

The Application of Supervisory Options for Instructional Leaders Framework Within the Fields of Agriculture, Science, Math and English Education

Carrie Ann Stephens, Associate Professor

University of Tennessee

David Little, Agricultural Educator

David Crockett High School

The purpose of this study was to determine specific types of supervisory methods used in diverse academic subjects to fulfill personal and professional growth in student teachers and interns. The study sought to compare agriculture, science, math and English teacher educator characteristics and the extent to which the three levels of the Supervisory Options for Instructional Leaders (SOIL) Framework—structured, moderately structured, and relatively unstructured—were used. Surveys were collected from 196 student teacher and intern supervisors throughout the United States. The study revealed that demographic associations appeared to have no bearing on the type of supervisory methods used. Supervisors were most likely to always use moderately structured levels of supervision with student teachers and interns who taught English, science, and agricultural education. Supervisors of math instruction reported using moderately structured levels of supervision often as opposed to always. The relatively unstructured level of supervision was virtually never utilized by supervisors of any subject areas.

Keywords: instructional supervision of teachers, student teachers, teacher educators

Introduction

Alfonso, Firth, and Neville (1975) defined instructional supervision as “the behavior officially designated by the organization that affects teacher behavior in such a way as to facilitate pupil learning and to achieve the goals of the organization” (p. 43). Beach and Reinhartz (1989) regarded instructional supervision as “a multifaceted process that focuses on instruction and provides teachers with information about their teaching so as to develop instructional skills for improved performance” (p. 2). However, Hoy and Forsyth (1986) described the purpose of supervision as “neither to make judgments about the competence of teachers nor to control them but rather to work cooperatively with them” (p. 3). While there are many opinions regarding supervision among teachers in the public school system, the basic definition by Hoy and Forsyth focuses on working cooperatively with teachers

so the process would appear to me more collaborative than authoritative.

The process of supervision for the teacher educator has evolved tremendously over time and in recent years; the paradigm shift of supervision has been towards a more collegial style. This paradigm shift has provided for more participative decision-making and collaborative models of supervision for the teacher. With more teacher involvement and decision making responsibilities, the supervisory-teacher relationship could have a direct effect on satisfaction in teaching (Edmeier & Nicholas, 1999). However, recent studies conducted by Fritz and Miller (2003, 2004) provided valuable information related to the supervision of agricultural education student teachers. The studies revealed that a structured type of supervision was preferred over moderately and relatively unstructured models of supervision. Fritz and Miller (2003) suggested “how a supervisor defines supervision and the process of conducting a supervisory visit may/may

not affect the happiness of the teacher” (p. 1). In relationship to this concept of school systems and environments, several questions remain. For example, should different programs of curriculum be supervised in different ways? What are common models of supervision being used by teacher educators, and are there similarities when compared to different content areas? Also, since science and agricultural education are closely related, are the similarities in the way they are supervised?

Theoretical Framework

Teacher educators should be aware of different approaches of instructional supervision, determine which model best suits their academic area, and decide to what extent the model is appropriate for stakeholders involved. Fritz and Miller (2004) developed the Supervisory Options for Instructional Leaders (SOIL) Framework to provide such information. In the SOIL Framework two features directly apply to stakeholders: *risk* and *reward*.

Risk is defined as the capability “to expose oneself to a significant chance of injury or loss” (Hardaker, Huirne, & Anderson, 1997, p. 10).

Fritz and Miller (2004) suggested that some examples of risks applicable to the instructional leader as a result of engaging teachers in relatively unstructured levels of supervision could be: (a) colleagues criticizing work ethic, (b) losing identity of a job title, (c) teachers’ not fulfilling their responsibilities, and (d) accountability for teaching performance. Reward is defined as “something given or offered for some service or attainment” (Mish, 2007). Fritz and Miller (2004) suggested rewards that could be gained by the instructional leader engaging in more teacher-driven types of supervision could be: (a) reflection opportunities for the teacher to measure growth over time; (b) flexibility for the instructional leader; (c) collaboration opportunities for the instructional leader and teacher; and (d) job satisfaction. Both risk/reward factors apply to teacher’s developmental levels such as teaching experience, teaching skills, leadership ability, professional development, and should be evaluated when choosing supervisory options (Fritz & Miller, 2003). In addition, the SOIL Framework (Figure 1) is divided into three levels: structured, moderately structured, and relatively unstructured models of supervision.

