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Roles beyond Instruction: Facilitating the Development of Pre-service Teachers

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Abstract

Identifying a Signature Pedagogy that ensures high-quality teacher preparation is essential to the field of teacher education, as inconsistencies across programs throughout our country threaten our profession. Drawing on a comprehensive study of the professions, Lee Shulman (2005) provides a lens from which to identify Signature Pedagogy and the underlying experiences that support it, as pedagogies of uncertainty, engagement, and formation. As a teacher-educator, this action research study examines my efforts in understanding how I can use my knowledge of Signature Pedagogy to design, implement and study practices that facilitate pre-service teachers' conceptualization of the teacher's role beyond instruction. Using Shulman's lens, I identify specific pedagogical experiences that lead to developing this conceptualization, and explore the critical role of the teacher educator in ensuring the effectiveness of these experiences.

Introduction/Background

Just as the patterns viewed inside a kaleidoscope change when it is turned, the image of quality teaching changes with shifts in individuals, contexts, and ideologies (Wang, Lin, Spalding, Klecka, & Odell, 2011). Having mentored several novice teachers in my years as an elementary school educator, I experienced inconsistencies in university preparation programs - visible through their variable skill-levels. Most often, the frustrated novice would assess that their college program failed them in providing adequate preparation for the realities of the classroom. Awestruck and overwhelmed, they necessitated a mentor to closely support them as they developed the skills to rise to the many unanticipated demands of the profession. Upon leaving the classroom to pursue a doctorate, I was torn by a love for my young students, as well as the novice teachers whose growth I had facilitated and supported throughout the years. As such, it became crucial to me as an educator and researcher to better comprehend why and how the quality of pre-service teacher preparation programs varies, as well as what must be done to improve this challenge in order to prepare

teachers who will thrive in educating our children despite a continually changing context.

Currently a university supervisor, I too am challenged with the responsibility of preparing teachers. Like many teacher educators, I wonder, "How can I be certain that I am providing my pre-service teachers with meaningful experiences to develop the myriad of skills necessary to be an effective educator?" Within the medical profession for example, doctors in training take part in clinical rounds. According to Lee Shulman (2005), these rounds involve a participating team representative of a variety of backgrounds and experiences. As the team visits patients, they discuss challenges, diagnosis, and grapple through critical tasks together. Ultimately, clinical rounds as a pedagogy, in combination with other aspects of a doctor's pedagogy, facilitates individual development towards "thinking and acting" like a doctor (Shulman, 2005, p.3). The clinical rounds represent a routine in medicine that has become a shared core practice across contexts.

Teacher education, however, remains a profession without an established set of shared core practices

that generate high-quality professional learning. Across the nation, teacher preparation programs vary greatly in their “scope and structure” (Hansen, 2008). These inconsistencies in program standards across the country threaten our profession, as they produce educators varying in levels of ability and skill development. Defining a shared research-based *signature pedagogy* that could be used within and across partnerships would promote uniformity, ensuring that beginning teachers, no matter where they are prepared, are exposed to practices that research indicates are beneficial (Shulman, 2005). These signature pedagogies would require on-going study in order to respond to the contextual shifts that continually challenge our profession. According to Shulman (2005, p.5):

Even though they [Signature Pedagogy] seem remarkably stable at any one point in time, they are always subject to change as conditions in the practice of the profession itself and in the institutions that provide professional service or care undergo larger societal change.

Defining Signature Pedagogy

As such, for the purposes of this study I define a *signature pedagogy of teaching* as a set of specific educational practices and related experiences designed to develop the cognitive, practical, and moral behavior that is characteristic of an effective teacher. Shulman (2005) asserts that signature pedagogies are characterized by uncertainty, engagement, and formation. Pedagogies of uncertainty help pre-service teachers comprehend that teaching requires decision-making and acting under complex conditions of ambiguity. The development of pedagogies of uncertainty can be supported by engaging pre-service teachers in interactions that “socialize them to the conditions of practice, making decisions and acting under conditions of uncertainty, as supported only by conversations and exchange” (Shulman, 2005, p.13). Authentic experiences emerging from the literature as potentially capable of offering pre-service teachers the opportunity to work within uncertain contexts include collaborative participation in conference nights, making parent phone calls, and

engaging in inquiry where pre-service teachers grapple through decision-making under the pressures of new experiences.

