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Developing Instructional Skills: Perspectives of Feedback in Student Teaching

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Abstract

Feedback is essential for the transformation and development of new teachers. This action research study explored perceptions of feedback givers/receivers in the development of essential teaching skills in a new co-teaching model. Outcomes informed programmatic changes to teacher education trainings and protocols. The research team included teacher education faculty, including the program leader (author 1), faculty (author 2) and K-12 teacher leader (author 3). Student teachers (6), cooperating teachers (7), and university supervisors (3) participated in semi-standard interviews and close-ended surveys. Responses were analyzed for feedback content, frequency, timing, effectiveness, reception and application. Three key components of the feedback process were identified: Goals (What), Relationship (How), and Effect (Change). The relationship between the student teacher receiving and the supervisor providing the feedback significantly influenced student teacher perception and application of feedback. Resulting programmatic changes include cooperating teacher selection criteria, co-teaching training, regular triad team meetings, and rubric-based feedback protocols.

KEYWORDS: action research, feedback, teacher education, field experiences, trust

Introduction

The impact of feedback upon learning is a well-established construct to develop competency and transformation, making it a critical aspect of teacher education (Drago-Severson & Blum-DeStefano, 2016; Hattie & Timperley, 2007; Knowles, 2005; Kulhavy, 1977; Sadler, 1989). This feedback can shape the practice and detailed attention to the work of teaching and is fundamental to the development of teachers' essential skills (Ball & Forzani, 2009). Educative field experiences are a social and collaborative endeavor which involve communicating rationale for teaching decisions while focusing on specific challenges and growth goals.

These school-based interactions can primarily occur within the student teaching triad (i.e. student teacher, cooperating teacher, and university supervisor). In this triad relationship, feedback

can bridge theory and practice to determine the quality and power of the student teaching experience (Valencia, Martin, Place, & Grossman, 2009). The challenge of successful feedback giving and receiving is establishing trust. which can be manifested in the following aspects: voluntary participation, valuing the parity of all stakeholders, shared visions and language, effective communication (which includes active listening), shared resources, shared decision-making process, and shared responsibilities for the outcomes (Friend & Cook, 2017).

The purpose of this action research was to examine the perceptions, collaborative experience, and outcomes of the student teaching experience through the lens of feedback within a 16-week clinical placement in a multiple-subject (K-8) teacher credential program. This program recently adopted the use of the 5D+ Rubric for Instructional Growth and Teacher Evaluation, developed by the University of Washington Center for Educational Leadership. This rubric, implemented at the onset of this study, was intended to provide a shared language for teaching skills and support the use of specific, evidence-based feedback for student teachers.

Action research was most appropriate for this study because the goal was to gain a deeper understanding of current teacher education program practices and to strengthen program components through critical analysis of feedback (Mertler, 2017). Action research centers on practitioner-researchers utilizing insider knowledge to improve practice (Efron & Ravid, 2013); therefore, the research team was comprised of teacher educators researching and implementing program revisions in student teaching. One of the team members was responsible for coordinating student teacher placements with cooperating teachers. This reinforced the reflexivity and openness to "new and different perceptions, viewpoints, and understandings" (Efron & Ravid, 2013, p. 5) that emerged during the planning, acting, developing and reflecting stages of the action research process. Notes collected at each stage and the data analysis informed professional development,

protocols, and the systemization of effective feedback practices in our teacher education program while the study was taking place.

Review of Literature

This literature review is framed by Hattie and Timperley's seminal work on *The Power of Feedback (2007).* According to Hattie and Timperley, the purpose of feedback is to reduce the discrepancy between what is currently understood and an established target or goal. The discrepancy can be reduced by student's reflective practice and employment of effective teaching strategies as well as teachers providing challenging and specific goals and guidance to help students progress toward those said goals. Feedback can work on four levels: giving feedback on the task, the process, the learner's self-regulating skills, and the learner's self-reflection as a learner. In the following sections, other relevant literature were introduced to explore different facets of Hattie and Timperley's model, including timing, content, and delivery of the feedback.

Qualities of Effective Feedback

According to Hattie and Timperley (2007), effective feedback should provide learners with a clear picture about the task, including the learners' current level of performance, errors made, and support to seek beyond surface-level knowledge. In a teaching and learning environment, feedback is used to articulate how "successfully something has been or is being done" (Sadler, 1989, p. 120). "Good quality external feedback is information that helps students troubleshoot their own performance and self-correct: that is, it helps students take action to reduce the discrepancy between their intentions and the resulting effects" (Nicol & Macfarlane-Dick, 2006, p. 208).