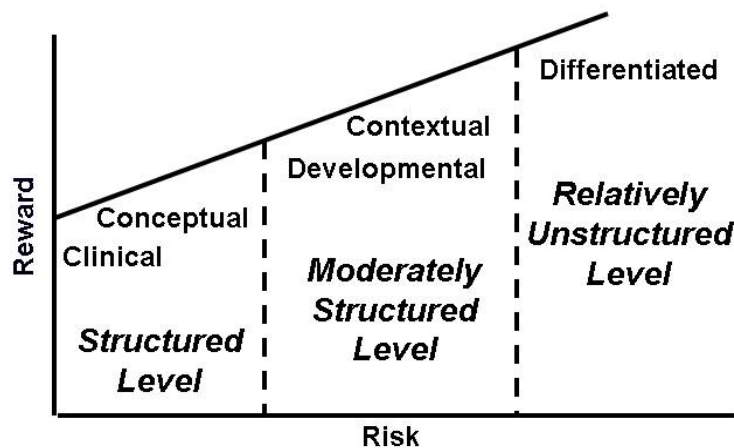


Figure 1. Supervisory Options for Instructional Leaders (SOIL) Framework (Fritz & Miller, © 2003)

Structured Level

The clinical supervisory model was chosen to represent the category of structured supervision in this study. Goldhammer, Anderson and Krajewski (1993) and Cogan (1973) identified clinical supervision as being

divided into five stages: (a) pre-observation conference, (b) observation, (c) analysis and strategy, (d) supervision conference, and (e) post-conference analysis. Pre-observation conference entails an opportunity to establish the teacher-supervisor relationship, where both

parties will begin to feel comfortable with one another (Cogan, 1973; Goldhammer et al., 1993). Structured lesson plans and activities will first be presented in order to identify proposed teaching objectives, thus maximizing a synthesis of knowledge for students (Clifford, Macy, Albi, Bricker, & Rahn, 2005).

Classroom observation allows the instructional supervisor to evaluate and analyze pedagogy in order to later assess comprehension efficiency with the student teacher (Cogan, 1973; Goldhammer et al., 1993). A written synthesis is recorded, based on problems associated with stage one on emerging concerns evaluated during the observation stage.

The analysis/strategy stage serves to be highly effective in two general areas of purpose. The first purpose is to process observational data through synthesis and strategy. The second purpose is to organize the conference and to determine what issues will facilitate individual teacher growth (Cogan, 1973; Goldhammer et al., 1993). The supervision conference allows the central theme of clinical supervision to occur (Goldhammer et al., 1993). Feedback is provided to evaluate student performance and to help guide the student into forming his or her individual style of teaching (Kent, 2001). Post-conference analysis provides the supervisor reflection opportunities to assess effectiveness, both professionally and with the student (Goldhammer et al., 1993).

Moderately Structured Level

With foundations laid in the clinical supervision model, contextual supervision, the model chosen to represent the moderately structured level of supervision in this study, furthers professional development through a mentorship with the supervisor (Ralph, 2003). Contextual supervision provides a model for the supervisor to link situational behavior of the teacher to physical and psychological environments in the school, i. e. social, organizational, political, cultural, and economic variables (Ralph, 2003). The focus of contextual supervision is the ability of the person in the mentorship role to vary his/her supervisory style according to the person being supervised. As the person being supervised progresses in his/her level of development, the supervisor will then adjust accordingly based on four dimensions of the situational leadership style: telling/directing,

selling/coaching, participating/supporting, delegating/observing (Hersey & Blanchard, 2007; Ralph, 2003).