Pedagogies of engagement acknowledge that learning about teaching requires learning through practice, as aided by collaboration and professional discourse with and between students, peers, and other educators. In pedagogies of engagement, pre-service teachers may act as active members of Professional Learning Communities, School Advisory Council and Response to Intervention meetings, observing with intent and accountably; participating in professional development presentations; and collaborative lesson-planning with pre and post conferencing sessions.

Finally, pre-service teachers must learn routinization of analysis and habits of the mind that shape their identity, character dispositions and values (Shulman, 2005). These routines and habits are referred to as pedagogies of formation. Experiences that aid in this formation may include participation in an open house; team and grade level planning; an analysis of how strategies learned at the university look when modeled by a collaborating teacher; or reflection through drawings, journaling, or recording, in order to mold professional dispositions.

As supported by this study, it is crucial to note that one independent experience used in teacher preparation may, and often does, synthesize the characteristics and objectives of more than one of the pedagogies [engagement, uncertainty and formation]. For instance, a new pre-service teacher may plan collaboratively with a grade-level team of experienced teachers. On this specific occasion, the pre-service teacher may experience pedagogies of uncertainty as they are led to contribute and make decisions without fully understanding the developmental level of students; pedagogies of engagement as they accountably participate in a professional discussion with educators; and pedagogies of formation as the process of planning begins to develop habits that aid in the conceptualization of their identity as it relates to the responsibilities of an educator.

Characteristics of Signature

Pedagogy

As a result of changing contexts, I assert that pedagogical practices must be developmental, adaptable and rooted in reflective practices that capitalize on teachers as life-long learners and adaptive experts (Shulman, 2005). According to Shulman (2005), signature pedagogical practices developmentally prepare professionals within their chosen profession to “act, perform, and practice, whether they have enough information or not” (p.3). Just as in medicine, teaching candidates’ performance as a professional requires that teacher educators intentionally implement experiences that aid in the development of pedagogies of uncertainty, engagement and formation into their preparation practices (Shulman, 2005). Thus, teaching candidates are supported to make decisions and act under the *uncertain* conditions of teaching, accountably *engage* in professional discourse, and participate in routinization of analysis that aids in the *formation* of their professional dispositions, identity and habits of the mind.

Consistent with Shulman’s (2005) call for providing developmentally sensitive experiences which allow future teachers to act, perform and practice, the triad consisting of a university supervisor and collaborating teacher, work together to facilitate pre-service teachers’ experiences within the three types of pedagogy throughout their work in partnership schools, varying in intensity as the pre-service teacher’s level of development increases (Borko & Mayfield, 1995). These opportunities for pre-service teachers to take ownership of their continuous growth and develop habits of professionalism, prepare future teachers who are intuitively capable of engagement for professional learning within uncertain concepts, forming the identity of a professional educator.

Literature Review

In search of practices used to prepare pre-service teachers in partnership-based teacher preparation programs, my colleagues and I engaged in an

exhaustive literature review and analysis of each article published in the journal *School-University Partnerships* from 2007 to 2010 (Franco, Fernandez, Gelfuso, Hagge, Powell, Ward, Dennis, Parker, & Yendol-Hoppey, 2013). Our mission was to identify best practices that would lead us to define a signature pedagogy for pre-service teacher preparation. We wondered, “To what extent are partnership-based teacher education programs comprised of a set of experiences that specifically reflect these characteristics of uncertainty, engagement and formation?” Within those 20 articles, we identified six types of pedagogical practices that could likely inform and create conversation about partnership-based signature pedagogy. These practices included: (1) integrated course content, assignments, and teaching, (2) focused observation of teaching by pre-service teachers, (3) mentoring and coaching that includes observation of pre-service teachers by other educators, (4) co-teaching, (5) inquiry, and (6) reflection on teaching (Franco et al., 2013; Yendol-Hoppey & Franco, 2014).

