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Investigating the Impact of an Action Research Project on the Cooperating Teacher/Student Teacher Relationship

With the intent of better understanding how mentoring was established during the music student teaching experience, the purpose of this collective case study was to investigate the impact of a collaborative action research project on the cooperating teacher/student teacher relationship. Participants in this study were three cooperating teacher/student teacher pairs who worked collaboratively on an action research project, during which the author collected data before, during, and after implementation of the projects. The following themes emerged from the data: Cooperating Teacher Qualities (being welcoming, providing leadership/guidance, giving specific and positive feedback, showing confidence and trust in their student teacher), Student Teacher Qualities (inquisitiveness, taking initiative, showing respect, displaying gratitude, being prepared) and Increased Collaboration. The student teachers exhibited specific qualities that shaped their experience; the cooperating teachers appreciated these qualities in their student teachers and as a result, were more willing to share teaching responsibilities. Cooperating teachers and student teachers alike desired a personal connection with one another that would allow for an authentic, comfortable relationship. Participation in the action research project resulted in increased opportunities for collaboration between the cooperating teacher and student teacher, which led to a relationship that was more collegial in nature. Keywords: student teaching, mentoring, collaborative action research

Introduction

Student teaching is often the first extended experience preservice teachers have in the classroom. It is perceived to be the seminal or capstone experience in undergraduate education (Conway, 2002; Rideout & Feldman, 2002; Roulston et al., 2005; Silveira & Diaz, 2014). Further, the student teaching experience is

considered by both preservice and in-service teachers to be the most valuable component of an undergraduate music education program (Conway, 2002).

The relationship between the cooperating teacher and the student teacher is an important aspect of the student teaching experience. When cooperating teachers serve as mentors, the student teaching experience appears to be more productive and meaningful (Duling, 2000). However, the ability for the cooperating teacher to act in the role of a mentor depends heavily on the rapport that is developed between the cooperating and student teacher (Elliott & Calderhead, 1993; Veal & Rikard, 1998). It has been suggested that working collaboratively might be an effective tool in managing and creating a successful student teaching experience (Bowles & Runnels, 1998).

In the following review of literature, I focus on multiple aspects of the student teaching experience, including the perceptions of the student teachers and their cooperating teachers as well as the development of the mentoring relationship between these two parties. Finally, given that the participants in this study were involved in a collaborative action research project, I explore the action research literature to better situate this qualitative study.

Review of Literature

Student Teaching

Multiple studies have focused on the perceptions of music student teachers (Frederickson & Pembrook, 1999; Kelly, 2000; Killian et al., 2013; Madsen & Kaiser, 1999). Discipline and classroom management were ranked as the greatest fears prior to student teaching, as well as the inability to apply knowledge and concerns about interactions with supervising teachers (Kelly, 2000; Madsen & Kaiser, 1999). Killian et al. (2013) investigated self-reported concerns of 159 music student teachers pre- and post-student teaching over a five-year period. They found that teaching concerns prior to student teaching (applying knowledge, discipline, confidence) were similar to those found by Madsen and Kaiser (1999) while the teaching concerns following student teaching (affinity for teaching, information about students, administrative duties) differed. Frederickson and Pembrook (1999) discovered that preservice teachers believed the best aspects of teaching were related to making decisions regarding literature and building collegial relationships with other teachers.

Information regarding the cooperating teacher is often embedded in the research rather than being the focus (Rideout & Feldman, 2002). Several studies (Draves, 2013; MacLeod & Walter, 2011; Zemek, 2008) point to a gap in the literature pertaining to cooperating teachers. To this end, Palmer (2018) examined the perceptions of cooperating teachers and found that participants were eager to learn from and build relationships with their student teachers, wanting to help the next generation of music teachers.

Cooperating teachers view their role in multiple ways, including being a good listener, being a friend, or acting as a guide or leader (Elliott & Calderhead, 1993). Further, their role manifested itself based on the cooperating teachers' own definitions of their responsibilities. Most of the cooperating teachers valued the importance of mentoring the student teacher. These findings are supported by Russell and Russell (2011), who reported that the cooperating teachers viewed their mentoring role to be one of a friend, guide, and resource person.