Telling/directing phase targets supervision techniques applying to individuals with low competence and commitment to self, or to those unable to properly perform in the classroom (Hersey & Blanchard, 2007; Ralph, 2003). Selling/coaching phase applies to individuals with some competence and variable commitment, but to those who lack in motivation (Hersey & Blanchard, 2007; Ralph, 2003). Participating/selling phase is geared towards individuals which exhibit high competence and variable commitment to teaching; however, they might be distracted or insecure once in the classroom. Finally, the delegating/observing phase incorporates relatively unstructured models of instructional supervision to those with high competence, commitment and motivation (Hersey & Blanchard, 2007; Ralph, 2003). If the individual is capable, and highly motivated to do his or her job, the supervisor will then allow them to be fully engaged with limited direct supervision (Hersey & Blanchard, 2007; Ralph, 2003).

Relatively Unstructured Level

Differentiated supervision served as the model chosen to represent the relatively unstructured style of supervision. This model provides an opportunity for the teacher to select the type of supervision model he/she will receive and to evaluate services received from the teacher educator (Glatthorn, 1997). In addition, the teacher may choose to select one model of supervision best fitted to the teacher's personal style of development. Glatthorn (1997) suggested four supervisory options: intensive development, cooperative professional development, self-directed development, and administrative monitoring.

Intensive development follows the same procedures as clinical supervision; however, one objective and/or goal is selected by the supervisor. This objective or goal is focused on until it is perfected.

Cooperative professional development strengthens the linkage between instructional improvement in the school and teacher growth (Glatthorn, 1997). The most efficient way for instructional and personal growth to occur is for a two or three teacher team to go through the

mentoring process together. The participants would observe each other's classes then provide feedback on each other's methods of teaching.

Self-directed development enhances the opportunity for professional growth as a result of reflection on teaching skills and techniques (Glatthorn, 1997). Although interacting occasionally with supervisors, the teacher works toward developing individual initiatives. The teacher will set goals at the beginning of the year, develop a plan to achieve set goals, carry out the plan, and assess progress in order to be evaluated on performance (Glatthorn, 1997). Glatthorn (1997) suggested these goals should pertain to professional roles, skills of teaching, subject specific skills, and goals based on mixed sources.

Administrative monitoring requires the supervisor to establish certain criteria for performance and growth of teachers in the classroom. These criteria are evaluated by the supervisor during an unannounced supervisory conference. The evaluation would last approximately 10–15 minutes and be conducted a variety of times during the academic year.

Purpose and Objectives

The purpose of this study was to determine specific types of supervisory methods used in diverse academic subjects to fulfill personal and professional growth in student teachers and interns. Five objectives and two hypotheses were identified in order to guide the study.

- 1 Describe and compare characteristics of teacher educators in agriculture, science, math, and English education who supervised student teachers from September 1, 2005 – May 31, 2006;
- 2 Determine and compare the extent to which teacher educators in agriculture, science, math, and English education used select models of instructional supervision;
- 3 Describe and compare the percentage of teacher educators in agriculture, science, math, and English education who use the structured, moderately structured, and relatively unstructured models of instructional supervision;
- 4 Describe and compare associations between selected agriculture, science, math, and English teacher educator characteristics, and

the extent to which levels of the SOIL Framework were used.

- 5 Compare supervisory styles of teacher educators in agriculture from the 2001 to 2006 study.

Hypothesis 1. There will be a higher percentage of supervisors who most frequently use the structured levels of supervision in the field of science and agricultural education, moderately structured level in math education, and a relatively unstructured level in English education.

Hypothesis 2. There will be differences in preferred supervisory models due to variations in respondent's supervisory experience, formal training, cooperating teacher experience, and academic rank.

Hypothesis one was developed based on previous research in instructional supervision. In recent studies conducted by Fritz and Miller (2003, 2004), agricultural education teacher educators preferred structured models of supervision. Since agricultural education and science education are closely related, one could assume that teacher educators in those disciplines would utilize the same models of supervision. However, the literature did not reveal a preferred style of supervision for math or English educators. Therefore, researchers believed that math educators would collaborate more with student teacher or intern in a problem and solution type manner. In addition, English education involves more independent and/or unstructured work; therefore, researchers believed this may be the method of supervision as well.

