Facilitating Pedagogies of Possibility in Teacher Education: Experiences of Faculty Members in a Self-Study Learning Group

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This collaborative self-study explores how seven members of a Faculty Self-Study Learning Group (FS-SLG) attempt to foster cultures of inquiry with teacher candidates. In so doing, we simultaneously describe a professional learning community of teacher educators engaging in reflective practice via the teaching, learning, and enacting of self-study methodology. Findings from this collaborative self-study highlight how we attempt to translate our own efforts to be more purposeful and reflective into our teacher education practice through modeling, as well as the tensions we felt in promoting a view of teaching as a process of critical inquiry. The discussion focuses on lessons learned and potential ways forward for educators who similarly desire to embrace inquiry-based pedagogies of possibility within the existing landscape of teaching and teacher preparation.

Introduction

An increasing number of teacher educators are drawn to the prospect of using their own work as a site of inquiry (e.g., self-study) to simultaneously advance both teaching and research outcomes (Brubaker, 2012; Hu & Smith, 2011; McAnulty & Cuenca, 2014; McNeil, 2011; Monroe, 2013; Williams, Ritter, & Bullock, 2012). Modeling reflective practice for teacher candidates, and joining with them as learners in unpacking the complexities of teaching, holds the potential to contribute to the professional understandings and practices of all educational stakeholders in the process. Loughran (2005) noted, "the overarching need for teacher educators to pay attention to their own pedagogical reasoning and reflective practice and to create opportunities for their student teachers to access this thinking about, and practice of, teaching" (p. 9). How this access is offered and structured can serve to create cultures of inquiry in teacher education.

The authors of this paper are all practicing teacher educators—at the same university—with a shared interest in the educative value of reflective practice in teacher education. This

shared interest led us to form a Faculty Self-Study Learning Group (FS-SLG), which has been meeting regularly for the last four years. While more is written about the nature and structure of the FS-SLG below, it seems important to stress here that we sought to achieve our goal of fostering cultures of inquiry by coming together as a group to develop critical and collaborative reflective practices via the teaching, learning, and enacting of self-study methodology (Benade, 2015; Ritter et al., 2018). For the purposes of this paper, we use the term cultures of inquiry to refer to the ways in which teacher education practices might be enacted to highlight and promote the contextual nature of teaching; and, subsequently, to advocate the need for teachers to engage in reflective practice.

With this collaborative self-study, we seek to make our thinking and practices as teacher educators public and open to interrogation. Specifically, the following questions framed this inquiry:

1. How do we translate our efforts to be more purposeful and reflective into our teacher education practice?

2. What tensions do we experience in our attempts to foster inquiry as teacher educators?

In grappling with these questions, we believe our work can facilitate what we call "pedagogies of possibility" in teacher education. Pedagogies of possibility arise from the natural tensions of inquiry-based methods that teacher educators may face in themselves and be confronted with by their students.

At the onset, we recognize that one limitation of our approach is that we cannot directly address the extent to which our teacher education practices translate into the development of an inquiry stance in teacher candidates (e.g., Cochran-Smith & Lytle, 2009; Dana, 2016; Jacobs, Yendol-Hoppey, & Dana, 2015; Patrizio, Ballock, & McNary, 2011). Nonetheless, by deliberately attempting to cultivate cultures of inquiry in our department and across our teacher preparation programs through our FS-SLG, we feel better able to position ourselves as "critical friends" (Berry & Russell, 2014, p. 195) and "leaders, decision-makers, collaborators, and activists" (Wolkenhauer & Hooser, 2017, p. 3) in ways that can influence teacher education (Cochran-Smith & Lytle, 1999; Donell & Harper, 2005; Price & Valli, 2005). Additionally, our research can inform the development of existing and burgeoning cultures of inquiry within other teacher preparation programs.

In what follows, we first present a section that details our collective understandings on the contextual nature of teaching and teacher education. We then discuss self-study as a potential means to navigate such complexity, and modeling as a specific tool that can be used to further inquiry amongst teacher candidates. Following these sections, additional information is provided as it relates to the context of the study, including data collection methods and analysis processes. The final two sections of the paper are used to present and then discuss the findings of our two research questions.