After analyzing the articles, we returned to Shulman’s work and specifically analyzed each pedagogical practice to determine whether the practice reflected pedagogies of engagement, formation, and uncertainty. While we discovered that the literature in the field of school-university partnerships did not deeply define the unique pedagogical tools used to prepare pre-service teachers in partnerships, nor did it provide evidence of the effectiveness of suggested pedagogical practices for pre-service teacher preparation, it highlighted a plethora of experiences used to advance and support pre-service teachers’ professional development in these six areas. These experiences easily identified within one of the six types of signature pedagogy that surfaced in our literature review (Franco et al., 2013). For instance, the experience of attending meetings was well-established under the signature pedagogy of focused observation of teaching by pre-service teacher, and teaching a small-group lesson was defined as an experience under the signature pedagogy, mentoring and coaching that includes observation of pre-service teachers by other educators (Franco et al., 2013).

Purpose/Research Questions

As I find myself frequently immersed in pre-service teacher preparation within three university partnership schools, I wonder what experiences will result in the cultivation of future educators capable of transforming understanding of what it means to be an educator into effective action. Most often, our efforts to prepare teachers focus on developing the instructional expertise of our students. Naturally, within the classroom, practices must be informed. However, how do we cultivate an understanding of and appreciation for the role of a teacher outside of instruction? As a former elementary teacher, I believe that the practices that occur outside of instruction strengthen proficiency within instruction. For example, engagement in a Professional Learning Community that encourages data analysis and collaborative work with professional colleagues, or community service projects linking home and school informs educators how to better serve their students within the context of the classroom. I refer to these experiences continuously throughout this action research study as *teacher's responsibilities beyond instruction*, and believe that these experiences are under-addressed, under-researched, and under-shared within our school-university partnership community.

To begin understanding how I can use my knowledge of signature pedagogy to advance the development of pre-service teachers, I posed three research questions: (1) What experiences can I provide that facilitate pre-service teachers' conceptual development of their roles beyond instruction? (2) How do the selected experiences discussed in this study promote the development of a teacher's conceptualization of his or her role beyond instruction? (3) To what degree do these experiences reflect Shulman's concepts of pedagogies of uncertainty, engagement, and formation?

As a result of this inquiry, I hope to begin conversation about a distinct set of evidence-based experiences that I may use to facilitate pre-service teachers' learning related to their roles beyond instruction. I then plan to study these tools within the shifting context of teacher education, strengthen and adapt them within my

own undergraduate classroom, and share them with others in order to create conversations about advancing the development of a signature pedagogy that is powerful enough to enhance undergraduate teacher preparation programs throughout our country.

Research Design and Methods

In this study, I utilized an action research methodology to inform my decisions regarding data collection and analysis, and arrive at meaningful conclusions that inform my knowledge of signature pedagogy as a teacher educator. As "systematic, self-reflective inquiry aimed at constructing knowledge about one's practice, with the goal of...coming to a better understanding of that practice" (Capobianco, 2007, p.273), action research served as the lens from which I examined the effect that my selected pedagogical experiences and applied facilitation practices had on the conceptual development of my pre-service teachers' roles beyond instruction (Carr & Kemmis, 1986; Cochran-Smith & Lytle, 1992; Stenhouse, 1975; Tabachnick & Zeichner, 1999).

Participants and

Pedagogical Experience Selection

Upon completing a review of each of the articles published in the journal *School-University Partnerships* (2007-2010) and noting the six types of signature pedagogy that emerged, I extracted all of the experiences and activities mentioned and embedded in the articles as a means for supporting the development of pre-service teachers. Once identified, I examined each of the activities in light of Shulman's pedagogies of uncertainty, engagement, and formation to ensure their potential for developing the implied and required characteristics that promote professional development.

