for teachers "that adopts the behaviors considered most effective with adult learners" (p. 362). Ellis and Bernhardt (1989) further supported this notion when they purported that an "andragogical supervisor recognizes and respects both the professional experience and the achievement of the teacher and acknowledges the teacher's need to be self-directing and autonomous" (p. 363). In addition to teachers' experiences, Glickman, Gordon, and Ross-Gordan (2004) stated that effective supervision of teacher learning "should be related to [teachers'] experiences, needs, and learning strengths; should include opportunities for collaborative action, reflection, and critical thinking; and should be directed toward teacher empowerment" (p. 95).

Instructional supervision is a form of adult learning that takes place between an adult learning facilitator (high school principal) and an adult learner (agricultural education teacher). If it is in our mission to "deepen our understanding of effective teaching and learning processes in all agricultural education environments" (Priority 4 of the National Research Agenda: Meaningful, Engaged Learning in All Environments, 2011-2015, Doerfert, 2011, p. 9), it is appropriate to consider the perceptions of agricultural education teachers regarding the instructional supervisory process. With these foundations in mind, the following research questions have been developed: 1) what instructional supervisory practices do agricultural education teachers consider important? and 2) are there differences between what male and female teachers deem important in the instructional supervision process?

Purpose and Objectives

Few studies related to teachers' perceptions of instructional supervision have been identified by the authors. No previous studies were identified that considered perceptions regarding instructional supervision practices occurring in the nonformal components of the agricultural education program. The purpose of this descriptive study was to identify agricultural education teachers' perceptions regarding the importance of selected instructional supervisory practices used in the nonformal components of school-based agricultural education. The specific objectives were to 1) identify demographic characteristics of agricultural education teachers, and 2)

compare and contrast agricultural education teachers' perceptions of instructional supervision practices by gender.

Methods and Procedures

The population for this study included 3,226 agricultural education teachers from a convenience sample of states ($N = 17$) with available electronic directories of agricultural education teachers. The following states were included: Arizona, Georgia, Illinois, Iowa, Louisiana, Maine, Montana, New Jersey, New Mexico, North Dakota, Oklahoma, Pennsylvania, South Dakota, Tennessee, Utah, Washington, and West Virginia. A disproportionate stratified random sample of teachers was drawn from each state based upon each state's National FFA Organization roster membership and the number of agricultural education teachers in each state. This technique allowed for a more representative sample from each of the states in the final data (Daniel, 2012). The sample size ($n = 664$) was determined according to Ary, Jacobs, & Sorenson (2010). After an introductory email message was sent, the instrument was sent via email. Three follow-up email messages were sent as recommended by Dillman, Smyth, & Christian (2009) which secured 234 respondents for a 35.24% response rate.

The Institutional Review Board at Iowa State University determined a potential risk to the respondents. Total anonymity was mandated so that non-respondents were not identifiable. In order to control for non-response error, researchers compared respondents from the first wave of responses to respondents from the final two waves of responses as recommended by Linder, Murphy, and Briers (2001). A *t*-test was used to compare early and late respondents based on mean scores within each of the five constructs. No statistically significant differences ($p < .05$) were found between these groups; therefore data from the two groups were combined and analyzed as a single sample.

The instrument was an electronic questionnaire with 28 items contained in five constructs of instructional practices framed from the work of Zepeda and Ponticell (1998). Individual items were developed after a review of the literature regarding the supervisory practices of educational administrators, primarily high school principals, as observed by teachers in several settings (Blase & Blase, 2004; Thobega & Miller, 2003; Zepeda & Ponticell, 1998). The five constructs were as follows: empowerment, visible presence, coaching, professionalism, and validation.

The empowerment construct included six items that described instructional supervision practices that encouraged teachers to explore and take personal control of their own improvement. The visible presence construct included five items that described practices related to supervisory visits made by the supervisor. Five instructional supervisory practices that supported the coaching construct were described by activities that provided teachers with guidance and support by the principal. The five items that were included in the professionalism construct described practices that helped the teacher take a role in his or her own supervision. The validation construct included seven items that described practices that acknowledged teachers' abilities and communicated the value of their work.