Relationship Between the Cooperating Teacher and Student Teacher

The importance of the relationship between the cooperating teacher and student teacher is prevalent in the music education literature (Draves, 2008a, 2008b; Elliott & Calderhead, 1993; Russell & Russell, 2011; Schmidt, 1994a). Draves (2008b) found that power sharing between cooperating teachers and student teachers can be placed on a continuum, from a student/teacher relationship on the end with the least power sharing, to team-teaching in the center, to a collaborative partnership on the end with the most power sharing. Based on these findings, Draves makes multiple suggestions for practice, including careful consideration of student teacher/cooperating teacher matches as well as providing opportunities for the cooperating teacher/student teacher pairs to interact prior to the student teaching experience.

The impact of reflective dialogue between the cooperating teacher and student teacher, as well as reflective thinking on the part of the student teacher, has implications for the development of the cooperating teacher/student teacher relationship. Conkling (2003) investigated the impact of reflective thinking in the professional growth and identity development of preservice choral music teachers. The students in this study cited the cooperating teacher as an influential model. Stegman (2007) examined the content of reflective dialogues between six pairs of cooperating teachers and student teachers. She discovered that conversations were most meaningful when they occurred on a regular basis and the cooperating teacher guided the conversation toward more significant levels of reflection.

Given the importance of the mentoring relationship, it is necessary to investigate ways in which a more organic and meaningful partnership can be constructed between the mentor and mentee. Action research might be one such way of building this relationship.

Action Research

Action research has been used to create meaningful professional development for both beginning and experienced teachers. Action research is a term that can be defined as a process through which practitioners (teachers) study their own practice to solve problems embedded in their daily routine (Corey, 1953). The teachers become practitioner-researchers as they work to address issues specific to their classroom. Knight et al. (1998), as cited in Henson (2001), define action research as a "collaborative process by which teachers themselves critically examine their classrooms, develop and implement educational interventions, and evaluate the effectiveness of those interventions" (p. 819). Teachers working collaboratively within the framework of an action research project have multiple opportunities and specific ways in which to communicate with one another. The nature of action research is largely dependent upon the practitioner-researchers developing common project goals, addressing issues in their classroom(s), and the decisions and assignment of key roles in the project (Mitchell et al., 2009). Henson (2001) found that teachers involved in collaborative action research experience a decrease in feelings of frustration and isolation. Collaboration is viewed as a key component in teacher development (Oja, 2001).

Action research is built upon the premise that teachers identify and creatively address problems in their classrooms. Successful collaboration on an action research project depends upon the following planning and considerations (Mitchell et al., 2008): defining the problem, establishing a plan to collect data, analyzing the data, identifying solutions, and reporting the results. Active teacher involvement is a crucial component at all stages of the research process. Engaging in a collaborative action research project might allow student teachers to speak comfortably and openly with their cooperating teacher. A collaborative action research project might also be the conduit for a more authentic mentoring relationship between the experienced and beginning teacher.

Participating in a collaborative action research project "allows the uncertainties of the teacher to be a source of learning and professional development for teachers and students" (Mitchell et al., 2008, p. 348). It may prove especially relevant for student teachers as a means of expressing doubts and uncertainties about their own teaching as well as building a fruitful relationship with a more experienced teacher.

Purpose

With the intent of better understanding how mentoring was established during the music student teaching experience, the purpose of this study was to investigate the impact of a collaborative teacher research project on the development of the cooperating teacher/student teacher relationship. I designed the following research questions to guide this investigation:

- 1. What qualities contribute to the development of a meaningful mentoring relationship between the cooperating teacher and the student teacher?
- 2. In what ways do cooperating teachers believe that participating in the collaborative action research project impacted their mentoring relationship with their student teacher?

Methodology

Research Design

I employed a descriptive collective case study design (Stake, 2000), using a constant comparative method and simultaneous cross-case analysis to illuminate patterns across cases (Merriam, 1998). Consistent with case study design (Stake, 1995), I collected multiple forms of data: in-depth observation of participants, formal individual interviews and focus group interviews, collection of artifacts (e.g., journal entries, lesson plans, reflective notes, observation reports), and informal conversations.

Participants and Procedure

Three cooperating teacher/student teacher pairs served as participants. Selection of participants was bound (Stake, 1995, p. 2) by those serving as cooperating teachers and those student teaching during the semester in which this study was done. The cooperating teachers taught in a variety of settings and had varying degrees of experience serving as a mentor to student teachers (see Table 1 for clarifying details).

Table 1

Cooperating teacher*	Student teacher*	Cooperating teacher years of teaching	Cooperating teacher number of previous	Setting
Kathy	Amelia	8	student teachers 0	Middle school general/choral
Claire	Emma	24	>10	Middle school band
Suzanne	Thomas	26	>20	Secondary choral

Cooperating Teacher/Student Teacher Pairs and Details

*I used pseudonyms throughout the study.