Teaching and Teacher Education as Learning Problems

As teacher educators participating in a faculty learning group focused on the teaching, learning, and enacting of self-study methodology, we share the critical belief that education is essentially a learning problem (Cochran-Smith, 2004), as opposed to a technical rational training problem. Berry (2004) observed how preparing teachers is often incorrectly perceived "as little more than the transference of pedagogical tips, tricks and techniques, most of which will be rendered irrelevant when new teachers enter the classroom and begin their real learning about teaching" (p. 1297). By way of contrast, conceptualizing teaching as a learning problem highlights the importance of social interaction in the construction of classroom realities. Because students conjointly experience their learning environments through culturally derived and historically situated lenses (Bruner, 1996; Hatano & Miyake, 1991; Rogoff, 2003; Shweder et al., 1998), it makes little sense to conceive of best teaching practices without thorough consideration of context. Teacher education must provide candidates with tools and practice in navigating the matrix of competing and constantly changing tensions that will comprise their professional milieus (e.g., Grossman, Smagorinsky, & Valencia, 1999; Hammerness, Darling-Hammond, & Bransford, 2005).

In thinking about what it might mean to prepare teachers to navigate such varied learning contexts productively, Cochran-Smith (2004) delineated the following three main ideas in relation to understanding teacher education as a learning problem:

> teacher education occurs in the context of inquiry communities wherein everybody is a learner and a researcher; inquiry is an intellectual and political stance rather than a project or time-bounded activity; and, as part of an inquiry stance, teacher research is a way to generate local knowledge of practice that is contextualized, cultural, and critical. (p. 12)

This framework for understanding teaching points explicitly to the importance of inquiry-based methods, reflective practice, and practitioner research in achieving more conscious modes of professional activity.

Self-Study in Teacher Education as a Genre of Practitioner Research

Further to our understandings of teaching and teacher education as learning problems, we view self-study as potentially allowing for the "critical examination of one's actions and the context of those actions in order to achieve a more conscious mode of professional activity, in contrast to action based on habit, tradition, and impulse" (Samaras, 2002, p. xxiv). Most researchers who utilize self-study in teacher education agree with Berry & Loughran (2005) that:

> underlying issues associated with change and development in teaching about teaching may well go unnoticed and this is one reason why self-study of teacher education practices is important. [It] is an approach for those who choose to critically examine their own beliefs about teacher education through challenging their existing practice in meaningful ways. (p.178)

Self-study is improvement-aimed and "looks for and requires evidence of the reframed thinking and transformed practice" (LaBoskey, 2004a, p. 859). Self-study can be characterized as a particular genre of practitioner research for teacher educators.

For these reasons, as part of this collaborative self-study, we operated from the perspective that engaging in self-study "is essentially being thoughtful-in a Deweyan sense-about one's work. It is reflective inquiry, similar to that widely advocated for teachers" (Cole & Knowles, 1998, p. 42). Engaging in self-study represents a means and ends tool for promoting reflective thinking (Dinkelman, 2003), and subsequently can foster a stance of reflective inquiry in teacher candidates. In stark contrast to imposing ideas on students, the purpose of promoting reflective thinking and inquiry is to prompt students "to more deeply investigate and more clearly articulate their own evolving views…to help them understand that what they understand today is not necessarily what they will understand tomorrow" (Fecho, 2004, p. 126).

Modeling in Teacher Education

Recent scholarship suggests "the way teacher educators model the promotion of certain views of learning could be a more important factor in shaping teacher behavior than the content of the messages they are sending, despite inherent differences between the university and school contexts" (Lunenberg, Korthagen, & Swennen, 2007, p. 588). Put another way, how one teaches is an essential part of what one teaches (Grossman, 2005; Loughran & Russell, 1997). Importantly, however, modeling is not intended for preservice teachers to simply mimic what they experience as part of their teacher education programs in their future instruction as teachers. Instead, modeling rests on a perspective of learning to teach that stresses preservice teachers critically engaging with and reflecting upon, the process of being taught—both in the past and, equally important, in the present–as students of teaching.

Describing essential components of the process of being taught , Lunenberg et al. (2007) described four types of modeling that are or could be used in teacher preparation, including implicit modeling, explicit modeling, explicit modeling and facilitating the translation to the student teachers' own practices, and connecting exemplary behavior with theory. Except for the lead author on this manuscript, no other members of the FS-SLG were familiar with these types of modeling prior to our collaborative self-study. Still, since we ultimately used these modeling types to think about our attempts to engage our teacher candidates in reflective practice, each is elaborated on, as appropriate, in the findings section of this article.

Context of the Study

This study took place at Duquense University, a private second-tier research university in the Catholic Spiritan tradition, located in Pittsburgh, Pennsylvania. With a combined undergraduate and graduate enrollment of almost ten thousand students, the university is comprised of nine schools of study and offers 80 undergraduate degree programs, 90 master's, doctoral and professional programs, and more than 20 online programs. The university claims to embrace a teacher-scholar model for its faculty, which can seem nebulous because it demands excellence in teaching at the same time as it places great value on research productivity.