A panel of experts reviewed the instrument for content, face, and construct validity. The panel consisted of five professors from the agricultural education department at Iowa State University and two high school agricultural education teachers pursuing advanced degrees. Feedback from the panel was used to make minor adjustments to the instrument. The instrument was pilot-tested with 20 agricultural education teachers drawn from the non-sampled population as recommended by Sudman (1976). Internal consistency for each construct was calculated *post hoc* using Cronbach's alpha. All construct scores were considered acceptable (.70 to .80) or good (.80 to .90) based on the recommendations of George & Mallory (2003) and are presented in Table 1.

Table 1

Instructional Supervision Constructs, Cronbach's Alpha and Number of Items per Construct

Construct	Cronbach's Alpha	Number of Items
Validation	.89	7
Empowerment	.86	6
Coaching	.86	5
Visible Presence	.75	5
Professionalism	.83	5

*Not*e. George and Mallory's (2003) alpha rule of thumb: >.9 – Excellent, >.8 – Good, >.7– Acceptable, >.6 – Questionable, >.5 – Poor, and <.5 – Unacceptable.

Data were analyzed using the Predictive Analytics Software (PASW 18.0) statistics package. Frequencies, percentages, and medians were calculated for each of the 28 items. A Chi Square analysis was conducted to determine associations between item importance and gender. Grand means were calculated for each construct. Since the study was limited to a convenience sample, findings should not be generalized beyond the sampled population.

Findings

The average agricultural education teacher in this study was 40.62 years old with a Bachelor's degree and 14.87 years of teaching experience. Researchers calculated frequencies and percentages within the five constructs for each of the 28 items (Brown, 2011). Table 2 lists the grand mean and standard deviation for each construct. Empowerment was rated most important with a grand mean of 3.9 on a 5.0 point scale.

Table 2

Grand Means by Construct

Construct	*n*	Grand Mean	SD
Empowerment	233	3.9	0.79
Validation	233	3.2	0.81
Coaching	234	3.1	0.84
Professionalism	233	3.1	0.81
Visible Presence	231	3.1	0.76

Note. 1 = Not Important, 5 = Extremely Important.

Table 3 identifies the frequencies, percentages, and median scores for items in the empowerment construct. Respondents identified the instructional supervisory practice *supports and facilitates my work in nonformal settings* as most important (*f* = 160, 68.4%) identifying the practice as very or extremely important. Teachers also indicated a high level of importance for their principals to *recognize individual teaching efforts in nonformal settings* with 52.8% (*f* = 123) of the respondents identifying the item as very important or extremely important.

Table 4 denotes responses for the validation construct. Frequencies percentages, and median scores for each item are identified. Over 50% of the agricultural education teachers indicated that it was very important or extremely important that their instructional supervisor *be available for discussion and providing feedback about teaching in nonformal settings* (*f* = 125,

53.42%); *gives praise when appropriate when working with students in nonformal settings* (*f* = 124, 52.9%); *gives descriptive, constructive criticism regarding teaching in nonformal settings,* (*f* = 122, 52.1%).

Table 3

Frequency of Responses for the Importance of Nonformal Empowerment Supervisory Practices

		Not	S.what	Mod.	Very	Extr.
	n	*f*(%)	*f*(%)	*f*(%)	*f*(%)	*f*(%)
It is important that my supervisor…						
Elicits my opinion about how to improve my teaching in nonformal settings	234	16(6.8)	57(24.4)	**70(29.9)**	76(32.5)	15(6.4)
Encourages me to try new teaching strategies in nonformal settings	233	22(9.4)	57(24.5)	**76(32.6)**	66(28.3)	12(5.2)
Helps me increase awareness of my own teaching practice in nonformal settings	234	21(9.0)	58(24.8)	**81(34.6)**	64(27.4)	10(4.3)
Is supportive of me trying new teaching strategies in the nonformal settings of my program	234	8(3.4)	40(17.1)	68(29.1)	**81(34.6)**	37(15.8)
Recognizes my individual teaching efforts in the nonformal settings of agricultural education	233	6(2.6)	33(14.2)	71(30.5)	**95(40.8)**	28(12.0)
Supports and facilitates my work in nonformal settings	234	9(3.8)	24(10.3)	41(17.5)	**103(44.0)**	57(24.4)

Note. Item median is shown in boldface. Construct grand mean = 3.9. Construct SD = 0.79.
1 = Not important, 2 = Somewhat important, 3 = Moderately important, 4 = Very important, 5 = Extremely important.