With the objective of contributing to my students' conceptual development and understanding of their role as educators beyond instruction, I sought to bridge theory and practice by integrating four of the experiences from the literature into my syllabus as assignments. The

University Partnership Elementary School Residency Seminar course was comprised of 13 pre-service teachers ranging from the ages of 20 to 36, and all experiencing their second internship in the College of Education. The four experiences selected from the literature included participation in Professional Learning Community, School Advisory Council and Response To Intervention meetings; calling students' parents and leading a parent-teacher conference; judging a district-wide science fair; and completing an inquiry project researching classroom management methods. I selected these experiences because they allowed me to explore the pedagogical practices of Focused Observation, Mentoring and Coaching, and Inquiry, and varied across Shulman's pedagogies of uncertainty, engagement and formation. For instance, Professional Learning Community, School Advisory Council and Response To Intervention meetings may be examined as potentially effective experiences facilitated under the signature pedagogy of focused observation of teaching by pre-service teacher. Calling students' parents, engaging in a parent-teacher conference, and judging a district-wide science fair are experiences underlying the signature pedagogy of mentoring and coaching that includes observation of pre-service teachers by other educators. Further, engaging in a classroom management inquiry project can be defined under the inquiry signature pedagogy. All of the experiences offer the potential for pre-service teachers to make decisions under unfamiliar and uncertain circumstances, engage in professional discourse within a circle of professional colleagues, and shape their identity, character and dispositions through routinization of analysis and habits of the mind. Whether this occurs is, in fact, a question explored in this study. Further, all of the experiences required that the pre-service teachers engage in activities outside of their classroom to inform their instruction within.

Using these experiences as assignments in their internship seminar, I analyzed my role in supporting their understanding that the role of an educator is not solely defined by obligations within instruction, but responsibilities *beyond* instruction as well. This was evident during our

monthly group seminars where I facilitated discussion and engaged them in specific activities in anticipation for the four internship experiences in their individual classrooms. This facilitation is described in detail in the "Description of the Experiences" section below. Further, through this study, I set out to inform my teaching practice by determining if the assigned experiences were effective in advancing the objectives of Shulman's pedagogies of uncertainty, engagement and formation.

Data Collection/Analysis

Over a 4-month period, the 13 pre-service teachers engaged in the four experiences of participating in Professional Learning Community, School Advisory Council and Response To Intervention meetings; calling students' parents and leading a parent-teacher conference; judging a district-wide science fair; and completing an inquiry project researching classroom management methods. Anecdotal notes as well as audio and video reflections served as data. Weekly, the pre-service teachers completed and emailed me a two-minute video reflection describing and highlighting their assigned experience that week, and describing what the experience taught them about their role as an educator. For the purpose of ensuring a candid and natural response, they were asked to be alone for their reflection and to speak without the use of a prepared script. This also aided in minimizing the possibility that they would say only what they believed I wanted to hear.

Upon observing each video reflection, I transcribed their exact responses and maintained anecdotal notes highlighting the lessons they learned, words they used to describe them, and how the experience had informed their role as an educator that week. Using the notes, I engaged in an on-going analysis to monitor their progress and stage of development week to week. At the end of the semester, I compared the language used by individual students to describe their role as an educator from the beginning of the study through the end. I also noted if the described experiences had facilitated characteristics of Shulman's pedagogies of uncertainty, engagement and/or formation. Finally, I compared my data across

the students to decipher any learning trends or key words, and conclude if the selected pedagogical activities influenced the conceptualization of their role as an educator beyond instruction.

Description of the Experiences

Participation in Meetings: Professional Learning Communities, School Advisory Council and Response to Intervention

Students attended one Professional Learning Community meeting with their grade level. During these meetings, professional colleagues most regularly engage in discussions about observed student needs, test scores and data analysis to diagnose needs and share resources to support educators’ learning, thus ensuring student improvement.

The School Advisory Council is an organized “group intended to represent the school, the community and those persons closest to the students. The group shares responsibility for guiding the school toward continuous improvement” (Bureau of School Improvement, 2013, p.1). This group of educators, administrators and parents typically meet to make final decisions in the implementation of the school improvement plan. The pre-service teachers were required to attend one School Advisory Council meeting during their internship.