Hypothesis two was based on the SOIL Framework and trying to analyze whether supervisory experience, formal training, cooperating teaching experience and academic rank influenced the type of supervision utilized. The researchers believe the more experience and education one has should lead to more unstructured types of supervision.

Methods

This sample study was descriptive in nature. The population consisted of 123 Land Grant Institutions (1862, 1890, and 1994) and Liberal Art Colleges in the United States. Agricultural

educator's names and institutions were acquired through a search from the American Association for Agricultural Education Directory (Cartmell, 2005). English, math, and science Land Grant institutions were chosen from professional organizations respective of their content area. Department heads (agriculture, English, math, and science) from each institution were either contacted by phone or email to evaluate interest in the study and willingness to participate. Department heads also provided a list of teacher educators responsible for supervising student teachers or interns.

A questionnaire was developed by the researcher based on a review of literature about supervision and from the proposed Supervisory Options for Instructional Leaders (SOIL) Framework developed by Fritz and Miller (2004). Portions of the questionnaire that were relevant to this report included behavioral questions that were related to a particular supervisory model and demographic questions.

Respondents were instructed to indicate to what extent they engaged in a specific behavior related to student teacher supervision. One behavior appeared in each statement and the behavior was related to a specific type of supervisory model. Types included were clinical supervision, contextual supervision, and differentiated supervision. The total number of questions representing each type of supervisory model were: five for clinical supervision, five for contextual supervision, and one for differentiated supervision. This section was quantified using a Likert-type scale consisting of the following choices: Never=1, Sometimes=2, Often=3, and Always=4. One supervisory style was selected to represent each level of the SOIL Framework. Clinical supervision represented the structured level, contextual supervision represented the moderately structured level, and differentiated supervision represented the relatively unstructured level. A panel of experts on instructional supervision determined the content and face validity of the questionnaire (Ary, Jacob & Razavieh, 1996). Since the same survey (with some minor additions to the demographic section) was utilized from Fritz and Miller's 2003 and 2004 studies, reliability of the instrument had already been established. Test-retest reliability coefficients were established by conducting a pilot test with a group of nine

secondary education supervisors from the College of Education at Iowa State University. The test-retest interval was two weeks. Questions with reliability coefficients of less than .70 were revised. A participant from the pilot study group was consulted about how best to revise these questions. A second pilot-test group, consisting of five teacher educators in agricultural education from Iowa State University, participated in a test-retest of the revised questionnaire. The test-retest interval for the second pilot study was two weeks. Reliability coefficients, based on data from the second pilot study, were .86 for clinical supervision, .71 for contextual supervision, and .80 for differentiated supervision.

Data was collected by a mailed questionnaire sent out to teacher educators and/or Department Heads in April 2006. Department Heads were utilized due to requests made from Institutional Review Boards at many of the Universities contacted. Once approval to participate was granted, a questionnaire, accompanied by a cover letter and a stamped return envelope, was sent directly to the teacher educator or the Department Head (whichever was requested) in each content area. If Department Heads were utilized, then he or she distributed the surveys to individuals willing to participate in the study. There were 275 surveys sent out in the initial mailing. In May 2006, a second questionnaire, accompanied by a cover letter and a stamped return envelope, was sent to non-respondents urging for their participation in the study. In addition, a third attempt in June 2006 was made to those who had not yet responded. In total, 196 of 275 questionnaires were completed and returned, for a response rate of 71%. The reader is cautioned not to generalize beyond the respondents in the study.

Nonresponse error was handled by comparing early to late respondents (Miller & Smith, 1983). This method was utilized because if the individual chose not to participate, Department Heads requested that the researchers not make contact with the teacher educator or individual who was responsible for supervising student interns. Therefore, early respondents were classified as the first half of respondents to return the survey, and late respondents were the second half of respondents to return the survey. No statistically significant differences were found on the supervisory behavior questions or

the demographic variables between the early and late respondents.