The idea behind our FS-SLG was for willing faculty members to come together every three weeks or so under the guidance of an experienced self-study practitioner (Jason Ritter, also a faculty member in the department) to learn about and to purposefully incorporate self-study

into their practice. This represents one approach to navigating the demands of being a teacher-scholar. The experiences of the group over the last four years have begun to be documented and reported in a variety of academic outlets (for example, see Ritter, 2017; Ritter et al., 2018). For this manuscript, several points are reiterated: namely, that the faculty participants in the group joined of their own volition, were mostly pre-tenure, and came from a variety of academic disciplines within teacher education as well as from a variety of research traditions (See Table 1).

Table 1

FS-SLG Participant Demographics

Name	Years of Teaching and Teacher Education Experience	Birth Assigned Sex	Participant Identified Racial/Ethnic/ National Affinity	Professional Background & Interests
Jason	17	Male	White, USA	Social Studies Education, Teacher Education
Rachel	25	Female	African, Kenyan	Mathematics Education, Teacher Education
Christie	10	Female	White, USA	English as a Foreign or Second Language Education, TESOL Teacher Education
Sandra	20	Female	Latina/Puerto Rican	Literacy Education, Latina/o Education, Diversity in Teacher Education
Xia	25	Female	Asian, Chinese	TESOL Education, Immigrant Studies, Language Teacher Education
Christoper	18	Male	White, USA	Early Childhood Education, Urban Education
Laura	18	Female	Mixed Race, USA	Sociolinguistics, TESOL Teacher Education, Teacher Education
Carla	19	Female	White, USA	Literacy Education, Teacher Education
Julia	25	Female	African American	Early Childhood Education, Family Engagement, and Culturally Relevant Environments

Such wide variation across the group served to create a rich diversity of perspectives and exciting opportunities for collaborative inquiry. Perhaps owing to this, group membership and participation have remained strong throughout the last four years, with eight or more faculty (e.g., more than half of the department) in attendance at most of our meetings.

Data Collection

Since the inception of the FS-SLG, artifacts have regularly been created for individual and collaborative self-study projects undertaken by members of the group. The data for this manuscript, however, relied most heavily on two sets of interviews seeking to document the intersection between our experiences as teacher educators and participants in the FS-SLG. Qualitative interviewing was chosen as a data collection method both to capture the extemporaneous thinking of members of the FS-SLG as well as "to gain in-depth knowledge…about particular phenomena, experiences, or sets of experiences" (deMarrais, 2004, p. 52). Both interventions were spearheaded by the facilitator of the group and designed to serve as checkpoints for understanding self-study methodology as well as methods for ongoing data collection around our collective experiences fostering cultures of inquiry with our teacher candidates through reflective teacher education practices.

The first interview (see Appendix A) took place two years into our work together during the Summer of 2016. The group facilitator and a research assistant developed the questions for the interview. All seven participants were contacted by email to arrange a time to be interviewed at a location of their choice. The interviews were conducted by a research assistant and lasted for about one hour per interview. Each group member was interviewed individually by the assistant, and the interviews were recorded using a digital recording device and then transcribed by the research assistant. After transcription was completed, they were publicly made available to all members to check for accuracy and completeness. Early in the Spring of 2018, the same seven group members again agreed to be interviewed to better target how we had attempted to use what was learned or discussed in our self-study group to foster cultures of inquiry with our teacher candidates. See Appendix B for a copy of the interview guide. The same procedures conducted for interview one were followed for interview two, resulting in more than 100 single-spaced pages of data between the two sets of transcripts.

Collaborative Data Analysis and Interpretation

After each group member agreed to the accuracy and completeness of the interview transcripts, the first three authors on this manuscript (the facilitator of the group, Jason; a member of the group, Rachel; and a research assistant, Christie) took the lead on data analysis. The collaborative dynamic to our self-study was notable for its potential in increasing social support, fostering a culture of reflection that results in higher-level discourse and critique, and helping researchers avoid solipsism and increase the chances of transferable knowledge being created (Louie, Drevdahl, Purdy, & Stackman, 2003). To get the analysis process started, we individually applied familiar qualitative procedures like inductive content analysis through coding and the constant comparison method (Patton, 2002) to our data, and then met collaboratively to debrief and discuss the results. Since the interviews were a form of narrative research, after our discussions from the first round of analysis, we decided to re-analyze the contents of the transcripts, first individually and then collaboratively, according to the categorical content perspective for the analysis of narrative data as described by Lieblich, Tuval-Mashiach, and Zilber (1998).

