Journal of Agricultural Education. 57(2), 161-171

doi: 10.5032/jae.2016.02161

Variability Versus Continuity: Student Teachers' Perceptions of Two University Supervision Formats

Catherine W. Shoulders[1], Don Edgar[2], Andrew Bolton[3]

Abstract

The aspects that make up the student teaching experience, from site placement to feedback received from site and university supervisors, are each influential on the quality of the student teaching experience. Whether made consciously or unconsciously, university supervisors must decide whether to allocate observations by student, wherein each supervisor meets with a small set of student teachers multiple times, or by visit, wherein each supervisor meets with every student teacher one time. This qualitative study explored student teachers' perceptions after being observed using one of the two aforementioned formats. Student teachers valued time with their university supervisors, reporting a desire for more time under observation and for discussion and feedback. They also appreciated the variability in feedback supplied by multiple supervisors, but desired continuity in feedback found with a single supervisor. Recommendations, including several potential observation formats, are offered to assist university supervisors in maximizing their time with student teachers while meeting the student teachers' conflicting needs of both variability and continuity in feedback.

Keywords: student teaching, supervisor, observation

Introduction/Conceptual Framework

The student teaching experience has been acknowledged by some as the most important part of a preservice teacher's training experience (Deeds, Flowers, & Arrington, 1991; Edwards & Briers, 2001; Harlin, Edwards, & Briers, 2002; Levine, 2006). Serving as the culminating field-test for individuals on the cusp of receiving teacher certification, student teachers "must synthesize everything they have learned about planning instruction: collecting and developing instructional materials, teaching lessons, guiding small group activities, and establishing and maintaining order" (Greenberg, Pomerance, & Walsh, 2011, p. 1). The aspects that make up the student teaching experience, from site placement to feedback received from site and university supervisors, are each influential on the quality of the student teaching experience.

The National Council on Teacher Quality, National Council for Accreditation of Teacher Educators, and Association of Teacher Educators each maintain standards for establishing a quality student teaching program. These standards focus on the following areas: length of placement; role of the teacher preparation program in selection of the cooperating teacher; qualifications of the cooperating teacher; qualifications of teacher candidates for student teaching; expectations for the student teaching experience; schedule for observations by the university and school supervisors; culminating projects; alignment of student teaching with the school calendar; activities during student teaching placement; selection of university supervisors; evaluation for continuous improvement of the cooperating teacher selection process

[1] Catherine W. Shoulders, Department of Agricultural Education, Communications and Technology, University of Arkansas

[2] Don Edgar, Department of Agricultural Education, Communications and Technology, University of Arkansas

[3] Andrew Bolton, Department of Agricultural Education, Communications and Technology, University of Arkansas

and school selection process; and selection of placements (Greenberg et al., 2011). Several of these standards focus on the university supervisor, who "holds a vital role in the student internship process, providing not only observational feedback, but significant contributions to the student internship process" (Rubenstein & Thoron, 2013, p. 135).

Historically, university supervisors carried out their observations in a manner that focused on inspection of the teaching practice rather than on helping teachers improve their practice (Bolin & Panaritis, 1992). Student teacher supervision evolved over time to include a focus on teacher reflection and growth (Sullivan & Glanz, 2000). Rubenstein and Thoron (2013) distinguished these two coexisting roles as that of supervisor, promoting teacher improvement through guidance and reflection, and that of evaluator, providing judgement regarding the teacher's performance. The supervision process can vary; number of observations, presence and agenda of pre-and post-observation meetings, length of observation, and nature and format of feedback given can all vary from supervisor to supervisor. Fritz and Miller (2004) found 167 teacher educators from 67 institutions were responsible for student teacher observations within the agricultural education discipline, suggesting that these supervisor-dependent factors can vary greatly within a university, as multiple supervisors are responsible for observing a student teaching cohort. Noting that faculty members serving as university supervisors at the University of Florida refrained from discussing observation techniques, Rubenstein and Thoron (2013) recommended "university supervisors utilize similar supervision strategies when supervising preservice teachers during their student teaching internship" (p. 145).