All data were analyzed using SPSS. The statistics deemed appropriate for the study included frequencies, percentages, means, standard deviations and correlations. An alpha level of .05 was set a priori and Davis' (1971) descriptors were used to interpret the magnitude of all associations.

Findings

Objective 1

Table 1 displays characteristics of teacher educators who supervised student teachers or interns during the 2005–2006 academic school year. Professors, Associate Professors, and Assistant Professors comprised 77% of the respondents, with Visiting Professors, Instructors, Graduate Assistants, and Other

Professionals being the other 23% of respondents. A little over three–fourths of the teacher educators were males (76.5%), over half of the respondents (52.6%) were tenured, and over three–fourths (78.1%) were formally trained in supervision. The teacher educators averaged about eight student teachers or interns under their supervision during this studied school year, and teacher educators reported that over half of their time (54.29%) was devoted to supervision of student teachers and interns. Respondents visited student teachers or interns an average of 3.77 times during the documented school year, with an average of nearly four and one–half hours spent during each visit. The average respondent had supervised student teachers and interns 13.21 years, which represented a moderate degree of supervisory experience.

Table 1

Characteristics of Teacher Educators who Supervised Student Teachers and Interns

Item	<i>N</i>	<i>Range</i>	<i>M</i>	<i>SD</i>
Years of experience supervising teachers or interns	195	1–41	13.21	9.59
Years of experience teaching in secondary education	193	0–37	8.45	8.10
Percentage of time devoted to intern supervision	183	0–100	54.29	31.27
On site visits to each student teacher or interns	190	0–15	3.77	2.09
Hours spent during each visit	193	1–9	4.05	2.17
Number of student teachers or interns supervised from August, 2005–December, 2005	178	0–20	3.50	4.25
Number of student teachers or interns supervised from January, 2006–May, 2006	189	0–20	4.75	4.23

Objective 2

Table 2 displays the level of the SOIL Framework that teacher educators tended to use most often when supervising student teachers and interns. Other professionals who were supervising interns preferred the clinical supervision model over the contextual and differentiated models. Supervisors of student teachers who taught English ($M = 3.72$), science

($M = 3.52$), and agricultural education ($M = 3.51$) were most likely to *always* use contextual supervision. Supervisors of math instruction ($M = 3.16$) differed slightly from supervisors of other subject areas in that they reported using contextual *often* as opposed to *always*. In addition, the majority of teacher educators either sometimes or never used the differentiated supervisory model.

Table 2
The Extent That Teacher Educators in Math, Science, English, Agricultural Education and Other Professionals Used Components of Different Supervisory Models

Supervisory Model	n	Mean
<i>Clinical</i>		
Math	12	3.40
Science	15	3.25
English	15	3.35
AgEd	133	3.43
Other	19	3.63
<i>Contextual</i>		
Math	12	3.16
Science	15	3.52
English	15	3.72
AgEd	132	3.51
Other	19	3.50
<i>Differentiated</i>		
Math	12	1.42
Science	14	1.64
English	15	1.60
AgEd	134	1.51
Other	19	1.68

Note. Likert Scale: 1–1.5=Never, 1.51–2.5=Sometimes, 2.51–3.5=Often, 3.51–4=Always

Table 3 displays the significance of supervision models among different academic disciplines. There appears to be statistical

significance (.05) between the contextual supervision (moderately structured) level of the SOIL Framework and the type of teacher educator who utilized the model.

Table 3
Significance of the Structured, Moderately Structured, and Relatively Unstructured Models of Supervision Utilized by Math, Science, Agricultural Education, English and Other Professionals

Supervisory Model	Sum of Squares	df	Mean Square	R ²	F	Sig.
<i>Clinical</i>						
Between Groups	1.355	4	.339	4.14%	2.042	.09
Within Groups	31.636	189	.166			
Total	32.718	193				
<i>Contextual</i>						
Between Groups	2.075	4	.519	4.80%	2.370	.05*
Within Groups	41.165	188	.219			
Total	43.240	192				
<i>Differentiated</i>						
Between Groups	.864	4	.216	.64%	.302	.87
Within Groups	135.306	189	.716			
Total	136.170	193				

Note. Significant at the .05 alpha level

To analyze the data further, Table 4 displays the significant difference in the type of teacher

educator who utilized the contextual supervisory model. Supervisors of student teachers who

taught English ($M = 3.72$); science ($M = 3.52$), and agricultural education ($M = 3.51$) were most likely to *always* use contextual supervision. However, supervisors of math instruction

reported utilizing contextual supervision *often* as opposed to *always* ($M = 3.16$).