This approach called for us to begin by selecting subtext for each research question by isolating and then grouping together relevant passages from the data. Next, we defined content categories by generating what we believed to be appropriate and representative themes for similarly grouped passages of data. This process led us to rethink some of our original codes as the sharing of perspectives led us to see compelling similarities and differences in some of the narratives. Finally, the last step of our collaborative analysis process required us to draw conclusions based on the results of how we coded and grouped the narrative excerpts. We effectively used "the contents collected in each category…descriptively to formulate a picture of the content universe" (Lieblich et al., 1998, p. 114). This was accomplished by selecting passages to present from the overall sample that highlighted each theme and then offering our critique regarding their contents. Our findings were also shared with all members of the group, to, again, ensure accuracy and seek out alternative interpretations.

Findings

Collaborative self-study provided us with an appropriate process to consider how members of our FS-SLG attempt to foster cultures of inquiry with our teacher candidates through

various forms of modeling. The findings serve as the basis for reconsidering our developing teacher educator pedagogies, with an eye toward adjustments to improve the learning and transferability of understandings and skills from our university-based context to our teacher candidates' future classrooms. A more thorough presentation of our research findings immediately follows, organized according to the two research questions that drove our inquiry.

Translating Our Efforts to be More Purposeful and Reflective Into Our Practice

The teacher educators in our FS-SLG approached fostering cultures of inquiry with their teacher candidates both via their daily practice as well as through specific assignments and projects complimentarily situated within the general conduct of the course. This section of the manuscript categorizes our attempts to accomplish these ends—as they surfaced in our interview data—in three ways derived from our conceptual framework: the teacher educator engaging in implicit modeling; the teacher educator engaging in explicit modeling; and the teacher educator finding ways to connect exemplary behavior with theory.

Cultivating Inquiry via Implicit Modeling

Implicit modeling occurs when teacher educators purposefully do certain things in front of teacher candidates for specific reasons, but neglect to draw attention to their actions or decisions. Because of the lack of explicitness, it is possible that the implicit nature of this kind of modeling may leave candidates' learning more to chance than other overt forms of modeling. Still, there is evidence that this type of modeling is the most prevalent in teacher education contexts (see, for example, Lunenberg, Korthagen, & Swennen, 2007; Ritter, 2012). The findings from our collaborative self-study reinforce this evidence, indicating that we most consistently engage in implicit modeling when it comes to how we approach our content, as well as the behaviors we exhibit in its presentation. Although we frequently make such choices consciously as teacher educators, we found that it was not always the case that we explained our thinking and decision making to our students.

One clear example of engaging in implicit modeling was provided in the interview with Christopher. While claiming that he often exhibits pedagogical behaviors, he hopes teacher candidates will consider implementing in their own practice one day, he also acknowledged:

> I don't know that I explicitly say to them you should do as I do. But I guess I try to leave a lot of space for them to make inferences about my what I am doing and why. I will model [certain methods] and hope that the students will be like, "Wow! I really like the way this worked out."

In this example, by not explicitly calling attention to what he is doing and why, Christopher seems to be taking a calculated risk that his teacher candidates will connect the dots for themselves between specific methods and their potential outcomes.

Another example of implicit modeling was provided by Julia in her interview when she described how she prepares her students for the inquiry-based teaching and learning that she embraces in her course:

> We do a lot of talking upfront in regards to here's research about [the inquiry process]. Here's some articles you can read about the inquiry method. This is what the process we are going to be working through. So we do a lot of talking about the process in the beginning so when they're ready to do the work they feel more comfortable.

Although establishing clear expectations and understandings around the process of learning to be utilized in a course is a useful exercise, the question becomes whether or not the teacher candidates recognized clearly enough its utility to one day replicate, as appropriate, in their own teaching practice.

Both of these examples highlight particular challenges for teacher educators who are interested in fostering cultures of inquiry with their teacher candidates through implicit modeling. One issue is whether the teacher candidates are actually able to recognize the nuanced pedagogical thinking and decision-making displayed by the teacher educator, and how it is rooted in the contextual nature of teaching. An additional issue involves the extent to which teacher candidates understand that teacher educator modeling is not meant to be copied or a means to indoctrinate, but rather as a way to encourage critically reflecting on what they value and the messages they want to send through their instruction. As a result of our work together in the FS-SLG, we came to the realization that teacher candidate learning would likely be enhanced if we were both more explicit about our work, as well as if we more coherently delivered the same kinds of messages across the courses in our teacher preparation programs. Simply put, our work as teacher educators interested in fostering cultures of inquiry is too often unnecessarily

limited when we find ourselves essentially acting as solo actors within larger educational programs.