In addition to Professional Learning Community and School Advisory Council meetings, the interns participated in one Response to Intervention meeting with their collaborating teacher. During these meetings, educators customarily work with a committee to identify interventions needed for specific students who are challenged by grade-level expectations. The educator enacts the interventions with fidelity in the classroom, and returns to the committee with data to support the student’s resulting improvement, or lack there of. During this meeting, the committee discusses future action to ensure that the student’s assessed needs are met appropriately.

While the pre-service teachers were required to attend the meetings, additional support or preparation for the assignment was not provided by our monthly seminars.

Positive Parent Phone Calls/ Parent-Teacher Conferences

Using a script, the interns were asked to conduct two positive phone calls to students’ parents. The basic script used appears as follows:

TABLE 1. Positive Parent Phone Call Script

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|--|
| <ul style="list-style-type: none"> • Introduce yourself! • Positive Calls: “I just wanted to give you a call and let you know that ----- is doing great! She/he (describe a specific positive instance/behavior) • I feel so lucky to get to work with him/her this year! • Thank you for all of your support with him/her |
|--|

The pre-service teachers selected two students to work with daily in small groups. Many of them expressed the same anxiety that first-year teachers feel prior to speaking to a parent for the first time. One particular pre-service teacher admitted feeling “deathly afraid” of talking to parents, and determined that she would not complete the assignment. As the teacher educator, I needed to scaffold her learning in a way that she would overcome her fears, and conceptualize the role of the “educator as a facilitator of communication.” In such scenarios, I filled out the script with the pre-service teacher, simulated the conversation with the parent until the intern felt comfortable, listened in as she made the calls, and debriefed the results of the conversation upon their completion.

With the support of their collaborating teacher, the interns also participated in the typical 12-hour workday characteristic to parent-teacher conference night, engaging in the experience by completing [for the first time] parent-conference forms, and participating in discussions with

parents, guardians, and their collaborating teacher. In preparation for the evening, I held a seminar in which I presented guidelines for conferencing, and simulated the experience. I provided them with tips for a successful pre-, during, and post conference experience, as well as a variety of simulations ranging from the ecstatic parent of the high achieving pupil to the angry disagreeable parent of the capable but under-achieving student. Using the script that follows, I guided the pre-service teachers to assume 3-minute roles; first as the parent and then as the teacher.

TABLE 2. Parent-Teacher Conference Script

<ul style="list-style-type: none"> <p>Beginning: Always start positive: Compliment!</p> <p>Eg. “So glad to meet/see you! Can I just tell you how much I love ----. State specific details. Is she/he like that at home?”</p> <p>Middle: The Meat! Getting on the same page</p> <p>“Let me share with you how he/she is doing in class”</p> <p>Question: “Is he/she reading @ home?”</p> <p>Suggestions: Action Plan</p> <p>“Some things you can do to support him/her at home are ---”</p> <p>(write them down on the conference form).</p> <p>End: On a positive note</p> <p>“Thank you so much for coming. I’m so glad we are on the same page.”</p>
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They participated in the discussion, acting out the appropriate role until I called ‘time,’ and role reversal occurred. During the discussions, I circulated, coaching the interns and providing feedback. At the end of each scene, students reviewed the pros and cons of their partner’s enactment, offering suggestions according to our guidelines.

Judging a District-Wide Science Fair

For this assignment, the pre-service teachers attended a district-organized training on the

morning of the science fair. During the training, they were each assigned to a mentor for the day and provided with a rubric for judging the students’ science fair boards. Their assumed role as a judge and the criterion on the rubric was explained in detail. The pre-service teachers and their mentors were then assigned to evaluate a specific area and grade-level.