I contacted participants by email to request their participation. After initial contact was made, I met with each participant individually to explain the study, distribute the consent document, and discuss the collaborative action research project. As I anticipated questions from the cooperating teacher/student teacher pairs regarding the action research project, I developed a set of guidelines using Sagor's (1992) criteria for action research. The following guidelines were provided to the cooperating teacher/student teacher pairs in guiding the formation of their action research project (for clarification purposes, the issue refers to the focus of the action research project; the researcher refers to the cooperating teacher/student teacher pairs): the issue pertains to teaching and learning and is within the scope of the researcher's authority, the issue is one about which the researcher is passion-ate, and the issue focuses on an area of teacher or student performance that could be improved upon.

During our initial meetings, I allowed for time to discuss the projects and was prepared to field questions and comments as the projects ensued. Although I served as a sounding board while the participants brainstormed potential research projects, identifying the problem to be investigated needed to be solely the teachers' choice. This is congruent with Sagor's (1992) aforementioned criteria for action research.

Researcher's Subjectivity

In addition to the observations that were dedicated to collecting data for this study, I also observed the student teachers in my role as college supervisor. I ensured the students that their participation was completely voluntary and would in no way impact their evaluation during the student teaching experience; student teachers were not pressured to participate based on my role as their supervisor. The participants were understanding of this potential conflict and willingly chose to continue their role in the study. Additionally, both the cooperating teachers and student teachers were aware that there would be more of a time commitment and additional tasks to complete if they agreed to participate. While there were specific procedures set in place (e.g., separate observation forms) that helped to differentiate the reasons between the visits, I was nonetheless informed by these additional observations. Also, the student teachers in this collegiate music education program were required to journal as part of their experience. The journals for my participants, while not focused on this study, informed my understanding of the participants and interpretation of the data. Finally, to assist in the clarity of understanding this study, the collaborative teacher research project undertaken between the cooperating teacher and student teacher pair was not an edTPA project.

Further, in an attempt to better understand how my role as researcher in this study was potentially biased and/or limited in other ways, I used the structure developed by Preissle (2008) to better understand my own experiences, beliefs, feelings, and professional predispositions. I was fortunate to have had a successful student teaching experience, one in which my cooperating teacher was a positive and influential mentor during both the student teaching experience and early in my public school music teaching career. I was also mentored beyond my undergraduate education by several of my collegiate professors, made in large part possible by my public school teaching occurring in close proximity to the college from which I graduated. It was during this time that I began to ponder how the music education profession might benefit if all teachers received high quality mentoring early in their career. Prior to embarking on this study, I had observed numerous cooperating teacher/student teacher pairs during the student teaching experience. It is reasonable that my past experiences served to influence how I viewed the interactions between the cooperating teacher and the student teacher pairs in this study as well as my interpretation of the data.

Data Collection and Analysis

As previously stated, I collected data in multiple ways and forms. I conducted two formal, semi-structured interviews with each participant, one during the early part of the student teaching experience and one towards the end. Additionally, I conducted two focus group interviews at the end of the student teaching experience, one with the student teachers and one with the cooperating teachers. The use of focus group interviews as a means of data collection allowed the participants to build upon the ideas and responses of the other participants, creating a more collaborative and informal setting (Morgan, 1997). All participants received a copy of the focus group interview questions prior to our meeting.

Each cooperating teacher/student teacher pair was observed approximately 15 hours in their shared classroom. During the visits, I took field notes on interactions between the pair and other people in the school network, such as other faculty and students. My field notes consisted of thoughts and impressions I had during my time observing in the various classrooms, including but not limited to the physical set-up of the respective classrooms and what I thought was significant in the interactions between the cooperating teacher/student teacher pairs (Emerson et al., 2011). I also observed shared teaching responsibilities as well as informal interactions, such as planning and eating lunch. I began observing each cooperating teacher/student teacher pair prior to the implementation of the collaborative teacher research project and continued observations as the project was in place. Doing so allowed me to witness and observe the development of the relationship between the cooperating teacher and student teacher.

I read the interview transcripts multiple times prior to the analysis in an effort to increase my familiarity with the data, before then coding the data using a constant comparative method of analysis (Creswell, 1998). After an initial code list was established, I reviewed my field notes and artifacts to triangulate the data, searching for supporting evidence of my initial analysis, before a final code list was developed. From this final code list, I was able to recognize emerging themes which were then used for interpretation in a cross-case analysis.