Table 4
Mean Scores of University Supervisors in Math, Science, English and Agricultural Education who Utilized Moderately Structured and Relatively Unstructured Models of Supervision

Supervisory Model and Type of Supervisor	<i>n</i>	<i>M^a</i>
Contextual		
Math	12	3.1667 A
AgEd	132	3.5100 B
Science	15	3.5200 B
English	15	3.7200 B

Note. Likert Scale: 1–1.5=Never, 1.51–2.5=Sometimes, 2.51–3.5=Often, 3.51–4=Always

^aMean Scores with different letters beside them indicate different mean scores by using the Duncan's Post-hoc test.

Objective 3

Based on the percentage data showed in Table 5, the moderately structured level of supervision was most often used by teacher educators (52%), followed by the structured

level (43.4%) and then the relatively unstructured level (4.6%). Hypothesis one was not supported by the data.

Table 5
Percentages of Teacher Educators who used the Structured, Moderately Structured, and Relatively Unstructured Models of Instructional Supervision.

Level of Supervision	<i>f</i>	Percent
Clinical		
Math	9	75.0
Science	6	40.0
English	4	26.7
AgEd	56	41.5
Other	10	52.6
Total	85	43.4
Contextual		
Math		
Science	3	25.0
English	9	60.0
AgEd	10	66.7
Other	72	53.3
Total	8	42.1
	102	52.0
Differentiated		
Math		
Science	0	0.0
English	0	0.0
AgEd	1	6.7
Other	7	5.2
Total	1	5.3
	9	4.6

Objective 4

Table 6 illustrates the relationships between the level of SOIL Framework and supervisor maturity indicators: supervisory experience, formal training, cooperating teacher experience, and rank in all academic areas. Davis' (1971) convention for interpreting correlation coefficients was used to describe the magnitude of the relationships of teacher educator maturity

characteristics to the extent to which levels of the SOIL Framework were used. When analyzing the data, negligible relationships exist among supervisory maturity and the teacher educator's supervisory selection. Therefore, this cannot explain why supervisors use different levels of the SOIL Framework in supervision. Hypothesis two was not supported by the data.

Table 6

Relationships Between Level of the SOIL Framework and Supervisory Experience, Formal Training, Cooperating Teacher Experience, and Academic Rank in Agricultural, Science, Math, and English Education

	<i>r</i>	Magnitude
Supervisory Experience	-.034	Negligible
Formal Training	.002	Negligible
Cooperating Teacher Experience	-.027	Negligible
Rank	.080	Negligible

Objective 5

This same supervision study was conducted in 2001 with teacher educators in agricultural education. In 2006, the study included teacher educators in agricultural education along with other academic disciplines such as math, science and English. Table 7 displays the comparison of supervisory models utilized by teacher educators in agricultural education between the 2001 to 2006 study. Comparison of mean scores

indicates a slight difference from the study conducted in 2001 to the 2006 study of supervisory models utilized. The clinical model of supervision (structured level) was *always* used in the 2001 study and now is *often* being used. The conceptual supervisory mode (moderately structured) is still used only *often*, and the differentiated supervisory model (relatively unstructured) still is never *used*.

Table 7

Comparison of Supervisory Styles of Teacher Educators in Agricultural Education from 2001 to 2006.