Classroom Management Inquiry Project

For this level II seminar assignment, I compiled a list of basic classroom management responsibilities that educators are required to perform, but are rarely prepared to do so in teacher preparation programs. The list was informed by my review of the *School-University Partnerships* journal (2007-2010), as well as personal experiences with novice teachers in schools, and pre-service teachers at the university. During our first seminar for the semester, I led the pre-service teachers to select a question of their choice from the list below. The interns were asked to visit three different classrooms in their school, collect ideas for how those classroom teachers manage the chosen task, and select one method to try out in their collaborating teacher’s classroom. Next, they created a model of two of their preferred learned methods, and a chart illustrating the pros and cons of the practical application of each method. During our final seminar meeting for the semester, they presented their model during a poster session forum, sharing the practices with their colleagues, and explaining how and why they would implement one of the methods in *their own* classroom.

In preparation for the project, I described the purpose of the assignment as an opportunity for them to research a personally meaningful inquiry, and use the collected data to guide the development of their classroom management practices, as well as that of their colleagues. Further, I outlined the expectations for the project, and answered multiple questions regarding the construction of their model. The interns demonstrated both apprehension and excitement to collaborate with other teachers in their schools, and learn from their methods.

TABLE 3. Classroom Management Inquiry Project Questions

CLASSROOM MANAGEMENT INQUIRY PROJECT QUESTIONS

1. What are some effective methods for grading papers?
2. What are some effective methods for distributing and collecting materials?
3. What are some effective methods for checking homework completion?
4. What are some effective methods for organizing a library and keeping track of library books?
5. What are some effective methods for displaying student work?
6. What are some effective methods for desk organization? Who do you sit where?
7. What are some effective methods for collecting and keeping track of field trip permission slips/paper work & money?
8. What are some effective methods for organizing students' emergency information (contact info/ parental information & circumstance) and having it handy for future use?
9. What are some effective record keeping methods for keeping track of calls you've made to parents and information discussed?
10. What are some effective record-keeping methods for keeping track (by month, term, etc.) of low-graded papers that are signed and returned by parents?
11. What are some effective methods for taking attendance?
12. What are some effective methods for keeping track of students' missing work/ getting a student caught up when they return from a short-term or long-term absence?
13. What are some effective methods for organizing and storing materials for easy future access?

14. What are some effective methods for keeping your classroom organized daily (boards & floors clean, chairs stacked, library in order, sharpener empty, student work in folders, books in desks, technology appropriately cared for, lunch boxes and book bags taken home)?
15. What are some effective methods for communicating daily with students' parents?
16. What are some effective methods to ensure that students keep track of their homework assignments and parents are aware of them?

Findings

Participation in Meetings: Professional Learning Communities, School Advisory Council and Response to Intervention

The reported impact of attending Professional Learning Community, School Advisory Council and Response to Intervention meetings, as described by participants, varied significantly. Professional Learning Community meetings proved the most developmentally beneficial experience of the three. The common consensus among the participants was the support they experienced. They felt that “all of the educators present were there in the best interest of the students” and that “there was an unspoken understanding that everyone in the school needed to work together to help the students succeed.” Seven of the thirteen pre-service teachers gained an understanding of where to find support and resources to help them plan lessons and improve their professional skills. One student described the experience as an “unexpected opportunity to learn about the limitless resources teachers can use to engage students and get them to grow as learners.” They were surprised by the team of people available to collaborate to support students’ needs. “Everyone brought forth a different perspective and idea to help each other out. It was exciting.”

Additionally, all of the pre-service teachers reported participating in meetings where data was analyzed for their students and interpreted to inform classroom practices. One pre-service

teacher explained how as a result of the experience, she had learned to “use data to formatively assess students and inform her instruction in order to meet individual needs.” Another student found the data analysis beneficial for establishing small groups and planning lessons stating, “I was so excited to see how my students naturally fell into their groups.”

Unfortunately, this was not the norm. The understanding of how data analysis informed their role as a teacher varied among them. One student said she was simply “overwhelmed by all that data talk,” while another said, “it was all about how to promote students who fail FCAT. Nothing was accomplished except the idea that the teachers should teach to the test, I guess.” Another student called it “a waste of time,” while still another said “I really don’t see how this is relevant to being a teacher. Teachers could really be working with the students in that time.”