Table 4

Frequency of Responses for the Importance of Validation Practices in Nonformal Settings

	n	Not *f*(%)	S.what *f*(%)	Mod. *f*(%)	Very *f*(%)	Extr. *f*(%)
It is important that my supervisor…						
Describes teaching behaviors he/she observes me demonstrate	234	10(4.3)	52(22.2)	**81(34.6)**	81(34.6)	10(4.3)
Gives me descriptive, constructive criticism regarding my teaching	234	16(6.8)	34(14.5)	62(26.5)	**100(42.7)**	22(9.4)
Gives me feedback and suggestions in working with students in nonformal settings	234	10(4.3)	46(19.7)	**71(30.3)**	88(37.6)	19(8.1)
Gives me praise when appropriate in working with students in nonformal settings	234	13(5.6)	23(9.8)	74(31.6)	**93(39.7)**	31(13.2)
Is available for discussion and providing feedback about my teaching in nonformal settings	234	11(4.7)	32(13.7)	66(28.2)	**96(41.0)**	29(12.4)
Makes suggestions to improve my teaching	233	17(7.3)	61(26.2)	**82(35.2)**	62(26.6)	11(4.7)
Records, analyzes, and shares observation data from observing me	233	31(13.3)	65(27.9)	**66(28.3)**	59(25.3)	12(5.2)

Note. Item median is shown in boldface. Construct grand mean = 3.2. Construct SD = 0.81. 1 = Not important, 2 = Somewhat important, 3 = Moderately important, 4 = Very important, 5 = Extremely important.

Agricultural education teachers felt that their supervisor should *instill confidence about the work teachers do in nonformal settings* (*f* = 140, 59.8%) as shown in Table 5. Less importance was placed on the supervisor modeling questioning strategies for the teacher in nonformal settings.

Table 5

Frequency of Responses for the Importance of Nonformal Coaching Supervisory Practices

		Not	S.what	Mod.	Very	Extr.
	n	*f*(%)	*f*(%)	*f*(%)	*f*(%)	*f*(%)
It is important that my supervisor…						
Instills confidence in me about the work I do in nonformal settings	234	12(5.1)	22(9.4)	60(25.6)	**91(38.9)**	49(20.9)
Makes his/her expectations about my teaching in the nonformal setting known	233	15(6.4)	54(23.2)	**70(30.0)**	80(34.3)	14(6.0)
Models questioning strategies to use in nonformal settings	234	30(12.8)	79(33.8)	**77(32.9)**	39(16.7)	9(3.8)
Uses a variety of observational techniques with me in nonformal settings	234	26(11.1)	67(28.6)	**72(30.8)**	57(24.4)	12(5.1)
Works with me to improve my teaching in nonformal settings	234	14(6.0)	54(23.1)	**81(34.6)**	66(28.2)	19(8.1)

Note. Item median is shown in boldface. Construct grand mean = 3.1. Construct SD = 0.84.
1 = Not important, 2 = Somewhat important, 3 = Moderately important, 4 = Very important, 5 = Extremely important.

When considering the professionalism construct, over two-thirds of the agricultural educator respondents indicated that it was very important or extremely important that their instructional supervisor *provide the teacher with resources and time to improve educational practice in nonformal settings,* (*f* = 156, 67.0%). Nearly half of the respondents identified the ability of the supervisor to *show interest in the teacher's professional growth in nonformal settings,* (*f* = 116, 49.5%) as being very important or extremely important. Refer to Table 6 for complete results.