Trustworthiness

I established trustworthiness through three measures: data triangulation, member checks, and peer review (Creswell, 1998). Multiple types of data (individual interviews, focus group interviews, and field notes) served to support the emergent themes. The member check, done by giving participants the transcript of their interviews and allowing for them to make changes prior to analysis, ensures that the interviews were an accurate portrayal of their words, thoughts, and ideas. Finally, I elicited feedback from two outside readers, both of whom were trained and experienced in qualitative research, to provide a peer review of the data and findings. Both researchers supported my conclusions but posed questions that helped to clarify and elucidate my findings.

The Action Research Projects

Kathy and Amelia: Natal Male Changing Voice¹. Kathy and Amelia chose to focus their teacher research project on helping their junior high cisgender boys develop a better understanding of the natal male's changing voice. Kathy provided the impetus for this project as she felt she had more to learn more about this topic and that her students would reap the benefits as well. Amelia was also eager to become better versed in the various approaches on this topic.

Both Kathy and Amelia brought resources they had separately collected to school so that they could brainstorm about ways in which they would set up the study. Additionally, Amelia attended the state ACDA conference shortly after she and Kathy agreed on this topic and attended sessions and gathered information specific to the topic of natal male changing voice.

The teachers utilized a qualitative approach with this topic, beginning by identifying a small sample of participants, all of whom were junior high natal males with voices in various stages of change. Separate from the rehearsal, they interviewed the students in a focus group setting to gather their knowledge, thoughts, and perceptions regarding the natal male voice change. Throughout the course of the next several weeks, Kathy and Amelia included a more deliberate approach to teaching their students about the natal male voice change during the course of their choral rehearsals. These approaches included being more explicit about the adolescent voice change throughout the choral rehearsal, including providing charts in the classroom to help students better understand the process. After two weeks, they interviewed the participants a second time in a focus group setting. The results indicated that the students were much more aware of the changing voice, and some were even able to use specific terminology about their own particular stage of voice change. Overall, the students felt more comfortable and knowledgeable about the voice change.

Claire and Emma: Guided Listening. Claire and Emma focused on guided listening with their band students. This idea came about as a result of Claire feeling that the band rehearsal, in its most traditional setting, does not allow for a more comprehensive approach to music learning, an instinct that is grounded in the music education literature (Prichard, 2013). Together, Claire and Emma reasoned that if a student has better listening skills and is more knowledgeable about how the members of an ensemble work together in making music, the students will be more likely to make better choices within each section. Their purpose in doing this teacher research was to improve the quality of the ensemble, both in overall sound and approach.

Though Claire initially developed the idea, Emma was very much involved in this research. Claire felt that the project came together more fluidly by discussing and brainstorming ideas with Emma. Once the ideas for the project became more concrete, Emma took the initiative to gather the materials that were needed. I assisted in supplying some examples about how general music teachers approach guided listening. These examples served as a template as Emma made the changes necessary both to find success with middle school students as well as to meet the needs and purposes of the research.

Claire and Emma decided to use Benjamin Britten's Young Person's Guide to the Orchestra during the guided listening portion of the band rehearsals. In the first lesson, the teachers began with an anticipatory set, including a brief discussion on Britten, as well as talking about how the piece is scored, and what similarities and differences there are between orchestra and band. The students were then told that they would be listening to a portion of this piece, and after listening, they would be asked to write down what they heard. Claire and Emma collected the students' responses.

The second step of the project consisted of Claire and Emma preparing a Google Presentation and using this to help better inform their students about

specific aspects and qualities of the music. Together, they selected six aspects (tempo, melody vs. accompaniment, articulation, mood, dynamics, and timbre) upon which to focus, and after discussing these aspects with their students, a portion of the Britten was played to give their students an aural representation. The teachers encouraged further discussion of these aspects at the conclusion of this part of the teacher research.

The final step of the research was similar to the first in that the students were asked, once again, to write down what they heard (specific to the aforementioned six aspects) after they listening to a portion of the Britten. Following this step, Emma and Claire compared the responses.

The findings indicated that many students in the second study used the definitions focused on during the presentation, but were not extremely specific in writing about them. For example, one student wrote, "I heard tempo," instead of expounding to explain what tempo was utilized. The students were specific in writing about the instruments and incorporated more of the terminology in their comments. Claire and Emma also compared the number of words the students used in the first response, hypothesizing that the students might have more of an idea of what to write about. The findings did not support this hypothesis. However, the findings did indicate that the students used nearly twice the amount of the specific words that were introduced in the second portion of the project.