Cultivating Inquiry via Explicit Modeling

In addition to implicit modeling, some teacher educators try to make it a point to explicitly model their thinking or practices, sometimes even facilitating the translation to the student teachers' own practices. This is usually accomplished through thinking aloud in the moment, but it can also take place before or after the teaching episodes if teacher educators write reflective journals and share them with students (Loughran 1996). One clear example of explicit modeling from our FS-SLG was provided by Laura in her interview when she noted:

> Even activities in class, I try to tell them upfront that there's a purpose to it. Some have more clear purposes than others, but every assignment, they know why they're doing it. They may not buy the explanation, but at least I tell them. It shows that I have a reason. And I don't just slap together a bunch of things and say this makes a class. There's a decision-making process that is involved.

The difference in this example compared to those included in the earlier section consists of the fact that Laura explicitly draws attention to what she considers important in her assignments and course sessions, and consequently invites her teacher candidates to think about the reasoning behind her choices.

This same feature appears to characterize Rachel's use of differentiated instruction in her mathematics methods course, described below:

> I made [my teacher candidates] realize that I was modeling what differentiating instruction might look like, and there were instances where I would talk about the fact that, "Ok, now as a way of differentiating instruction, we are going to be doing our lesson plan presentations, and what I want you to do is, as they are presenting their lessons, this other group, for example, is going to be giving part of your mini-study." By the time the course ended the students were realizing that I was studying teaching and I would talk about the fact that when you go out to your own classrooms, try to analyze the way you are differentiating instruction and think about what you're missing out and what you need to do just as I am doing myself. And so in this particular way, I would say that I was

trying to model becoming a reflective teacher and thinking about what you're doing and why.

In both of these examples, the teacher educators from our FS-SLG describe instances in their teaching when they exhibited certain pedagogical methods or behaviors and purposefully called teacher candidates' attention to them as a site of inquiry and source for learning about teaching. It stands to reason that the explicit ways in which the teacher educators in these examples call attention to their reflective practice may better focus teacher candidate learning than implicit modeling attempts. Still, to the critical point raised in the earlier section, important questions remain about the regularity and consistency of such messages across programs of study to impact teacher candidate understandings.

Cultivating Inquiry via Connecting Exemplary Behavior with Theory

Another way in which teacher educators might foster cultures of inquiry in their practice is through structuring course activities and assignments in ways that connect exemplary behavior with theory. It is possible that these connections could be implicit or explicit; however, our experiences suggest that being explicit is usually the surer way to know that teacher candidates are at least aware of the connections. One example of this kind of modeling was provided by Xia in her interview when she described an assignment in her ESL course. She noted how:

> I let my students come to campus with the group members, and I interview 4-5 people about their understanding of culture. And then, after the interview, they work on a creative project using graphic organizers to present in class what are their emerging themes from their interview data. So, from an inquiry of culture, kind of practice, I let my students come out of their comfort zones…their particular friendship zones or academic zones like in my classroom…to see what do police officers, janitors, librarians think about culture. I give them a 5-minute jotting down time, asking what have you learned from this particular ethnography interview in your words, in an inquiry of culture? How did they feel when they reached out to some strangers about their understanding of culture? And, also, they give me the academic outcome, meaning how they changed their mind about culture from their interview data, what learned as a result of their collaborations with each other…because I developed the groups in a very tricky way.

This example demonstrates using an assignment to connect exemplary behavior with theory in so far as the teacher candidates are the ones connecting their actions and developing understandings within the nexus of language learning and culture. This method of fostering inquiry is different from implicit modeling (where there is an assumption that teacher candidates learn from how teacher educators teach) and explicit modeling (where there is an assumption that teacher candidates learn by getting access to how teacher educators are thinking about their teaching).

It should be noted that the purpose here is not necessarily to privilege any one of these approaches. Instead, the purpose is to document how members of one department of a school of education attempt to use modeling to foster cultures of inquiry with our teacher candidates and to start conversations around the potential benefits of harnessing each type of modeling to advance understandings of inquiry, both as a method of discovery and as a way of being (e.g., Ciampa & Gallagher, 2015; Kock, Taconis, Bolhuis, & Gravemeijer, 2015; Krutka, et al., 2014; Miranda & Damico, 2015; Wolkenhauer, Boynton, & Dana, 2011).