Research has demonstrated that feedback increases the rate and application of learning (Bloomberg & Pitchford, 2017; Hattie & Timperley, 2007); therefore, an understanding of the

qualities of good feedback is essential in developing, implementing, and evaluating the role of feedback in the student teaching experience. According to Scheeler, Ruhl, and McAfee (2004), "teachers who attempt to try new teaching methods must receive regular feedback about the impact of new practices on student learning" (p. 397). Within a student teaching experience, the university supervisor and cooperating teacher must know the attributes of effective feedback.

Feedback is effective when a student is able to answer the three key questions within the Hattie and Timperley model (Bloomberg & Pitchford, 2017; Hattie & Timperley, 2007). The questions are interwoven and do not work in isolation. According to Hattie and Timperley (2007), "feedback relating to '*How am I going*?' has the power to lead to undertaking further tasks or '*Where to next*?' relative to a goal, '*Where am I going?*'" (p. 90). In addition to these three interwoven questions, the timing, content, and delivery of feedback is important in increasing teacher effectiveness.

Timing

The timing of feedback is also essential in shaping learning and should be provided as close as possible to the instruction observed (Ellis & Loughland, 2017; Hattie & Timperley, 2007; Hoffman et al., 2015; Nguyen, 2009; Scheeler, 2008; Scheeler et al., 2004.) Scheeler et al. (2004) found "targeted teaching behaviors were acquired faster and more efficiently when feedback was immediate" (p. 403). They also found that immediate feedback reduced the chance that teachers would continue to use fewer effective practices; delayed feedback allowed for practiced errors to continue. Nguyen (2009) specifically studied the triad model of student teaching, examining the impact of feedback within the student teacher, university supervisor, and cooperating teacher triad relationship. The researcher specifically found that the triad members were able to create and maintain a supportive environment when they communicated to student teachers their areas of

strengths and improvement in a timely manner (Nguyen, 2009). In addition, Scheeler (2008) found that immediate feedback is useful because it reduces the practice of errors and provides correction before it is forgotten.

Specific Action and Goal-oriented

Feedback should be tied to goals of specific lessons (Ellis & Loughland, 2017) and also "provides critical information about where the student is in relation to the learning goal and what they need to learn next" (Bloomberg & Pitchford, 2017, p. 46-47). Sadler (1989) asserted "the learner has to (a) possess a concept of the standard (or goal, or reference level) being aimed for, (b) compare the actual (or current) level of performance with the standard, and (c) engage in appropriate action" (p. 121). In 2014, McDonald et al. (2014) also found that when students can articulate how they can demonstrate mastery of the learning target, there is more ownership of their improvement and progress.

One role of the university supervisor is to work with the student teacher to set growth goals; this is a skill essential to ongoing growth as a professional in education. "The ultimate aim should be to have the student set, internalize and adopt the goal, so that there is some determination to reach it" (Sadler, 1989, p. 130). In addition to working towards larger goals in their development as a teacher, the supervisor helps identify the steps or *Where to next?* actions that can be immediately applied as specific changes, leading them towards reaching their goal.

Methods

Action research was used in this process of inquiry, as Author 1 was the program's leader implementing changes in the multiple subject credential program. This study was one cycle of "planning, acting, observing, and reflecting" (Mertler, 2017) during a multi-year continuous improvement evaluation of the teacher education program. "Being insiders who are intimately

involved and familiar with the context" (Efron & Ravid, 2013, p. 4), the research team included the teacher education program leader (Author 1), faculty (Author 2), and K-12 teacher leader (Author 3). In the planning stage, the research team limited the research topic to the role of feedback, reviewed related literature and then developed a research plan. In the action stage, data was collected and analyzed. From this work, the team developed and implemented an action plan for change within the teacher education program. Throughout the study, the team engaged in reflection, identifying areas for additional action research as part of the continuous improvement cycle.

The purpose of this action research was to explore the perspectives of feedback during the student teaching experience. Prompted by a critical review of current teacher education program practices and protocols, action research was selected as a methodology to investigate the effectiveness of feedback within the university supervisor, student teacher, and cooperating teacher triads. Teacher education faculty practitioner-researchers provided integral insider perspectives to the collection and analysis of data and development of program improvements based on study findings (Merriam & Tisdell, 2016).

Student teachers, cooperating teachers, and university supervisors during spring 2017 were asked to volunteer as participants for this study. At the end of the recruiting process, six student teachers (five females and one male), seven cooperating teachers (all females), and three university supervisors (two females and one male) provided informed consent to participate in this study. This resulted in four complete triads and two incomplete triads.