Supervision Style	2001 Study	2006 Study
	Mean	Mean
Clinical	3.56	3.43
Contextual	3.45	3.47
Differentiated	1.70	1.51

Note. Likert Scale: 1–1.5=Never, 1.51–2.5=Sometimes, 2.51–3.5=Often, 3.51–4=Always

Conclusions/Implications/Discussion

It can be concluded that most teacher educators in this study would prefer a moderately structured approach to supervision. Moderately structured supervision provides opportunities for the student teacher or intern to be involved and most teacher educators in this study prefer that type of supervision. The moderately structured level of the SOIL

Framework shows that teacher educators do realize the importance of situational leadership and that different forms of supervision can be applied to individuals with varying levels of competence, commitment and motivation. This allows the teacher educator with the ability be progressive with all student teachers in finding their personal style of teaching.

One can conclude that people who are in supervisory positions feel that they are expected

to guide, direct, mentor, and take charge of those individuals who fall under their care. Relatively unstructured supervision effectively negates the supervisor's duties and encourages self-supervision on the part of the student teacher or intern. It is apparent from the 2001 and 2006 study that virtually all supervisors of student teachers and interns are reluctant to abrogate their professional responsibilities of traditional supervision that would include structured and moderately structured levels in favor of relatively unstructured models.

The math educators and other supervisors utilized the structured supervision model over the moderately or relatively unstructured levels. However, the agricultural education, English and science teacher educators preferred the moderately structured level of supervision. The significant difference between teacher educators and their choice of supervision was in the moderately structured level (contextual supervision). Math educators only *often* used contextual supervision and the agricultural education, science, English and other supervisors *always* used contextual supervision.

Supervisory experience, formal training, cooperating teacher experience and academic rank were teacher educator characteristics which were used to represent supervisory maturity. Supervisory maturity did not influence which type of supervisory model a teacher educator selected when working with student teachers or interns. It is concluded, therefore, that these factors are not related to the SOIL Framework, and cannot explain why instructors use the preferred level of the SOIL Framework in their supervisory duties.

One can conclude that more training on different models of supervision is being conducted and more teacher educators are being exposed to different styles of supervision and how these approaches can be effectively implemented with student teachers or interns. Supervisory styles of teacher educators in agriculture were surveyed in 2001 (Fritz & Miller, 2003). When results of the 2001 study were compared to the 2006 study, a mean score comparison of supervisory styles showed teacher educators still do not favor the relatively unstructured level of supervision. However, in the 2006 study, teacher educators now only *often*

use the structured level (clinical supervision) instead of *always*, as found in the 2001 study. However, teacher educators in agricultural education tend to *always* use the moderately structured level (contextual supervision) instead of *often*, as found in the 2001 study.

One ponders if the amount of hours spent with a student teacher impacts a teacher educator's supervisory approach. Extended hours spent with the student teacher or intern could result in closer attention to: guidance, consultation with cooperating teacher, review of lesson plans, observations in the classroom, feedback with the student teacher on quality of classroom presentation and activities, suggestions for improvement on instructional delivery and classroom management practices. However, extended time spent with the student teacher or intern might make that individual feel controlled and over manipulated in the classroom. In addition, it implies the student teacher or intern has low competence and is unable to perform properly in front of a class. In this situation, the student teacher or intern could become frustrated because he or she is unable to discover individual styles of teaching in the classroom. When considering the amount of time spent with the student teacher or intern, risk and reward certainly apply to all stakeholders in the supervision process.

Recommendations

Further study is warranted to determine if the patterns endure over an extended period of time. Questions that might relate to future research in this area are:

1. How does rank of supervisor of student teachers and interns relate to supervisory style?
2. To what extent is length of time visiting student teachers and interns related to the supervisor's preferred supervision style?
3. Do supervisors of math student teachers and interns differ from other teacher educators in preferred supervisory style due to the nature of the teaching of that particular subject area?
4. What are the risks and rewards to utilizing the SOIL Framework?