Our experiences, to date, suggest that demonstrating the importance of inquiry as a method of discovery is likely possible to achieve through individual attempts at modeling, whereas, demonstrating the importance of inquiry as a way of being seems more contingent on explicitly drawing attention to its importance and connecting with other teacher educators across the programs in question to send collective messages. Of course, none of this is easy. In an effort to identify some of the challenges that may need to be overcome, the next section of this manuscript details some of the tensions that surfaced for us as we sought to promote inquiry with our teacher candidates.

Tensions Experienced in Promoting Inquiry as Teacher Educators

Despite our collective feelings on the importance of inquiry in educational settings, a number of competing factors can serve to create tensions in the learning environment that constrain our attempts to practice what we preach or to fully advocate for our teacher candidates to adopt inquiry-based methods for themselves. Below we characterize the tensions that can limit our efforts to promote inquiry in our work as internal or external based on the perceived locus of the dissonance; however, we recognize that this divide is not real in the sense that our internal views and understandings are shaped by our external context, and vice-versa.

Internal Tensions: Conflicting Expectations and Uncomfortable Ambiguity

One factor that sometimes gnawed at our willingness to foster cultures of inquiry with our teacher candidates is connected with the persistent notion of a teacher as the expert who transmits his or her knowledge to others. Despite our professed allegiances to constructivist and interpretive pedagogical approaches, and to modeling such approaches in our work, we discovered that it still can be hard to shed the unproductive feelings that accompany deeply ingrained understandings of what it means to teach or to be a teacher. Julia addressed this point in her interview:

> In the beginning, it was hard for me because of that model of, you are supposed to be the person sharing information, you're supposed to know a body of knowledge…why aren't you sharing the information with us and guiding us? So what I did to help myself and them feel like it's not just them teaching themselves and informing themselves, I would provide supports for them once I found out what their areas of interest are. I would have guests come in, and we do snippets of info sharing, or I would find articles that would support their area or topic, so they feel like, ok she is contributing to this learning process…so they don't feel like I could just do that at home.

Here it is clear that Julia, at least initially, was struggling with taking on a role that consisted mostly of being a guide to her students' learning. This is important to recognize because our teacher candidates will likely experience a similar tension and feelings when utilizing inquiry-based methods with their own students.

Authentically engaging in inquiry requires a certain level of comfort with ambiguity, which further complicates the need that teachers and teacher educators often feel to demonstrate their expertise overtly. Yet it is also true that too much ambiguity is not useful for teachers or students. Teachers may experience a virtual paralysis in contemplating their next pedagogical moves, while students may remain confused or headed in the wrong direction with their thinking. As Laura noted after one of her inquiry-based projects, "the first time I gave that assignment, I wasn't expecting as many questions as I got. Then I realized I needed to set up the assignment a little more in a more structured way." Understanding teaching and teacher education as learning problems, more so than focusing on finding the correct response in the face of ambiguity, seems to hinge on the degree to which pedagogical thinking and decision-making are made public, as well as the extent to which students are asked to contemplate those decisions or actions.

As one last consideration, fostering cultures of inquiry and engaging in inquiry-based teaching methods requires being open and honest. While essential in any kind of an authentic endeavor, this can lead to certain uncomfortable feelings or negative realizations. As an example, Carla characterized inquiry as a:

> place to say who are you as a teacher and how does that influence what you do and why you do it…they have to figure out who they are, how their voice works, how their gestures work, how they value or maybe sometimes devalue students and communities.

While no one wants to dwell on the various ways in which they might devalue students and communities, in this example, it still represents an incredibly important piece of the puzzle for conscientious teachers who view teaching as a learning problem to be navigated. Openly and honestly engaging in inquiry—and/or effectively modeling those thoughts and actions—can have a profound influence in this process.