Individual interviews with each participant were conducted during the end of the student teaching semester, using semi-standard interview protocols and additional follow-up questions as needed. These interviews were audio-recorded, transcribed, and analyzed using an open-coded

method. Interview questions asked participants to reflect on the feedback received/provided during student teaching following delivery of a lesson. One was a self-reported successful execution of a lesson plan and another lesson that was not as successful. Participants were asked to identify the person who provided feedback as well as to report the content, frequency and timing of the feedback. Next, participants were asked to respond to a general question about what made feedback effective. Finally, participants were asked to explain if they had received effective feedback during student teaching and what influenced their ability to receive feedback and act upon it.

Teacher interview transcripts were reorganized into meaningful units of data, meeting criteria set by Lincoln and Guba (1985) as the smallest piece of singularly interpretable information within a general knowledge of the context, and also heuristically meaningful to the study. Categories exhaustively included all of the codes from the data and were refined to be as mutually exclusive as possible. The next level of content analysis was formulation of broader conceptual themes that cut across the data (Merriam, 1998).

The primary data source of this study was the individual interview with each participant. To verify the validity of participants' answers, an additional close-ended survey was included. Student teachers responded to a survey pertaining to the receiving of feedback, while cooperating teachers and university supervisors responded to a different survey addressing the provision of feedback. Survey questions were developed to incorporate what is currently known about qualities of effective feedback (Hattie & Timperley, 2007; Nicol & Macfarlane-Dick, 2006). The questions explored perceptions of student teachers, cooperating teachers and university supervisors relative to frequency, duration, goal-focused content, and application of feedback. Examples of the survey questions included asking student teachers, university supervisors and cooperative teachers: On average this week, how long was their last conversation about the teacher candidate's instructional

skills? How often did the participants give or receive the feedback after the lesson? How often did the participants give or receive feedback about a specific "next step"? How often did the student teachers act upon the feedback provided?

Data from this initial cycle of action research informed changes within the teacher education program, specifically in relation to training and provision of feedback. Additional cycles of action research are planned to further engage in continuous improvement. In regards to limitations, readers should be mindful that the individual interviews and surveys took place at the end of the student teaching semester, and the major findings of this study center on participants' opinions at the time of the interviews. Another limitation is the small sample size and the fact that not all cooperating teachers had received training in providing feedback. The purpose of our action research was to understand the effect of feedback given to teacher candidates during the student teaching, not necessarily to seek generalizability of the findings. We focused our investigation on a single setting to seek out the answer to a driving question (How is feedback perceived by members of the student teaching triad?) and to inform practice (Duesbery and Twyman, 2019). If the readers were to replicate the methodology used in this study, they could distill the findings related to feedback on student teaching with a contextual fit to their own programs.

Results

Interviews

Interviews were coded using ongoing analytic induction, resulting in the formulation of six interpretive constructs. These constructs were broken down into subcategories as relevant patterns emerged from the codes. (See Table 1).

Table 1. General Coding Schemes

Main Constructs	Sub-categories

Directional feedback	Specific teaching strategies
	Use of forms/5D+ rubric
Characteristics of feedback	Timing of feedback
	Delivery process
Student teacher feelings	Feelings about person providing feedback
	Feelings about self
	Feelings about the feedback
Cooperating teacher feelings	Feelings about student teacher
	Feelings about feedback
Application of feedback by student teacher	(no sub - categories)
Program Considerations	Personality matching
	Workload management
	Need for more understanding

All triad members mentioned that the content of feedback focused mainly on areas concerning classroom management, instructional planning, and student engagement. The delivery of feedback was described as "immediate" by all cooperating teachers and university supervisors, often with a strength-based approach. However, the interpretation and reception of that feedback was strongly influenced by the student teachers' perception of the persons providing the feedback. Trust in the feedback giver's knowledge/experience validated the feedback, in addition to the positive relationship and rapport that was perceived by both the feedback giver and receiver.

University supervisors and cooperating teachers provided student teachers directional feedback (Where am I going? How am I going?), which corresponded to the Teaching Performance Expectation (TPE) areas on the evaluation forms; while the specific next steps were derived from the 5D+ Rubric (University of Washington CEL) or provided in response to challenges observed by the supervisors/cooperating teachers. All the student teachers felt that they made efforts to apply feedback soon after it was given. However, student teachers' confusion about the feedback

provided by the university supervisor, conflicting feedback from the university supervisor and cooperating teacher, or lack of support for how feedback should be applied affected some student teachers' applications.