Recommendations and practices regarding the frequency with which a single student teacher is observed varies by organization. The National Council on Teacher Quality (Greenburg et al., 2011) recommended a minimum of five observations at regular intervals throughout a semester-long student teaching experience. Fritz and Miller (2004) found supervisors within agricultural education made an average of three visits to each student teacher. Greenberg et al. (2011) reported the range of visits to be between two and five per student teacher. Regardless of the number of visits, the practice of visiting student teachers multiple times during a semester and the presence of multiple university supervisors at one institution leads to a choice between two types of student teaching observation formats. Whether made consciously or subconsciously, university supervisors decide whether to allocate observations by student (single-observer formats), wherein each supervisor meets with a small set of student teachers multiple times, or by visit, wherein each supervisor meets with all student teachers one time (multi-observer formats) (see Figure 1).

The great impact university supervisors' feedback has on the student teaching experience suggests this choice should be a deliberate one, supported by data. A review of the present literature yielded few studies focusing on the university supervisor component of the student teaching experience (Fritz & Miller, 2004; Rubenstein & Thoron, 2013). While Rubenstein and Thoron (2013) studied the actions of supervising teachers at one university using consistent supervisors over time, Fritz and Miller (2004) did not assess the division of university supervisor responsibilities. There exists a need to better understand how the division of observation responsibilities between multiple university supervisors shapes the student teaching experience.

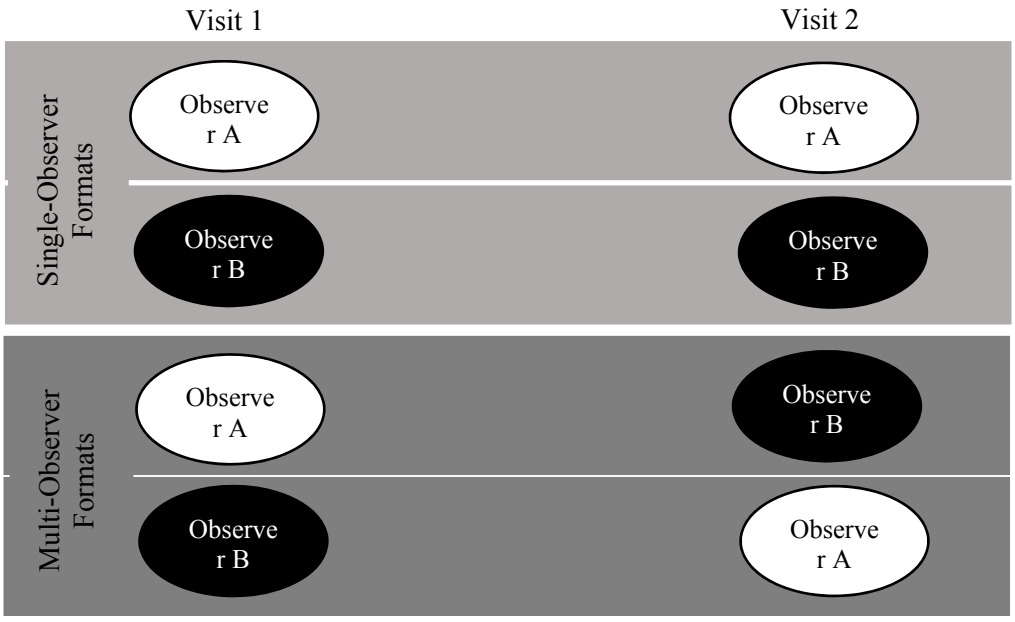

Figure 1. Formats for allocating student teacher observations among multiple university supervisors.