Table 7 identifies agricultural education teachers' responses to the five items which constituted the visible presence construct. Nearly three-fourths of the respondents indicated that it was very important or extremely important that the instructional supervisor *understand the role of the teacher in nonformal settings,* (*f* = 175, 74.8%). Two other items were identified by over 50% of the teachers as being very important or extremely important: *observes me in a variety of settings,* (*f* = 139, 59.4%) and *provides feedback regarding how the teacher relates with the student in the nonformal setting,* (*f* = 122, 52.3%).

Alternatively, agricultural education teachers identified two items within the construct as somewhat or not important. Respondents indicated the lowest level of importance for principals *attending SAE visits for the purpose of instructional supervision,* (*f* = 149, 64.5%) and *attend FFA meetings for the purpose of instructional supervision,* (*f* = 134, 58%).

Table 6

Frequency of Responses for the Importance of Nonformal Professionalism Supervisory Practices

		Not	S.what	Mod.	Very	Extr.
	n	*f*(%)	*f*(%)	*f*(%)	*f*(%)	*f*(%)
It is important that my supervisor…						
Delineates between instructional supervision for improvement and evaluation	232	27(11.6)	62(26.7)	**75(32.3)**	61(26.3)	7(3.0)
Engages in dialogue with me about my teaching in nonformal settings	234	17(7.3)	62(26.5)	**81(34.6)**	60(25.6)	14(6.0)
Openly discusses with me philosophical views of teaching and learning in nonformal settings	233	31(13.3)	76(32.6)	**71(30.5)**	44(18.9)	11(4.7)
Provides me with resources and time to improve my educational practice in nonformal settings	233	8(3.4)	20(8.6)	49(21.0)	**106(45.5)**	50(21.5)
Shows interest in my professional growth in nonformal settings	234	9(3.8)	41(17.5)	**68(29.1)**	85(36.3)	31(13.2)

Note. Item median is shown in boldface. Construct grand mean = 3.1. Construct SD = 0.81.
1 = Not important, 2 = Somewhat important, 3 = Moderately important, 4 = Very important, 5 = Extremely important.

Table 7

Frequency of Responses for the Importance of Nonformal Visible Presence Supervisory Practices

		Not	S.what	Mod.	Very	Extr.
	n	*f*(%)	*f*(%)	*f*(%)	*f*(%)	*f*(%)
It is important that my supervisor…						
Attends FFA meetings for the purpose of supervision	231	76(32.9)	**58(25.1)**	56(24.2)	32(13.9)	9(3.9)
Attends SAE visitations for the purpose of supervision	231	81(35.1)	**68(29.4)**	47(20.3)	26(11.3)	9(3.9)
Observes me in a variety of educational settings	234	7(3.0)	27(11.5)	61(26.1)	**100(42.7)**	39(16.7)
Provides feedback regarding how I relate with students in nonformal settings	233	10(4.3)	36(15.5)	65(27.9)	**100(42.9)**	22(9.4)
Understands my role as a teacher in nonformal settings	234	5(2.1)	16(6.8)	38(16.2)	**107(45.7)**	68(29.1)

Note. Item median is shown in boldface. Construct grand mean = 3.1. Construct SD = 0.76.
1 = Not important, 2 = Somewhat important, 3 = Moderately important, 4 = Very important, 5 = Extremely important.

Distribution among groups and gender was examined based on demographic characteristics through Chi Square analyses. Multiple cells had expected cell counts less than five. Researchers collapsed the five response categories into three categories as follows: not important and somewhat important = 1, moderately important = 2, very important and extremely important = 3. Associations between gender and the importance of selected administrator supervisory practices were calculated. Table 8 identifies the items with statistically significant Chi Square associations with gender and their corresponding effect sizes.