All of the student teachers communicated positive feelings about the usefulness of feedback, but one of the six student teachers (who did not pass student teaching) had negative perceptions about the person providing feedback and communicated mixed feelings in his own ability to implement the feedback the way it was desired. With the exception of this placement, all cooperating teachers and student teachers had very positive working relationships, girded by high regard for both the feedback giver and receiver. Most cooperating teachers felt that their student teachers were very receptive to feedback and truly desired to grow from the feedback. Often these teachers mirrored similar attitudes toward feedback that they admired in their student teachers. Comments and suggestions for the program were also mentioned, focusing on ideas for cooperating teachers' professional development to be more effective as mentors.

Surveys

Duration: Student teachers perceived the duration of post-conferences to be between 15 and 30 minutes. Responses from cooperating teachers confirmed this perception. The majority of university supervisors perceived the duration to be more than 30 minutes. The more frequent, often daily, interaction between student teachers and cooperating teachers may explain the difference in this perception.

Frequency: All student teachers indicated they received feedback daily, with the majority indicating they received feedback two to three times per day. Data from cooperating teachers indicated a perception that feedback is provided "most" or "all" of the time. University supervisors

reported provision of feedback "all" of the time, which correlates with the nature of their role in observing the student teacher and then conducting a post conference.

Application: Survey data indicated that student teachers believed they acted upon feedback when it was provided, with 67% of respondents indicating they "always" acted upon feedback. Data from cooperating teachers and university supervisors, however, indicated application of feedback did not always occur.

Goal - Next Steps from Cooperating Teachers and University Supervisors: Student teachers reported they received specific "next steps" from their cooperating teachers three to four times per day. Perceptions of cooperating teachers indicated "next steps" were provided occasionally (20%), most of the time (60%), and all the time (20%). This data indicated another discrepancy in the perceptions of how often specific feedback was provided. There was a similar discrepancy between perceptions of some student teachers and university supervisors, with some student teachers reporting they "sometimes" received "next step" feedback while all university supervisors reported they provided this feedback "all the time".

Follow Up/Progress: Of particular importance in the survey data was the perception of cooperating teachers and university supervisors regarding how often they followed up with previously provided feedback to gauge progress. 40% of cooperating teachers and 100% of university supervisors reported providing this important step "most of the time".

Discussion

The purpose of this action research was to analyze the perceptions of feedback from the teacher candidate, cooperating teacher and university supervisor to inform fieldwork training and protocols. Analysis of the interview data from each member of the student teaching triad revealed three key components of the feedback process: Goals (What), Relationship (How), and Effect

(Change). It was clear the feedback student teachers received from their cooperating teachers and supervisors all worked toward the explicit and attainable micro goals of helping them improve their instruction and increase student learning, but the relationship between the feedback giver and receiver was a critical factor in determining the merits and worth of the feedback and likelihood that application of the feedback would lead to implementation or change in practice. (See Figure 1).

Figure 1. Dimensions of Feedback
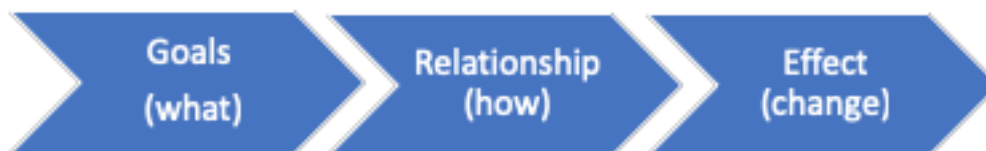
Goal-oriented Feedback

Interview data found that both cooperating teachers and university supervisors mainly provided feedback on key areas such as student engagement, more effective use of instructional norms, and application of content-based pedagogies. This aligns with Ellis and Loughland's (2017) assertion that specific feedback regarding practice should include constructive criticism that is explicitly tied to program goals and addresses Hattie and Timperley's questions of *How am I going? Where to next? Where am I going?"* (2017).

However, survey data in response to "Always receiving specific next steps" indicated a discrepancy in the perceptions of how often specific feedback was provided and processed. While most of the cooperating teachers and university supervisors said they provided these next steps "most of the time", not all student teachers shared the same perception. In examining the research on goal-focused feedback and the importance of training for cooperating teachers and university supervisors, the data indicates a possible need for training in how to provide this specific feedback

so it is understood as a "next step" and acted upon by student teachers. A shared vision between the feedback providers and receivers, which can be augmented by using the shared rubric or assessment instrument, can add to the clarity of communication and collaboration.