Purpose/Research Questions

The purpose of this qualitative study was to explore student teachers' perceptions of their internship experience after engaging in two observations from university supervisors in one of two formats; *single-observer* students received two visits from one university supervisor while *multi-observer* students received one visit each from two university supervisors. In order to meet this purpose, the following research questions guided the study:

1. How do student teachers describe the feedback received by their university supervisors?
2. What aspects of the university supervisor visits do student teachers value, and how are continuity and variability within observer feedback perceived?
3. How can university supervisors adjust their visits to be most effective for these students?

Theoretical Perspective

While qualitative studies do not rely on theory to confirm or conflict findings, Flick (2006) recommended qualitative researchers utilize theories to conceptualize and guide the focus of the study. This study's design and focus were developed based on the tenets of constructivism and control theory (Carver & Scheier, 1982). Knowledge constructions can present different meanings to different individuals based on the constructivist premise that people interpret experiences differently, regardless of the experience's reality or true meaning (Beard & Wilson, 2006; Doolittle & Camp, 1999). Therefore, the separate individual experiences of faculty members lead to different interpretations of an observation (Young & Henquinet, 2000). Subsequently, feedback given based on the interpretation of the observation differs as well. According to control theory, the feedback, molded by the supervising teacher's previous experiences, impacts the subsequent learning experience and behaviors of the student teacher. Control theory states that individuals attempt to reduce the gap between a standard and a behavior based on the feedback received. This process is termed the *negative feedback loop*, as its function is to reduce the perceived deviations between a behavior and a standard. Carver and Scheier (1982) posited the feedback system is not to create behavior, but rather to "create and maintain the perception of a specific desired condition: that is, whatever

condition constitutes its reference value or standard of comparison" (p. 113). The discrepancy can be eliminated via one of several actions: changing behavior to change future feedback, changing the standard to align with present feedback, rejecting the feedback, or escaping the situation that points to discrepancy (Kluger & DeNisi, 1996). Student teachers, therefore, will alter their instructional practices to elicit more favorable feedback from their university supervisor, reject the feedback by ignoring the university supervisor, or escape the situation by removing themselves from the student teaching experiences which yield negative feedback (for example, avoiding lectures or group work). Constructivism and control theory guided the study's conceptualization and context (Flick, 2006).

Researcher Subjectivity

The findings extracted and conclusions made from qualitative inquiry are done so from the lens of the researchers; "the subjectivity of the researcher…becomes part of the research process" (Flick, 2006, p. 16). A subjectivity statement made by the researchers assists the reader in understanding the perspective through which the research was conducted (Preissle, 2008). As the three researchers conducting this study, we were all certified in agricultural education and had completed internships as student teachers. Two of us were agriculture teacher educators at the university level while one of us was a graduate assistant in agricultural education. Those of us that were teacher educators had each served as university supervisors for student teachers and had previously been employed as high school agriculture teachers. One of us had served as a site supervisor for three student teachers while teaching high school. Two of us served as the university supervisors in this study, while one of us conducted the focus groups, but had no contact with the student teachers in a supervisory or observational capacity.

Methods

Description of Participants

This study utilized eight 2015 preservice teachers at the University of Arkansas during their spring internship experience. Students were randomly assigned to two groups, each using a different university supervision format. Four students were assigned to the *single-observer* group, while four were assigned to the *multi-observer* group. The *single-observer* group consisted of one male and three females while the *multi-observer* group consisted of two males and two females. The small number of students participating in this study increased the likelihood they could be personally identified with additional demographic information. Therefore, in order to maintain participant anonymity and adhere to the protocol of the University of Arkansas Institutional Review Board, further demographic information is omitted from this participant description.

Focus groups were conducted separately by group. All students were required to complete their internship, including the university supervisor visits, as a component of their degree requirements. However, participation in the study was voluntary; students had the option to refrain from participating in the focus groups. Two students declined participation, leading each focus group to contain three participants.

During the student teaching internship, extenuating circumstances altered the experiences of two of the student teachers. One student teacher was involuntarily transferred to a different school to complete h[is/er] internship approximately one month into the semester due to a complication that arose during h[is/er] background check. Another student missed approximately two weeks of the internship due to a family emergency, and resumed h[is/er] internship with one week left in the semester. Both of these students were in the *multi-observer* group.