Table 8

Statistically Significant ($p < .05$) Chi Square Results for Gender[a] and Importance of Administrator Supervisory Practices in Nonformal Settings

Item	χ^2	V^b	p
Coaching (n = 234)			
Models questioning strategies to use	8.45	.19	.02
Works with me to improve my teaching	6.46	.17	.04
Empowerment (n = 234)			
Encourages me to try new teaching strategies	9.34	.20	.01
Helps me increase awareness of my own teaching practice	7.63	.18	.02
Recognizes my individual teaching efforts in the nonformal settings of agricultural education	9.25	.20	.01
Professionalism (n = 232)			
Delineates between instructional supervision for improvement and evaluation	6.42	.17	.04
Provides me with resources and time to improve my educational practice	9.75	.21	.01
Validation (n = 234)			
Gives me descriptive, constructive criticism regarding my teaching	12.37	.23	.00
Gives me feedback and suggestions in working with students	13.58	.24	.00
Is available for discussion and providing feedback about my teaching	6.60	.17	.04
Visible Presence (n = 233)			
Provides feedback regarding how I relate with students	7.96	.19	.02

Note. DF = 2.

[a]Female teachers perceived the construct as more important than male teachers in each case.

[b]Cramer's V measure of effect size.

Cramer's V analysis indicated that the following five statements indicated a moderate level of association with gender: provide feedback and suggestions (.24); give descriptive, constructive criticism (.23); provide resources and time (.21); encouragement and supporting new teaching strategies (.20); and recognition of their individual teaching efforts (.20). In each case, female teachers perceived the construct as more important than did male teachers.

Conclusions, Implications and Recommendations

Agricultural education teachers in the present study indicated the importance of the principal providing validation of the teacher's work in nonformal settings. When a principal provides opportunities for discussion about professional practice, offers feedback and constructive criticism, and gives praise when appropriate for the teacher's work in the nonformal components of their work, a positive and professional relationship can develop. Zepeda and Ponticell (1998) espoused the importance of giving praise; Ovando (2001) suggested that evaluation systems should

contribute to the recognition of teachers; while Blase and Blase (2004) professed that praise given by supervisors has a positive effect upon teachers.

Respondents from the current study felt it was very/extremely important that the principal understand her/his role as a teacher (Blase & Blase, 2004) in nonformal settings. This support can be developed through visible presence by the principal. Moore and Camp (1979) found administrators do not always understand the role of the agricultural education teacher. To better understand the teacher, respondents indicated that it is important for principals to provide feedback based on performance in a variety of educational settings.

Agricultural education teachers perceived *attending FFA meetings and SAE visits for the purpose of supervision of instruction* as only somewhat/not important. This does not seem to be in concert with previous studies. Rush and Foster (1984) determined that administrators and teachers both identified maintaining an FFA chapter as a high priority. Hilton (1981), in his study of 100 Iowa agricultural education teachers and their school district superintendents, also concluded that FFA activities are valued highly by both agricultural education teachers and their administrators. Additionally, Thompson (1986) recommended that agricultural education teachers should make efforts to involve administrators in FFA activities.

A*ttending SAE visitations for the purpose of supervision* was rated even less important. This finding is interesting when compared with a perception study of Tennessee agricultural education teachers who rated the statement *school administrators should be supportive of time off during the school day for teachers to make supervisory visits* at a mean rating of 3.16 on a 4.00 point Likert-type scale (Swortzel, 1996). If agricultural education teachers feel that it is important to have time during the school day for SAE visits, then why do they identify administrator participation in the visits as not/somewhat important? Agricultural education teachers should communicate with principals the importance of the deep educational engagement that takes place during SAE supervisory visits. Rush and Foster (1984) recommended improving SAE by having administrators and agricultural education teachers work together to evaluate its effectiveness.

Differences in perception were identified between female and male teachers who responded to this study. These differences may be attributed to evolutionary psychology which has been found to account for universal, gender-based differences between females and males regarding communication and interpersonal skills (Looy, 2001). Sullivan and Glanz (2000) described the importance of instructional dialogue between the principal and teacher. Female teachers in the current study perceived the instructional supervision process as being more important than did their male counterparts. This finding supports the notion that women and men communicate with different purposes—women communicate to connect with people while men communicate to solve problems (Murphy & Zorn, 1996). Furthermore, female agricultural education teachers, more frequently than their male counterparts, believe instructional supervision should take place beyond formal educational settings in agricultural education (Paulsen & Martin, 2013).