Another important implication from this research is the importance of training for both university supervisors and cooperating teachers on how to effectively provide feedback and prompt reflection (Akcan & Tatar 2010). Significantly, Hoffman et al. (2015) found that in 42 of 46 studies reviewed, cooperating teachers had not participated in training on how to coach and to provide feedback. In our context, only half the cooperating teachers had received any specific coaching or training on how to provide feedback. Most of the student teachers perceived the feedback they received as useful. However, ongoing professional learning and generalization of the concepts and skills learned in teacher education programs should require specific training for university supervisors, cooperating teachers and even the mentors and principals who will work with teachers in induction programs to increase qualities of effective feedback and impact on performance (Scheeler, 2008; Scheeler et al., 2004).

Relationship (How feedback was received)

Individuals interpret feedback through belief systems; efficacy and mindsets affect motivation, and for some individuals, constructive or critical feedback may be perceived as a "failure" for those with low efficacy or a fixed mindset (Dweck, 2008; Nicol & Macfarlane-Dick, 2006). Most of the student teachers held a high regard for their cooperating and university supervisor. Their positive attitudes to receiving feedback and their trust in feedback givers allowed them to be more open to specific praise and constructive feedback they received.

Attending to the emotional response of the student teachers, asking how they felt about the lesson and what changes they would make in teaching could help student teachers develop the self-

regulation and self-assessment practices necessary to mastering the TPEs. Teaching student teachers to understand that feedback is about performance and not an evaluation of who they are as people and individuals is critical in the development of the student teacher and to the triad relationship. Mutual trust in the triad relations could reduce anxiety if every mistake is framed as a learning experience rather than as a "fault" by the student teacher. Feedback that builds efficacy includes prompting the student teacher to focus on what went well and building on strengths and growth toward goals (Nicol & Macfarlane-Dick, 2006). Assessing the level of efficacy and mindset and framing feedback to teach self-assessment and self-regulation of emotions is another dimension of Hattie and Timperley's question, *How am I going?*

Akcan and Tatar (2010) recommend interactive and collaborative conversations during feedback. They suggest that it is helpful to offer ideas for improvement, but limiting feedback to directive suggestions does not prompt reflection. A focus on dialogues in which the supervisor poses reflective questions, listens for beliefs, evidence of efficacy, and depth of understanding will more effectively support development of the student teacher's progress toward goals. This work requires a learning community characterized by high levels of trust and collaboration described by these participants:

> I really like my university supervisor and my mentor teacher, how they say, well, you're on your way to developing this. You're close, you know, here are some ways that you can do that - you're really close. And then also, hey, you know, offering support in ways to go about meeting content or standards a little more effectively and not a, hey, you did this wrong, here's how to do it. But, hey, you know what, I think we can do this a little better and we can do it this way, you know, and it's always like a 'we'. It's not like a *you* did it wrong type scenario. (ST)

Kutsyuruba, Walker, and Noonan (2011) found that when trusting relationships exist, "individual morale, self-esteem and self-worth, and is central to dealing with uncertainty, unpredictability and risk" (p. 83). Bloomberg and Pitchford (2017) assert "relational trust is key to building effective teams and an essential ingredient in building collective efficacy" (p. 19). Knowing this, it is important for supervisors/cooperating teachers to actively and more intentionally remove barriers to trust by acting with benevolence, reliability, competence, honesty and openness to create environments in which student teachers feel safe being vulnerable and taking risks. A focus on coaching, rather than evaluation, when delivering feedback is important in this work.

Effect (what changed in practice)

While student teachers indicated that they applied feedback "Most of the time" (33%) or "All of the time" (67%), both cooperating teachers and university supervisors felt that their feedback was applied "Most of the time." For one student teacher, the feedback that was provided by the university supervisor did not address what she perceived was the main problem of her lesson:

> There was a lesson that I just – my kids were kind of out of control that day and the feedback that I felt, it was during one of my university supervisor's observations. And the feedback that I felt from him I felt wasn't specific enough. He kind of pointed more towards the content of my lesson rather than what I was doing as a teacher that could help the students in classroom management… What I thought as helpful was he did do some feedback on what I could improve content-wise, which I appreciated. But he did not speak specifically to the classroom management on ways that I needed to improve or what he noticed during the classroom management. (ST)

The disconnect between the university supervisor and the classroom context was another reason why feedback was not applied. The student teacher explained:

> For example, I'm using GLAD for my history. And that doesn't really require reading or writing, yet my university supervisor suggested that that was my next move in teaching history even though that was not part of the style that my cooperating teacher was using. The GLAD style uses more pictures and charts and lots of group work and doesn't really focus on the reading and writing. So, I felt that was kind of detached. So, it would have been nice if he had known what GLAD was and that we could know how to incorporate it both ways.