Suzanne and Thomas: Music Vocabulary. Suzanne and Thomas focused their teacher research project on the increased student understanding of music vocabulary. This initially began as a departmental goal in the school district where Suzanne taught. She attempted to implement this goal prior to the beginning of Thomas's student teaching experience but was unhappy with the results.

Though Suzanne identified the problem, she and Thomas worked collaboratively in the creation and implementation of the project. As the problem was word-based, Thomas was able to provide a variety of information for the related research from other educational methods courses he had taken in college. From these sources, Thomas and Suzanne developed ideas that served to guide the choices made for the methodology. Thomas later shared that he felt the related research piece, while being the most difficult, was helpful in that it provided practical ideas for use in the project.

The implementation consisted of several lessons during which both Suzanne and Thomas collaboratively incorporated multiple techniques and approaches to help their students learn the vocabulary. These lessons included activities such as having students compare and classify terms, writing their own analogies and metaphors, small-group sharing of understanding, and playing games to informally check comprehension. Following these lessons, a second test was given. The results from this second test were compared to the first test given by Suzanne. The average test scores in the three classes rose from 71.2% to 94.5%, 70% to 90.9%, and 63.4% to 83.5%, respectively. The standard deviations decreased from 16.3 to 8 in the first class, and 15.9 to 8.3 in the second.

Findings

After coding and analyzing the data, I found three major themes that emerged in relation to the participants involvement in the collaborative action research project: cooperating teacher qualities, student teacher qualities, and increased collaboration. While I designed, implemented, and analyzed this study as a collective-case study, my observation of the participants as they collaborated in the action research study serves to situate the findings.

Cooperating Teacher Qualities

The cooperating teachers (Claire, Kathy, and Suzanne) showed specific qualities that allowed for them to serve as mentors to their student teachers. These qualities (being welcoming, providing leadership/guidance, giving specific and positive feedback, and showing confidence and trust in their student teacher) paved the way for a better and more collaborative relationship. The cooperating teachers seemed very aware of the importance of specific characteristics and discussed these traits in both their interviews and in casual conversations during my visits. Additionally, the cooperating teachers demonstrated these roles consistently during my observations. The student teachers also recognized the various roles and qualities in their respective cooperating teacher.

The cooperating teachers spoke to the importance of providing a welcoming environment to their student teachers. This included the belief that everything should be shared, such as the physical space in the classroom (including a separate desk for their student teachers), as well as the teaching time with all the students. Additionally, cooperating teachers thought it necessary to be outwardly expressive in their welcoming nature to their student teachers, as is elucidated by Emma in the following quote:

I always felt like she wanted me to be here, and I think she's very appreciative and welcoming of her student teachers. She even said once that she thinks having student teachers makes her a better teacher.

While never once referring to themselves as superiors, all the cooperating teachers felt it was their responsibility to provide leadership and guidance to their student teachers. Further, while all of the cooperating teachers were welcoming to their students and teachers and hoped for a personal relationship, they nonetheless owned the fact that they were in a leadership role. Claire recognized this quality in her relationship with Emma, stating that she "was comfortable steering and setting guidelines for Emma."

Claire, Kathy, and Suzanne understood the inherent importance of positive and immediate feedback for their student teachers. This feedback was, in many ways, what delineated their role as a leader, and suggested that it is possible for a cooperating teacher to give both guidance as well as develop the personal connection that all felt was important to form with their student teachers. Suzanne addressed the importance of the specific quality and kind of feedback necessary for student teachers:

Sometimes you see that they're feeling a little defeated, and think, "Okay, so what do I say or address at this point?" A cooperating teacher needs to be their cushion when they're feeling down. They need to say, "It's okay. Let's try this again." Thomas hasn't had many things that didn't work, but the few times when that did happen we talked through it. When the cooperating teacher and the student teacher can talk through it, that's when the student teacher gets the confidence to try again.

The cooperating teachers agreed on the importance of having confidence in their student teacher, but how a cooperating teacher chooses to instill this confidence depended greatly on the specific student teacher. They agreed that one way to build confidence in the student teacher, as well as establishing trust, is by allowing the student teacher to take control of the classroom. This is a complicated issue in student teaching as many cooperating teachers have different approaches to how soon and in which particular classes the student teacher will have to assume responsibility. However, the cooperating teachers in this study considered it important for the student teacher to be leading classes early in the student teaching experience. Kathy spoke to this approach during her interview:

I think it's important to give [Amelia] some freedom. I think just sitting in the back of the classroom and observing is useless to a certain degree, except maybe in the very beginning. You have to trust. And even if you have a student teacher who you maybe don't get along with as well as I have with Amelia, you still have to give them a feeling of trust so that they feel comfortable in your classroom.