Description of University Supervision

Two university supervisors were responsible for all visits to student teachers. Student teachers were each observed two times during the spring semester. Each was responsible for observing two student teachers in the *single-observer* group twice during the semester, as well as for visiting each of the four student teachers in the *multi-observer* group one time. Two of the student teachers in the *multi-observer* group were observed by one supervisor first, while the other two were observed by the other supervisor first. During visits, the supervisors observed the student teacher teaching during a class, spoke with the agriculture teacher under whose supervision the student teacher was working, and provided feedback to the student teacher. A uniform student teaching observation form was also completed during each visit. The duration of each visit varied based on the schedules of the university supervisor and student teacher.

Data Collection

At the completion of the student teaching internship, student teachers participated in one of two focus group interviews based on the observation format to which they were assigned. Focus group interviews were selected as an effective method of data collection due to their ability to provide quality control; "participants tend to provide checks and balances on each other which weeds out false or extreme views. The extent to which there is a relatively consistent, shared view can quickly be assessed" (Patton, 2002, p. 386). Each focus group interview was moderated by the researcher among us not involved in student teaching supervision. Separate but similar focus group interview protocols were used to gather data pertaining to the research questions. Protocols differed where appropriate to align questions to the format of the observations. For example, the *single-observer* group's protocol asked, "Did you experience improvement in your performance between your university supervisor's first and second visit?" while the *multi-observer* group's protocol asked, "Did you experience improvement in your performance between visits made by each of the university supervisors?" The focus group interviews lasted between 40 and 50 minutes. Discussion was audio-recorded and later transcribed verbatim for accuracy. Participants were given coded identifiers to maintain confidentiality. Coded data was first identified by the group (SO for *single-observer* group and MO for *multi-observer* group), participant (P1-3), and line number (L). All data collection procedures were approved by the University of Arkansas Institutional Review Board.

Data Analysis

Focus group interview transcriptions were analyzed using the constant comparative method (Lincoln & Guba, 1985). This method includes four stages: compare incidents in the data applicable to each category, integrate categories, delimit the construction, and write the construction. We coded transcriptions for themes, which were then evaluated to unearth categories within the data. We then compared incidents both within a focus group interview and between focus group interviews. Initially, an open coding procedure was used to unearth themes found within fragments of the data and then compare those themes to the interview transcriptions to determine whether other fragments aligned as well. Fragments were then compared to evaluate whether information was repeated or new information was offered. Repeating information was placed into the existing theme while new information was initially placed into a new category. Once themes were established, categories were labeled to reflect the data, adjusting the placement of fragments into different categories or collapsing and expanding categories as appropriate. A final evaluation determined that all themes were labeled in a manner accurately representing the data and all themes were found unique to one another.

Evaluative Criteria

Procedures sought to establish credibility, transferability, dependability, and confirmability throughout the development of this study in order to confirm its trustworthiness (Lincoln & Guba, 1985).

Credibility, defined as the reader's confidence in the researchers' abilities, the design of the study, and the findings to represent the data (Ary, Jacobs, Sorenson, 2010) was established through the use of triangulation between the three of us. We each evaluated the data for themes and confirmed the presence of themes listed in the findings. Transferability was established through the use of a description of the context, including the university supervision format and university supervisors (Holloway, 1997). Dependability and confirmability were addressed via an audit trail, consisting of audio-recorded and transcribed data, triangulation in data analysis between the three of us, focus group interview protocols, and acknowledgment of our subjectivity.

Findings

Three themes were uncovered from within the data: feedback from the university supervisor is valued; time considerations impact the effectiveness of the visit, and the value of variability between university supervisors is dependent upon communication between supervisors.