However, 4 out of 6 student teachers shared a similar perception of their ability to implement feedback, particularly when there was clear understanding of what needed to be done:

> So, I take what I get and I immediately put it into my next lesson and I start practicing immediately. So, if it's something – for instance, a lesson where I wasn't giving a clear enough purpose it leaves your students kind of in a no man's land of what they need to be doing for your lesson. And so, I started giving them a really clear purpose, connecting it to their past experiences, allowing them to connect to their experiences and then having my directives and posting them. And that made my lessons go so much smoother because everyone knew what they were supposed to do, including me, and everyone was on the same page. (ST)

Conclusion

The task of developing new teachers is critical and complex work that requires clear learning goals, relational connection, and explicit feedback. As teacher education program practitioners, through this action research we found that how the feedback was received and the

relational environment in which the feedback took place strongly influenced the degree of successful implementation of feedback. Creating a safe environment in which the challenging work of providing quality feedback that supports development of self-regulation and self-assessment requires careful planning for and attention to the relational environment in which the triad engages in this important work.

In order to address these components for effective feedback and concerns raised by findings in this study, our program has implemented more training and systemic support into the student teaching experience. We replaced two extra formal observations with two "Triad Meetings" at weeks five and ten of student teaching. These meetings are concentrated times to address any concerns and to build a more cohesive approach to providing feedback for the student teachers. This is also a time to review the teacher candidate's formative evaluations, identify areas where the student teacher is "on the verge of" reaching the next level, and determine what supports could be provided to facilitate continued growth.

As another response to this action research, we developed two training modules focusing on co-teaching strategies and protocols for providing specific feedback based on the shared teaching rubric. All cooperating teachers were invited to attend a two-hour training at the beginning of the semester in varying locations. These training modules will eventually be shared online as part of required training for all cooperating teachers. In addition, university supervisor bi-monthly support meetings have been scheduled to provide ongoing calibration and to develop consistency with feedback protocols.

To create a more shared understanding of program goals, we also developed a "Co-Teaching Phase-In Schedule," which sequences candidates' focus on 5D+ Rubric domains (Classroom environment and culture; Purpose; Student engagement; Curriculum and pedagogy;

Assessment for student learning) and use of co-teaching strategies for a gradual release of responsibilities. The phase-in schedule suggests focus areas for each week and directs how the university supervisor should provide feedback, based on evidence in the lesson. All of these components of feedback are now to be recorded on the observation forms. The cooperating teacher role now also emphasizes consistent and active feedback throughout the clinical experience. Feedback is formally recorded by the cooperating teacher on the formative evaluations at weeks five and ten. These forms are provided to the cooperating teacher, with prompts to follow the protocol of identifying the student teacher's strengths, what he/she is "on the verge of", evidence to support progress toward the different 5D+ Rubric domains/TPEs, and specific next steps for implementation.

We also developed "School Site and Cooperating Teacher Criteria", which articulates a protocol for selecting cooperating teachers and defines their role for providing feedback as a "coach" who is an active, reflective listener, good questioner, understands the continuum of teacher learning, and has a strength-based view of student teachers when providing feedback. These criteria are shared with district superintendents and principals in conversations that emphasize cooperating teachers' ability and willingness to mentor a teacher candidate.

Future Research

Results reflect the perspectives of four complete triads, where all participants only worked in two districts, in a program that places student teachers in over 30 other districts throughout a wide service region. It would have been preferable to have data from complete triads, with more participation from all the university supervisors assigned to student teachers in this study.

Notwithstanding these limitations, the information we gained from this work informed many changes in our teacher preparation program. Future action research could include further

exploration of the dynamics between the different triad members in the context of coaching and co-teaching models. It would be interesting to collect video data of various triad meetings to more deeply examine the giving/receiving of feedback by each member. A related area of study could include a focus on the university supervisor's role in bridging the world of the university and K-12 education. In addition, future research based on a more representative sample of the population served by the program could be conducted to understand how recently implemented reforms in our teacher education program, including trainings and support related to feedback with a focus on Goals (What), Relationship (How), and Effect (Change), impacts the development of student teachers' content-area instructional skills.

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