The cooperating teachers assume many qualities in their relationship with their student teachers. Often, these qualities overlap each other, as is demonstrated in building confidence in a student teacher by trusting them to assume teaching responsibilities. These qualities are deemed important by both the cooperating teacher and student teacher and inform the building of the cooperating teacher/ student teacher relationship.

Student Teacher Qualities

The student teachers in this study (Emma, Amelia, and Thomas) understood that they would need to exhibit specific qualities to have a successful and meaningful experience. These qualities (inquisitiveness, taking initiative, showing respect, displaying gratitude, and being prepared) allowed for their respective cooperating teachers to share teaching responsibilities and power in their classroom. Amelia discussed being inquisitive in the following statement:

[I think it's important] to be completely open and ask your cooperating teacher about what they're doing in the classroom and what has been helpful in their job as a teacher. They've had way more experience than we've had and it would be good to know things that they wish they would've known when they began teaching. Don't be afraid to ask questions of them.

The student teachers universally felt that being inquisitive fostered conversations that allowed the cooperating teachers to share with them skills that have been acquired over their years of teaching experience. Embedded in this quality is a level of respect that the student teachers had for their cooperating teachers and for their experience. The cooperating teachers appreciated the student teachers' inquisitiveness, and were especially thankful for the student teachers' ability and willingness to truly listen to their answers and apply their suggestions.

The cooperating teachers appreciated when the student teachers showed initiative. During the focus group interview with the cooperating teachers, Suzanne referred to a student teacher in the past who did not take any initiative, commenting that it impacted the amount of trust she felt in and responsibility she bestowed upon this student teacher. This is notable given how much the student teachers appreciated being trusted by their cooperating teacher and what this trust does for their confidence in their own teaching.

The student teachers spoke often about their cooperating teachers' experience, and how this experience benefited them while student teaching. Amelia would talk with Kathy about ideas she had for lessons and shared that Kathy would "add a lot with her experience." Emma shared a similar thought, stating that when she would talk with Claire about her ideas, Claire knew what was more realistically possible because of "all of her years of teaching experience." Thomas also felt it was important to share his gratitude about working with Suzanne and how much he valued her knowledge. Although this was not his intent, he felt that voicing these feelings helped to "positively reinforce [their] relationship."

Lastly, the student teachers spoke to the importance of being prepared for all aspects of the student teaching experience. They noted that doing so not only allowed for them to be more successful in their teaching, but also more receptive to feedback given to them by their cooperating teacher.

Increased Collaboration

Each of the cooperating teacher/student teacher pairs had a positive relationship prior to the implementation of their respective action research projects. These positive relationships were a result of the aforementioned cooperating teacher and student teacher qualities. Nonetheless, collaborating on their respective action research projects led to a deeper understanding of each other, perhaps because of the increased communication that inevitably came out of this collaborative project. In the following quote, Emma voices that, although she and Claire shared a strong bond from the start of the student teaching experience, this project allowed Claire to see a different aspect of her personality:

I think this project gave me a chance to be a little more creative, and kind of show Claire another side of what I could bring to the table. There was nothing else really like this that I did. This was something totally different than a rehearsal. I think it strengthened the relationship between us, because it's another thing you're working on. It worked well, and we worked well together.

In many cases, the cooperating teachers and student teachers learned something about each other that may not have manifested if not for the particular skills needed to complete this project. For example, Suzanne and Thomas worked on a project in which they compared a pre-test and post-test to measure results. Thomas surprised her with the way he was able to analyze the results. Prior to this project, she did not know that Thomas was "a math guy." Suzanne also shared that "how he approached this project—the kinds of [materials] that were out there, how he decided what activities would be done with the students—that spoke volumes to me [about Thomas's dedication and preparation]."

Additionally, Emma felt that, despite the feelings of respect, value, and trust bestowed upon her by Claire, she was still ultimately teaching in Claire's classroom. And while the teacher research project did indeed take place in Claire's classroom, it was different in that Claire and Emma conceived and implemented this project collaboratively. Kathy echoed this feeling in the following statement: It's interesting, because I feel like we've done most things together already, but it seems like the things we've done for this project have been more of a duel approach. So, we'll be working together a lot on this project, which I think will be really nice. Amelia is starting to take over the full-time teaching responsibilities, but we're trying to tag-team this project so that we're still both involved.