Feedback from the University Supervisor is Valued

Regardless of the format of supervision, participants in both groups valued the feedback from their university supervisors. Those that were observed by both supervisors noted they "definitely liked having feedback from both of them" (MOP1L140). Participants experienced a boost in confidence received from positive feedback, stating, "…just hearing you did good, or good job as [the university supervisor] left was reassuring that I was on the right track...it was well worth…my time" (MOP1L21-22, 29). They also valued the perspective given by the university supervisor: "[The university supervisor] noticed things that I never noticed…you know, [s]he came and said that and it helped" (MOP3L23-26). Interns reported that the feedback from the university supervisor initiated internal reflection: "I felt it helped redirect you if you were kind of off the beaten path. You can reevaluate yourself," (MOP1L27-28) and made them "more motivated to get better scores for the next time [the university supervisor] came and visited" (SOP2L9-10). One student reported a negative experience with h[is/er] supervising teacher and stated [s]he did not value the feedback given:

When [Supervisor A] came by and observed it was more constructive. It was a class I normally teach and so it was more of an average performance of what I was doing. When [Supervisor B] came by, I had been gone for a week, came back to a class I never taught in the first place and somehow that was a representation of my teaching…I used [Supervisor A's] feedback and [Supervisor B], I kind of ignored. (MOP2L40-43)

However, [s]he stated that [s]he expected in the typical student teaching experience, feedback from any university supervisor would be valuable, and that h[is/er] experience was atypical due to personal circumstances. When asked whether [s]he would have preferred having either Supervisor A or Supervisor B observe h[im/er] multiple times, [s]he stated, "In either case, I would have preferred it" (MOP2L111).

Time Considerations Impact the Effectiveness of the Visit

Participants in both focus group interviews reported that time, in one of three fashions, impacted the effectiveness of their visits from university supervisors. Participants felt that more time was needed during the visit from their supervisor for a holistic teaching experience to be observed and when providing feedback for adequate understanding to be reached, and that the timing of visits in relation to one another and the student teaching schedule played an impactful role in the visits' effectiveness.

Participants from both focus group interviews stated their visits from university supervisors were less effective than they could have been because of the timing of their two visits. One participant said:

> I wish that I could have had more time between my visits so that I could have maybe got some guidelines or evaluation at the beginning, not so much like three weeks apart, cause at three weeks apart toward the end, I've already found my go…of how I'm going to do it. So I wish it was at the beginning and one closer at the end. (SOP2L11-14)

Another noted the external constraints that impacted the short duration between h[is/er] two observations, and suggested this time limitation was a factor contributing to h[is/er] lack of improvement:

> I didn't see improvement because between the two times that the professor visited we were going to contests and so by the time the professor came back, it was only a couple of weeks. There wasn't much teaching time to improve. (MOP3L39-41)

This notion of inability to adapt lessons was expressed by several students, who noted they "didn't have time to adjust" (MOP1L108) when observed twice within two weeks and "there wasn't really any time to implement much of a change" (MOP2L58) when observed in the last weeks of the semester.

Participants also desired more time under observation in order to provide the university supervisor with a comprehensive portrayal of their teaching abilities. Several participants stated they wished the university supervisor would spend the entire day with them, as their teaching styles changed based on the class. One participant stated [s]he regretted missing out on h[is/er] university supervisor's suggestions for improvement of h[is/er] more challenging classes: "[Supervisor A] came the same time both times and saw my good class. I kind of wish I would have had more guidance on my bad classes so I could know what to do differently. But they were never seen, so…" (SOP2L29-30). Several noted dissatisfaction when their observations were shorter than anticipated:

> On both observations, like the first one, [Supervisor A] came by and [s]he sat through most of my class and went out to talk to the cooperating teacher and then sat through like half of P1's class. And then left because [s]he had a meeting to go to. In the exact same fashion, [Supervisor B] sat through [P1's] entire class and then 45 minutes of my class, which is maybe half of it before [s]he left. So I feel like on both of them they didn't get a full opinion of either of us really. (MOP2L92-96)