The findings from this study indicate that agricultural education teachers desire a professional relationship with their principal in which they are empowered and validated in the work they do in the nonformal components of their program. Respondents also identified the importance of the principal's practices that support teachers through coaching, professionalism, and visible presence. When considering the findings of this study, a great discrepancy appeared between what agricultural education teachers consider important and a critical school-based programmatic application in that area. Agricultural education teachers who participated in this study consider it very important that the instructional supervisor understand the teacher's role in nonformal educational settings; support and facilitate work in nonformal educational settings; provide teachers with resources and time to improve their educational practice in nonformal educational settings; instill confidence in teachers about the work they do in nonformal educational settings; and observe teachers in a variety of educational settings. It would therefore seem logical that agricultural education teachers would consider it important to encourage their supervisor to

attend FFA activities and SAE visitations with them as part of a formative, instructional supervision process. However, in this study the data indicate that this was not the case.

Why do agricultural educators in this study downplay the importance of the principal attending FFA meetings or SAE visitations for the purpose of instructional supervision? There could be several reasons. One reason could be that agricultural education teachers do not believe that the principal would be able to provide specific, constructive feedback on how to improve the educational quality of an SAE visit. Another reason might be that agricultural education teachers do not have confidence that their principal would have enough expertise to provide feedback consistent with improving the educational benefits of an FFA leadership event or meeting.

Alternatively, is it possible that agricultural education teachers do not feel comfortable demonstrating authentic educational experiences embedded in FFA and SAE? Are agricultural education teachers implementing the entire three-pronged program as conceptualized? Or is it possible that teachers have lost their focus on implementing these two program components? Is there something (or nothing) going on with FFA and SAE that is being hidden from administrators who supervise these programs? These are serious questions for the profession to examine.

Female teachers in this study viewed several aspects of instructional supervision as more important than did male teachers. Female teachers want feedback, encouragement, and recognition more often than do their male counterparts. Blase, Blase, and Du (2008) found that female teachers perceived that principals failed to recognize their work related achievements more often than did male teachers. Further, Fraser (1980) found greater variability among female teachers regarding the impact of instructional supervision on their professional growth. Gender differences related to instructional supervision demands further research (Card, 2007).

Just as the agricultural education program transcends the formal walls of the traditional classroom setting, the complex interaction between the agricultural education teacher and principal should move beyond the traditional classroom setting to all components within the agricultural education program. As adult learners, agricultural education teachers' expect that their experiences and perspectives be valued in the instructional supervision process (Bradford, Brown & Cocking, 1999; Knowles et al., 2011). As self-directed, autonomous learners (Ellis & Bernhardt, 1989) agricultural education teachers should be proactive and engage their supervisors in a holistic approach to supervision. Agricultural education teachers should invite their high school principals to supervise them in all aspects of their teaching, especially within the program components of SAE and FFA.

Agricultural education teachers utilize a unique model in the education of their students. Teachers must be trained to think differently about how instructional supervision can positively impact their professional development in all components of the school-based program. This training can begin with the teacher preparation program. Preservice teachers should be introduced to the instructional supervision process, as well as to the various philosophies and models that exist. As teacher education faculty members supervise various clinical field experiences, they should reinforce instructional supervisory practices deemed important by agricultural education teachers. Preservice teachers should receive supervisory feedback from faculty supervisors and cooperating teachers in the formal and nonformal components of the agricultural education program during field experiences. If we want future teachers to develop a positive, professional relationship with their future supervisors, teacher education students must be taught the process during their preservice training program.

Additional research is needed regarding teachers' perceptions of instructional supervision (Zepeda & Ponticell, 1998) to determine how often agricultural education teachers experience the instructional practices they deem important. Further exploration of instructional supervision could help to develop a list of appropriate supervisory strategies that can positively impact agricultural education teachers in their learning and professional growth. By developing productive relationships, principals and teachers could gain valuable insight about experiential learning and leadership development that can go far beyond the agricultural education program.

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