External tensions: Time, Competency-Based Demands, and Scripted Curriculums

In addition to the internal tensions noted above, our interview data also revealed certain external factors that can constrain our efforts in fostering cultures of inquiry. The most often cited constraint involved time. For instance, Rachel wondered aloud, "how do I create time for the teacher candidates to really engage in this reflection and inquiry that can make them good practitioners and share that work with such a crowded curriculum?" Laura similarly noted the "constraints of finding space in an already full curriculum," while Julia referenced "time constraints" alongside of other "demands on my plate and all the other assignments the teacher candidates need to do for a course." Julia's statement suggests that time is not just an issue for the teacher educator and their quest to cover all the required competencies for their courses, but also a potential issue for the teacher candidates. Interestingly, during our collaborative analysis process, we discussed the distinct possibility that it was the issue of feeling like there is never enough time that led so many members of the FS-SLG to engage mostly in individual attempts at modeling in their own teaching and courses. Obviously, this issue parallels what our teacher candidate will experience when they accept positions as teachers in the schools, and again, it would appear that some respite might only be found via consistent expectations that students will engage in inquiry across their respective programs of study.

Another possible external constraint to fostering cultures of inquiry in both teacher education and teaching relates to the norms and practices of some public schools. Sandra described the issue in her interview:

> I want them to be reflective practitioners, and I want them to reflect after every lesson for instance, but I think these are really tough times and so much is being asked of the teacher candidates. I show them the scripted programs, we look at scripted teacher curriculums, that say...what the teacher says is in blue ink and what the students might respond is in another color. And they're like 'What!? They're telling us what to say? And I'm like yes, that's the reality right now with some programs particularly if the school is under Title I or they're trying to improve reading scores. And they have mixed feelings about it. And I admit to them that when I was a novice teacher, I appreciated this because I needed that structure. I could use the teacher's guide as a benchmark or launching point. But, at times I also found it constraining and insulting since context matters and I wanted to do things differently. So, I understand that we (the faculty) are telling them to be creative, to break the mold, and yet they may feel stifled in their field experiences (and later in student teaching placements). So we talk about those tensions in class, and then I talk about the process of creative insubordination. Let's find some ways of doing creative insubordination.

Although Sandra offers a way forward for her teacher candidates through intentional conversations around being "creatively insubordinate" with how school or district-adopted curriculum programs are enacted, the fact that inquiry is viewed as extraneous in relation to certain curriculum materials is problematic. In these settings, teachers must be convinced of its value in spite of the fact that their working environment sends contrary messages.

Connected to this is the issue of how students perceive and respond to the curriculum. Laura noted how "some students who like the freedom can enjoy [inquiry], but some don't… The process is a little harder because it asks them to notice things instead of me telling the answer." Julia also noted how sometimes her students "look to me as the instructor and want to know if they are on the right track…So they worry about if the direction they find themselves in is okay with me." Just as the notion of the teacher as expert seems deeply ingrained in our collective consciences, students also often quickly learn to play—and sometimes are even rewarded for embodying—the role of passive recipients. The tensions outlined in this section,

unfortunately, point to how reflective inquiry can too easily be pushed to the margins of educational settings in favor of mechanistic, and ultimately more superficial, forms of learning. Still, this collaborative self-study offers some insight into how teacher education can work toward creating cultures of inquiry and supporting the development of an inquiry stance with teacher candidates. It also provides some insight into how to achieve these aims in such a way as to potentially serve practicing teachers in their classroom contexts.

Discussion and Conclusion

We recognize that self-study, as a research methodology, poses some limitations in the area of generalizability. Our FS-SLG group sought to design and conduct research that would collectively engage us in discovering and interpreting professional practices within our learning community. In this way, while not generalizable in terms of traditional research paradigms, we believe this study fulfilled its potential "to generate local, situated, provisional knowledge of teaching," and that it can effectively "trigger further deliberations, explorations, and change by other educators in their contexts" (LaBoskey, 2004b, p. 1170). Our inquiry rationale and processes may serve as an adaptable framework for other similar learning communities.

As such, this study set out to explore how members of our FS-SLG translate our desires to be more purposeful and reflective into our teacher education practices, as well as the tensions we experience as part of that process. One aspect of the group, not to be overlooked, concerns the simple fact that we all felt it was important to 'walk our talk' in accomplishing these goals. In other words, we did not view it as acceptable to tell our students to be more reflective or to critically inquire into their practices without doing the same for ourselves. This imperative manifests itself in our practice in three ways (e.g., implicit modeling, explicit modeling, and connecting exemplary behavior with theory), each designed to advance understandings of inquiry as a method of discovery or as a way of being.

Still, our efforts in fostering cultures of inquiry and the development of an inquiry stance with our teacher candidates were not seamless. We felt internal tensions related to our roles as teacher educators and willingness to show vulnerability. We also felt external tensions related to a perceived lack of time, a bloated curriculum, the norms and practices of some public schools, and our own teacher candidates' expectations of the teacher education program. Many of these tensions parallel those experienced by classroom teachers interested in inquiry-based methods.