> On one of my visits, [Supervisor B] was a little late to the class so [s]he missed part of the lesson because I would teach a lesson in the beginning and [s]he missed all of the short lesson and got there just for the project so I got some points taken away because [s]he didn't see that part of my lesson. The lecture part. (SOP1L50-52)

Finally, students desired more time to discuss their observations with the supervising teacher. One student described h[is/er] hurried feedback as "kind of vague" (MOP1L20), noting the supervising teacher "had to be somewhere. [S]He sat through most of the lesson so [s]he kinda had to leave early I guess. So as far as sitting down and talking with [Supervisor A], it didn't really happen" (MOP1L65-66). They expressed a desire to see more written feedback, as well as having more dedicated discussion time after the observation. One student valued the feedback so highly, [s]he was willing to drive to the supervisor's office for additional time: "I wouldn't even mind that. If they have to leave the observation, just coming in and talking to them about what they observed" (MOP2L147-148). Another student stated the little time for feedback left h[im/er] wondering about h[is/er] improvement from the first visit: "I was told I did a good job on the second visit, but I wasn't sure how I did on those areas of improvement" (SOP1L32-33).

Value of Variability between University Supervisors is Dependent upon Communication between Supervisors

Student teachers acknowledged that feedback provided varied by university supervisor. One student noted the two supervising teachers focused on different items during their visit, but both provided sound advice. Students in the *multi-observer* group perceived the variability negatively, stating they would

have preferred to have one observer: "One [university supervisor] might be looking at one aspect and then the other teacher is looking at the other so you don't get the full…so I think it would have been better for a single teacher to observe the same student teacher" (MOP3L119-121). Another stated "having two instructors, it kind of makes it uneven perspectives" (MOP1L117-118). Students in the *multi-observer* group posited one component that would shift the variability's detriments toward being more beneficial: "unless they're communicating constantly, they're never going to have a complete picture of where you need to be headed" (MOP2L113-114). Another added, "I don't know if they really communicated much. You know, [Supervisor A] wasn't like, 'did you work on this'?" (MOP3L76-77).

Students in the *single-observer* group echoed similar feelings, but from a different perspective. As a group, they preferred to have multiple observers. One stated the sentiments of the group: "The professor who visited me, [s]he has, like, h[is/er] persona of it and this is what [s]he would do and change, but someone else might have seen something else to add to that" (SPP3L21-22). They acknowledged that receiving feedback from two university supervisors with varied perspectives would make them "more well-rounded teachers" (SOP1L61-62). One student teacher recognized the variability from university supervisors' feedback was not just from a teaching standpoint, but also within their areas of expertise: "I liked that my professor came and observed my Equine class, but I would have liked another professor to observe my shop class because that was more their specialty" (SOP1L23-24). While they viewed the option of varied supervisors differently than their *multi-observer* group counterparts, their opinions regarding necessary measures to make the variability effective were similar: communication between university supervisors is crucial.

> I feel like they could have combined at the end and been like, "this is what I saw." "This is what I saw." They could have discussed together with us after they came back, this is what they thought and it would have been more of like a team feeling. (SOP3L63-64).

Conclusions

Control theory states that adjusting behavior to impact future feedback, changing the standard to align with present feedback, rejecting the feedback, or escaping the situation (Kluger & DeNisi, 2007) are all potential options when given feedback. Most student teachers elected to attempt behavioral change in an effort to alter future feedback. When that feedback was given by the same university supervisor during their second visit to the student teachers in the *single-observer* group, the student teachers were satisfied with their progress related to that behavior. However, they acknowledged the value of differing perspectives that result from individual background experiences, which is the foundation of constructivism (Beard & Wilson, 2006). Student teachers in the *single-observer* group desired visits by multiple university supervisors in order to experience variability in the focus of their visits, provided those supervisors discussed the student teacher's performance in order to provide a degree of continuity during feedback. Participants in the *multi-observer* group felt their experiences resulted in inconsistent feedback that made it difficult for them to evaluate their performance over time. When that feedback was not given during the subsequent visit by the second supervisor, students experienced frustration. They, too, noted that feedback from both university supervisors was valuable, but stated the value could only be realized when the university supervisors communicated regularly to provide feedback on similar aspects of their performance. While the two groups approached the question of using one or two university supervisors from different angles, they arrived at the same conclusion: multiple perspectives is crucial to enhancing one's teaching practices, but the *negative feedback loop* (Carver & Scheier, 1982) must be closed; follow-up feedback after a change in behavior must be offered in order for the student teacher to perceive a reduction in disparity between the standard and his or her behavior.