I observed that unlike the other three experiences, the majority of students used language that described what they saw as outside observers, rather than connecting the experience to what it meant for their role as an educator beyond instruction.

This was particularly true for School Advisory Council and Response to Intervention meetings. One student reflected, “I could not connect my role as the teacher to the overall goals of the discussion during the meeting. They (in reference to the teachers) were all scrambling to understand

what the numbers on their papers meant” and “they all looked overwhelmed by having to look at all that information. I don’t know why they make them do this.” Her reference to the participants of the meeting was consistently in terms of “they,” never connecting that as an educator she was suppose to be a significant part of “they.” Participants in Response to Intervention meetings felt that there was too much going on and that the meetings were “stressful and confusing.” One student said, “There were all these people in the room and everyone was taking turns talking about the student’s needs. I didn’t really know who was who,” while another said “It was crazy. I didn’t dare to say anything.” Another student specified, “I sat close to my collaborating teacher and most of the time had no idea what they were talking about.” As a result of this lack of understanding at School Advisory Council and Response to Intervention meetings, Shulman’s pedagogies of uncertainty, engagement, and formation were not adequately explored. Consequently, no significant conceptualization of their role as an educator beyond instruction was facilitated from participation in these experiences, therefore not supporting them as effective experiences to advance the objectives of a signature pedagogy in teacher preparation.

Though inconsistent among students, Professional Learning Community meetings did result in deepening the conceptualization of roles beyond instruction for some pre-service teachers. One student noted after the experience, “There is more to a teachers’ role than what they do in the classroom. There is so much work behind the scenes.” Another said, “Wow, I had no idea my teachers had to go to those kinds of meetings. It’s nice to know I won’t be alone in thinking of strategies to help my students.” At Professional Learning Community meetings, pedagogies of engagement were evident as pre-service teachers collaborated with educators to discuss challenges and offer solutions. The experiences also presented them with pedagogies of uncertainty as they were “socialized...to the conditions of practice” (Shulman, 2005, p.13), and pedagogies of formation as they began to internalize the common understanding that “everyone in the school needed to work together to help the

students succeed,” as one student so clearly stated.

After attending the first Professional Learning Community meeting, over half of the students reported attending them consistently. They said, “I wanted to hear what strategies the presenters might share” and “the teachers had great ideas. I even shared one.” As such, because the experience aided many in developing routinization of analysis and habits of the mind, as well as affirmed the belief that the discussions in the meetings meaningfully supported their learning outside of the classroom, I assess that the experience of attending Professional Learning Community meetings maintains the potential for supporting the signature pedagogy of focused observation.

Parent Phone Calls/Parent Conferences

Of the four experiences, participation in parent phone calls and conferences significantly supported the pre-service teachers’ profound awareness of the educator’s role as a communicator beyond instruction. Five of the thirteen interns expressed initial fear that “parents would react in anger and defensive ways at the idea that the school was calling them,” and “no one wants to hear from an intern even though I work with their child everyday.” One pre-service teacher said, “I don’t know what to say. Even with a script, I don’t know what they’re going to ask” while still another alleged, “You don’t understand, I’m deathly afraid of talking to parents.” In contrast, prevalent intern responses resulting from the experience included a surprise with how naturally positive the discussion with parents flowed, and how interested parents were to hear about their child’s progress no matter the source. Such responses include “At first they thought I was calling about something bad and then when they realized it was good, they wanted to keep talking to me. I loved it” and “Once I said hello, I just knew what to say. They were so nice.” or “I was proud of their little girl and so were they. I had no idea I was going to really like to do this.” Another student felt that she “just wanted to call all of their parents with good news.”

On two rare occasions, the pre-service teachers experienced disconnect between the child's interest in school and the parent's enthusiasm about their child's success. "The mom didn't even care that her son had received a 100% on his Math test even if it was the first one all year." The second student reported that "the mom was so distracted and all she said was 'ok' and hung up the phone." These interns concluded that the "phone call provided a small window into the child's life," revealing the student's level of support at home, and the consequential compensation they, as the teacher, would need to provide to make up for that deficit. Further, they gained the understanding that positive phone calls are crucial to establishing a rapport and communicating children's needs as they surface throughout the school year. "After the phone call when the mom came to visit the classroom, I felt great that she knew who I was and we were actually able to talk openly about her son. And I'm only the intern." Another pre-service teacher said, "Now I know that if I need her support at home, I can just call her." Overall, the experience resulted in excitement towards their newly discovered role as initiators of communication.