References

- Alfonso, R. J., Firth, G. R., & Neville, R. F. (1975). *Instructional supervision*. Boston, MA: Allyn & Bacon.
- Ary, D., Jacobs, L. C., & Razavieh, A. (1996). *Introduction to research in education* (5th ed.). Orlando, FL: Harcourt Brace.
- Beach, D. M., & Reinhartz, J. (1989). *Supervision: Focus on instruction*. New York, NY: Harper & Row.
- Cartmell, D. (Ed.). (2005). AAAE directory of university faculty in agricultural education. Retrieved from <http://www.aaaeonline.org>
- Clifford, J. R., Macy, M. G., Albi, L. D., Bricker, D. D., & Rahn, N. L. (2005). A model of clinical supervision for preservice professionals in early intervention and early childhood special education. *Topics in Early Childhood Special Education, 25*, Retrieved from <http://web.ebscohost.com/ehost/pdf?vid=4&hid=102&sid=75e4f0bb-bc87-4a4b-83cc-0a32d60b1642%40sessionmgr106>
- Cogan, M. L. (1973). *Clinical supervision*. Boston, MA: Houghton Mifflin.
- Davis, J. (1971). *Elementary survey analysis*. Englewood, NJ: Prentice-Hall.
- Ebmeier, H., & Nicklaus, J. (1999). The impact of peer and principal collaborative supervision on teachers' trust, commitment, desire for collaboration, and efficiency. *Journal of Curriculum and Supervision, 14*, Retrieved from http://vnweb.hwwilsonweb.com/hww/shared/shared_main.jhtml?_requestid=11634
- Fritz, C. A., & Miller, G. (2003). Supervisory options for instructional leaders in education. *Journal of Leadership Education, 2*(2), Retrieved from <http://www.fhsu.edu/jole/issues/0202/FritzMillerFinal.pdf>
- Fritz, C. A., & Miller, G. (2004). Supervisory practices used by teacher educators in agriculture: A comparison of doctoral/research extensive and research non-extensive institutions. *Journal of Agricultural Education, 45*, 45-56. Retrieved from <http://pubs.aged.tamu.edu/jae/pdf/Vol45/45-04-046.pdf>
- Glatthorn, A. A. (1997). *Differentiated supervision (2nd ed.)*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Goldhammer, R., Anderson, R. H., & Krajewski, R. J. (1993). *Clinical supervision: Special methods for the supervision of teachers* (3rd ed.). New York, NY: Holt, Rinehart, & Winston.
- Hardaker, J. B., Huirne, R. B., & Anderson, J. R. (1997). *Coping with risk in agriculture*. New York, NY: CAB International.
- Hersey, P., Blanchard, K. H., & Johnson, D. E. (2007). *Management of organizational behavior: Leading human resources* (9th ed.). Upper Saddle River, NJ: Pearson Education.
- Hoy, W., & Forsyth, P. (1986). *Effective supervision: Theory into practice*. New York, NY: Random House.

- Kent, S. I. (2001). Supervision of student teachers: Practices of cooperating teachers prepared in clinical supervision. *Journal of Curriculum and Supervision, 16*, Retrieved from <http://web.ebscohost.com/ehost/pdf?vid=8&hid=102&sid=75e4f0bb-bc87-4a4b-83cc-0a32d60b1642%40sessionmgr106>
- Miller, L., & Smith, K. (1983). Handling non-response issues. *Journal of Extension, 21* (5), 45-50.
- Mish, F. C. (Ed.). (2007) *Merriam-Webster's dictionary*. Springfield, MA: Merriam-Webster. Retrieved from <http://www.m-w.com/cgi-bin/dictionary>
- Ralph, E. (2003). The convergence of supervision and mentoring via "contextual supervision": Promising findings (Eric No. 477171). Retrieved from <http://eric.ed.gov/ERICWebPortal/contentdelivery/servlet/ERICServlet?accno=ED477171>

CARRIE ANN STEPHENS is an Associate Professor of Agricultural Education in the Department of Agricultural Leadership, Education and Communications at the University of Tennessee, 2621 Morgan Circle, 320 Morgan Hall, Knoxville, TN 37996. cfritz@utk.edu

DAVID LITTLE is an Agricultural Educator at David Crockett High School, 405 West College St., Jonesborough, TN 37659.