The students also valued their time with their university supervisors. They felt more observations, more time spent being observed, and more time for feedback would enhance the student teaching experience. When the students perceived a great disparity between their performance and the standard,

several of them rejected the feedback provided by their university supervisors on the grounds that time given prevented them from receiving more favorable feedback. Student teachers stated that limited time under observation prevented the university supervisor from observing a comprehensive display of their teaching practices. It was espoused that the short time frame between two visits prevented them from being able to adapt their teaching practices. Conversely, a long time frame from when they first started teaching until when they were first observed led them to adopt subpar teaching practices, and the short amount of time dedicated to receiving feedback prevented them from fully comprehending changes needed to be implemented. They acknowledged that scheduling conflicts and alternative responsibilities may reduce the control the university supervisor has on time allowed for student teaching observation, but stated that efforts made to devote more time to observations would be beneficial.

Discussion & Recommendations

Qualitative research is not intended to be generalized beyond the study, as the context cannot be repeated outside of the research conducted. Rather, the discussion and recommendations are offered as potential answers for similar questions, as well as for guidance in future research. Many institutions offering degrees in agriculture teacher education have similar contexts, wherein multiple university supervisors are responsible for observing a group of student teachers multiple times throughout a semester. Regarding recommendations for practice, we acknowledge students' need for a structured observation schedule that designates specific time between visits, as well as ample time for observation and discussion. We recommend each visit be conducted over an entire school day to reduce conflicting appointments, ensure a comprehensive observation that displays a holistic teaching portfolio, and allow for continued discussion between class observations. "Communication can make a positive impact on teaching efficacy held by student teachers if only by grounding their beliefs in a more authentic assessment of teaching performance" (Edgar, Roberts, & Murphy, 2009, p. 41).

Student teachers also desired a combination of variability in feedback and continuity in the focus of feedback over time. Previous studies have found a preference for providing continuity in feedback over time through the employment of the *single-observer* method of student teacher supervision (Rubenstein & Thoron, 2013; Fritz & Miller, 2004). Universities may wish to evaluate their own students' preferences and needs related to the use of this method to determine whether they, like the students participating in this study, would perceive feedback from multiple supervisors as valuable. As a result of the themes unearthed in this study, several potential observation formats were developed in order to meet the needs of the students while maximizing the time of the university supervisor. These formats are intended to serve as guides for programs as they discuss observation formats among their faculty responsible for university supervision.

1. Repetitive Team Format: This format of observation requires that all university supervisors attend all visits as a team. While this method does not maximize the time of the university supervisors, it does provide student teachers with both multiple perspectives and consistent feedback areas over time.
2. Alternative Team Format: This format of observation requires that each university supervisor observe each student teacher one time. University supervisors should develop and maintain a strict observation protocol to be followed during each visit. We recommend that supervisors establish a communication routine during which each supervisor is briefed on the observations made so that feedback can be provided in similar areas with each subsequent visit.
3. A-B-A Format: This format of observation requires that university supervisors visit each student teacher three times. A "lead" supervisor will observe the student teacher twice to provide consistency over time, while a "secondary" supervisor will observe the student teacher once, providing an alternative perspective regarding the observed teaching practices.

It is recommended that each of these formats be piloted within universities, as their formats were constructed as a result of the findings of this single qualitative study, and therefore cannot be generalized beyond its scope. Discussion among university supervisors may yield additional formats of supervision most appropriate for the institution's specific needs.