This stands to reason because both settings have, to varying extents, succumbed to outside pressures demanding heightened scrutiny and accountability through a more standardized, test-led 'science' of education, relying primarily on quantitative methods of assessment and research (Baez & Boyles, 2009). Whereas teachers and teacher educators have always been accountable to themselves, their colleagues, their students, and the community, the disconcerting shift now is toward them being primarily accountable to external bodies.

With no discernible panacea to reverse this trend, it seems fair to ask if promoting inquiry is worth the trouble given the existing landscape of teaching and teacher preparation. In response, we agree with Wolkenhauer & Hooser (2017) that "practitioner inquiry has the potential for developing teacher candidates as educators who critique and generate knowledge for student learning and professional growth" (p. 2). Recognizing this as a vital objective for the field of education, we choose to end this manuscript by sharing some of the lessons we learned about fostering inquiry and engaging in practitioner research in our teacher education context via our FS-SLG that we believe are transferrable and relevant to the classroom context. These lessons include the importance of critical friends, the fact that structure matters, and the role of diversity in reframing perspective.

Critical friends are essential in providing support for and critical feedback to the inquiry process, whether that be through how teachers establish tasks, run their classrooms, or engage students in active methods of learning. In this way, critical friends can also inform the structures teachers might choose for their teaching and learning. Structure matters more than ever in the standardized world of today's classrooms where teachers and students are accountable for demonstrating their effectiveness in relation to a dizzying number of criteria monitored by outside agencies. Time is always of the essence, and learning tasks must work toward some definitive objective. Finally, diversity ought to be viewed as an asset in reframing perspective. Inviting others, fellow teachers and students alike, into the inquiry process enriches understanding. Each of these lessons learned seems inextricably linked to one another.

While we can always hope that teachers (and teacher educators) interested in enacting pedagogies of possibility with their students will seek out such conditions for themselves, this research points to the importance of *developing inquiry-based professional learning communities in educational contexts as a necessary and ongoing feature of professional practice.* Participation in these kinds of learning communities, coupled with the resulting insight gleaned

through collaborative inquiry, represents a potentially powerful and data-driven way to respond to the current—sometimes stifling—climate of schooling.

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Appendix A
First Interview Guide

- Could you briefly describe what led you to becoming a professor of education?
- How did your beliefs and values factor into the decision to become a professor of education?
- When you were in graduate school as a doctoral student, what were your expectations of doing research and how were you trained to do so?
- Could you tell me about some of your research interests?
- What methods or approaches do you usually use to explore your research questions?
- What led you to become interested in joining the DILE self-study group?
- What did you hope to get out of the self-study group? What were your expectations?
- Now that you have participated in the group for some time, could you tell me what self-study means to you?
- One methodological consideration for self-study is that it should be 'self-initiated' and 'self-focused.' How does this relate to your notion of what self-study is?
- Another methodological consideration for self-study is that it should be interactive and/or collaborative. Could you describe what this might look like and why it might be important?
- Self-study does not have a prescribed set of methods, but rather incorporates a variety of methods to answer a research question. How does this compare to other methodologies you have used?
- An important part of self-study methodology is making the work public. Could you provide some examples of how you think this aspect of self-study might be fulfilled?
- How you have started to use self-study in your own work as a teacher educator and researcher?
- What, if anything, has been useful about the group in terms of developing your understanding of self-study methodology?
- What, if anything, has been useful about the group in terms of your development as a teacher educator and researcher?
- Could you describe some ways the group could have contributed more to your development as a teacher educator and/or researcher?
- Is there anything you would like to add to the interview?

Appendix B
Second Interview Guide

- What does a culture of inquiry mean to you?
- Could you please explain some ways in which you have attempted to foster a culture of inquiry with your students?
- As part of your efforts to foster a culture of inquiry, have you ever engaged in implicit modeling of any kind with your students? If so, how
- As part of your efforts to foster a culture of inquiry, have you ever engaged in explicit modeling of any kind with your students? If so, how
- As part of your efforts to foster a culture of inquiry, have you have ever engaged your students in practitioner research? If so, how?
- When you attempt to build a culture of inquiry with your students, what are your primary concerns or considerations?
- How do you think your students have perceived of your attempts to foster a culture of inquiry?
- What was it that made you want to foster a culture of inquiry with your students in the first place? How do you think it benefits your students both as preservice teachers and as practicing teachers?
- Do you think practitioner research is useful for practicing teachers at all levels of the school system? Do you think it is practical?
- Is there anything else that you would like to add?