The student teachers were excited about further opportunities to work together and felt that the collaboration on this project felt more equal than it did in previous discussions and activities with their cooperating teachers. This is interesting given that the student teachers did not identify any of their cooperating teachers as especially controlling of their environment prior to the implementation of this project. The cooperating teachers also felt that they began to view their student teachers more collegially during this project.

Claire noted that she and Emma talked more about teaching in general as they brainstormed for this project. Kathy shared that she and Amelia devoted a large amount of time to brainstorming about the project, stating "we talked together about how we're going to do this, and now we're documenting everything together. I think we'll continue to go through the different ideas together."

Discussion

The first guiding question for this study asked what qualities contributed to the development of a meaningful mentoring relationship between the cooperating teacher and the student teacher. Both cooperating teachers and student teachers exhibited specific qualities that allowed for a successful relationship to develop. The cooperating teachers were welcoming of their student teachers and were genuinely interested in their professional growth and development. Abell et al. (1995) discovered similar findings and stated that the mentors in their study "believed it was their responsibility to their individual school system and to the teaching profession to get new teachers off to a good start" (p. 178). It is important that the cooperating teacher shows confidence and trust in the student teacher (if earned), both implicitly and explicitly. Researchers have found that when student teachers felt valued by their cooperating teachers, there is higher likelihood of forming a better relationship, and one that results in a more meaningful experience for the cooperating teachers and student teachers (Schmidt, 1994a, 1994b; Schmidt & Knowles, 1994). Given the importance of the music student teaching experience, it seems reasonable that university personnel responsible for identifying potential cooperating teachers should look for these qualities.

There are few existing studies that identify desirable qualities for the student teacher. Draves (2008b) identified many of the same personal and professional qualities for student teachers that were believed to prove successful for the student teachers in this study (inquisitiveness, taking initiative, showing respect, displaying gratitude, and being prepared). In an effort to make student teachers better equipped for success during the student teaching experience, Draves also stated that "music teacher educators must make this implicit knowledge of effective personal and professional characteristics explicit to preservice teachers" (p. 187). The findings in this study support this statement.

It is necessary to situate this question as it relates to the involvement by the participants in the collaborative action research project. While aforementioned qualities likely existed separately from the involvement in the project, both the participation in the project as well as the collaborative nature enabled these qualities to be more present for both the cooperating teachers and the student teachers.

The second guiding question asked the cooperating teachers to reflect upon in what ways participating in the collaborative action research project impacted their mentoring relationship with their student teachers. As previously noted, this project provided varied and more in-depth means of connecting with and guiding their student teachers. All of the participants noted increased levels of communication as a result of the project. Communication and conversation have been found to be important components of a successful cooperating teacher/student teacher relationship (Liebhaber, 2003; Sanders et al., 2005). Both the cooperating teachers and student teachers remarked that it was necessary to communicate more to complete the multiple layers of their action research study, beginning with the brainstorming necessary to identify the problem, continuing with discussion regarding the methodologies, and culminating with the implementation of the project. The cooperating teachers and student teachers engaged in meaningful discourse as they collaborated to understand and interpret the results.

Both the cooperating teachers and student teachers felt that their relationship became more equal as a result of this project. This was especially notable given that the student teachers all felt as if they were respected, valued, and trusted by their cooperating teachers prior to the implementation of the teacher research project. However, despite already having a positive relationship, the cooperating teachers viewed their student teachers more as colleagues during the course of the action research project. It is possible that this shift happened not only as a result of the teacher research project but also that the implementation of the project occurred during the latter stages of the student teaching experience. The cooperating teachers were comfortable sharing all aspects of the teaching responsibilities, including complete ensemble preparation. Given this understanding, it seems that the cooperating teachers had progressed to the far end of the power sharing continuum, as defined by Draves (2008b), during which the student teaching relationship is defined as a collaborative partnership.

Because of this increased sense of collaboration, and understanding this in the context of Draves's (2008b) power sharing continuum, it might behoove more cooperating teacher/student teacher pairs to participate in a collaborative teacher research project. Draves further defined the continuum as beginning with a student/ teacher relationship and then progressing to a team-teaching relationship before ending with the aforementioned collaborative approach. She also recognized this as closely aligned with Fuller's (1969) stages of teacher concern, and noted that, "as student teachers moved through Fuller's stages, cooperating teachers shared more power with them" (Draves, 2008b, p. 193). The cooperating teachers in this study, especially Claire and Suzanne, who had multiple experiences as a cooperating teacher from which to reference, speculated that this project might be especially beneficial in developing a stronger relationship even with student teachers with whom they have less in common. To this point, Suzanne discussed a particularly difficult relationship she had with a previous student teacher and felt that this project would have provided a common vision. She felt that collaborative participation in this project would have fostered more positive communication between herself and her student teacher, and would have resulted in a more positive student teaching experience.