References

Ary, D., Jacobs, L. C., & Sorensen, C. K. (2010). *Introduction to research in education*. (8th ed.). Belmont, CA: Wadsworth/Thomson Learning.

Beard, C., & Wilson, J. P. (2006). *Experiential learning: A best practice handbook for educators and trainers.* London: Kogan Page.

Bolin, F. S., & Panaritis, P. (1992). *Supervision in transition.* Alexandria, VA: Association for Supervision and Curriculum Development.

Carver, C. S., & Scheier, M. F. (1982). Control theory: A useful conceptual framework for personality – social, clinical, and health psychology. *Psychological Bulletin, 92*(1), 111, 135.

Deeds, J. P., Flowers, J., & Arrington, L. R. (1991). Cooperating teacher attitudes and opinions regarding agricultural education student teaching expectations and policies. *Journal of Agricultural Education, 32*(2), 2-9.

Doolittle, P. E., & Camp, W. G. (1999). Constructivism: The career and technical education perspective. *Journal of Vocational and Technical Education, 16*(1). Retrieved http://scholar.lib.vt.edu/ejournals/JVTE/v16n1/doolittle.html

Edgar, D. W., Roberts, T. G., & Murphy, T. H. (2009). Structure communication: Effects on teaching efficacy of student teachers. *Journal of Agricultural Education, 50*(1), 33-44. doi: 10.5032/jae.2009.01033

Edwards, M. C., & Briers, G. E. (2001). Cooperating teachers' perceptions of important elements of the student teaching experience: A focus group approach with quantitative follow-up. *Journal of Agricultural Education, 42*(3), 30-41. doi: 10.5032/jae.2001.03030

Flick, U. (2006). *An introduction to qualitative research* (3rd ed.). Thousand Oaks, CA: SAGE Publications.

Fritz, C. & 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, 44*(3), 34-46. doi: 10.5032/jae.2003.03034

Greenberg, J. Pomerance, L., & Walsh, K. (2011). *Student teaching in the United States.* National Council on Teacher Quality. Retrieved from http://files.eric.ed.gov/fulltext/ED521916.pdf

Harlin, J. F., Edwards, M. C., & Briers, G. E. (2002). A comparison of student teachers' perceptions of important elements of the student teaching experience before and after an 11-week field experience. *Journal of Agricultural Education, 43*(3), 72-83. doi: 10.5032/jae.2002.03072

Holloway, I. (1997). *Basic Concepts for Qualitative Research.* London: Blackwell Science.

Kluger, A. N., & DeNisi, A. (1996). The effects of feedback interventions on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin, 119*(2), 254-284.

Levine, A. (2006). *Educating school teachers* (p. 39). Washington, DC. The Education Schools Project.

Lincoln, Y. S. & Guba, E. G. (1985). *Naturalistic Inquiry*. Newbury Park, CA: SAGE Publications.

Patton, M. Q. (2002). *Qualitative research & evaluation methods.* Thousand Oaks, CA: SAGE Publications.

Preissle, J. (2008). Subjectivity statement. In L. Given (Ed.), *The SAGE encyclopedia of qualitative research methods.* (p. 846). Thousand Oaks, CA: SAGE Publications, Inc. doi: 10.4135/9781412963909.n439

Rubenstein, E. D., & Thoron, A. C. (2013). An observational analysis of agricultural education faculty during on-site supervisory visits with pre-service teachers. *Journal of Agricultural Education, 54*(4), 134-148. doi: 10.5032/jae.20103.04134

Sullivan, S., & Glanz, J. (2000). *Supervision that improves teaching: Strategies and techniques.* Thousand Oaks, CA: Corwin Press.

Young, C. B., & Henquinet, J. A. (2000). A conceptual framework for designing group projects. *Journal of Education for Business,* 76(1), 56-60. doi: 10.1080/08832320009599051