Implications

The university personnel responsible for placing student teachers need to have a thorough understanding of the cooperating teachers with whom they are working. This knowledge will help to ensure a positive and meaningful experience for both the cooperating teachers and student teachers. It is important that universities work closely with the schools in order to identify potential cooperating teachers. When considering potential cooperating teachers, specific criteria need to be in place to ensure that people are being chosen based on more than their agreement to serve in this capacity. These criteria include, but are not limited to, a cooperating teacher's open and accommodating nature, willingness to share their classroom space and teaching time, and giving consistent and constructive feedback. The experiences of former student teachers as well as the information reported by those responsible for observing the student teachers should be carefully considered in determining whether a specific cooperating teacher should continue to mentor future student teachers. This is important given the influence that the cooperating teacher has on the student teachers, as was indicated by the student teachers in this study.

A thorough understanding of potential cooperating teachers, as well as a similar understanding of the student teachers, will assist university personnel in making a good match between the two parties. The importance of this match has been well documented by researchers (Draves, 2008b; Schmidt, 1994a; Schmidt, 1994b; Schmidt & Knowles, 1994). Knowledge of the specific qualities that each person brings to the experience will be helpful in determining whether a potential connection might be made.

Student teacher qualities that were found to be important and beneficial during the student teaching experience should be fostered throughout various coursework (e.g., introductory music education courses, methods courses, student teaching seminar). Additionally, an understanding of the expectations of the music student teaching experience should be made explicit during the course of the preparatory program. It is important that music teacher educators foster the necessary qualities that have been identified for the music student teacher to find success during the student teaching experience. Many of the qualities were more personal in nature, and it is therefore both possible and understandable that these qualities were not the focus of any specific coursework.

Cooperating teachers and student teachers should communicate and collaborate with one another on a scheduled basis prior to the beginning of the student teaching experience. Draves (2008b) stated that "by accelerating the formation of the relationship, power sharing may be greater over the course of the student teaching experience, result in greater teacher identity formation in the student teacher, and overall be more beneficial to both parties" (p. 213). The cooperating teacher/student teacher pairs in this study appeared to benefit from early communication prior to the official beginning of the student teaching experience.

A teacher research project undertaken by the cooperating teacher and the student teacher provides opportunities for increased collaboration leading to a stronger mentor/mentee relationship. Participating in a collaborative teacher research project might be especially worthwhile for cooperating teachers and student teachers that are not connecting on a personal level in that it may provide a common vision for the pairs that might then lead to increased collaboration and meaningful discourse.

Suggestions for Further Research

While research into mentoring is becoming more prevalent, there is a lack of knowledge concerning ways in which to improve the mentoring experience for new music teachers. Given the findings of the current study, it is reasonable to suggest that a collaborative action research project undertaken by the mentor (more experienced music teacher) and mentee (beginning music teacher) would provide valuable insight. It would be intriguing to compare the findings to the current study and ascertain whether the teacher research project resulted in a similar, highly collaborative relationship. Further, undertaking this project would not be recommended if the student teacher is also required to complete an edTPA during the student teaching experience.

The student teachers in the current study benefited greatly from their cooperating teachers' willingness to approach the classroom from a team-teaching perspective, one that was to the far right on the power sharing continuum (Draves, 2008b, p. 146). Further investigation on the power sharing practices of cooperating teachers and the impact this has on the student teaching experience is warranted.

Music teacher educators must continue to nurture specific qualities that enable their student teachers to be successful as well as find meaningful ways to support the cooperating teachers who play an important role in the development of the new teachers. The teachers in this study appreciated the opportunity to be heard. It is likely that by continuing to listen to these voices that researchers can continue to find ways to improve upon the preparation of our future colleagues.

Endnote

¹The term 'natal male' is widely used to define a person who is assigned male at birth based on external sexual organs. While Kathy and Amelia did not use this term specifically in their action research project, their intention about studying the natal male changing voice, separate from gender, was discussed during our initial conversations. I have included the term here for clarification and recognition of this complex issue.

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