Participation in parent conferences further reinforced the pre-service teachers' conceptualization of their role beyond instruction. The interns reported our seminar to be extremely relevant and helpful to establishing a foundation for the experience. One intern expressed understanding her "teachers' preparation methods better, and knowing how to organize the conference in an effective manner for future practice," while still another said "I wouldn't have known what I was looking at if we hadn't talked about the parts of a conference." As their collaborating teachers engaged in the meetings, they felt they "knew what they were looking for." The interns' reflections were often characterized by words such as "I wouldn't do it that way," or "I really like the way she did..." and "I'll be sure to do that during *my* conferences." Reflections indicated the transfer of ideas from discussions in seminar to scaffolded experiences that aided in their conceptualization of how to place those practices into personal action. Ten of the thirteen pre-service teachers agreed, stating "I never

would have known how to prepare for a meeting with a parent if I hadn't done it with my collaborating teacher."

Prevalent trends that surfaced throughout the video reflections for this experience include the deepened understanding of where students are coming from and why they do the things they do. They identified that "communication in all directions is key to teaching me how to better serve my students' needs and to show parents how to better support their child's learning." Another intern indicated, "The collaborative discussion of how to work as a team on students' challenges linked home and school support to advance the student's needs." Still another added, "It gave me the sense that the parents knew that we were as concerned about their child's progress as they were - we're not alone, and they're not alone."

Further, the experience unsuspectingly tackled preconceived notions about diversity for five of the interns. They had not anticipated the need for a means to communicate with parents unable to speak English clearly or at all. One intern stated, "The parents came to the conference but they looked confused because we didn't have a Spanish-speaking translator. We had to get a teacher from across the hall." Two of the pre-service teachers required translators for their conferences, and three were surprised to hear about the struggles that these parents faced to support their child's education. One pre-service teacher expressed sadness, stating that "the mom kept saying how frustrated she was that she could not help her son with homework or support his needs in school because she couldn't read his work or do his Math." Another intern was astounded by a mother and father who ignored the professional opinions of her female collaborating teacher, only to respond and make eye contact with the male teacher also participating in the conference. She said, "The parents didn't even look at my collaborating teacher. It was so awkward." The resulting consensus among the pre-service teachers was that "it is important to anticipate and expect cultural differences among parents when approaching them to discuss their children."

It is evident that the use of both parent phone calls and parent conferences both strongly fostered pedagogies of uncertainty where pre-service teachers were forced to act under uncertain conditions; pedagogies of engagement as they participated in dialogue with parents and colleagues; and pedagogies of formation as the experiences built character, dispositions and values related to communication. Through the use of these experiences, I was able to effectively facilitate the pre-service teachers' conceptualization that went beyond instruction, they are facilitators of communication, and that communication enhances the educator's ability to understand and meet student needs.

Judging a District-Wide Science Fair

As a result of the new experience of judging a science fair, the pre-service teachers were immediately challenged with having to make decisions under conditions of uncertainty. Upon arriving to the fair, many feared "we don't know what we are looking for in those projects" and "I'll feel bad for the students that worked hard but don't win because of me" or "There are so many good ones. How will I score them?" Fortunately, mentors quickly engaged them in dialogue, teaching them what to look for and expect as they grappled with the demands of judging on-site. Many of them expressed deep gratitude for their mentor's guidance, and felt that they could not have done it without them. "Thanks to my mentor..." began many of the science fair video and audio reflections.

Observing students' projects from across the county in one large room, made several of our pre-service teachers keenly aware of the various socio-economic levels present throughout our district. The interns observed the difference between projects neatly typed, cut and decorated with purchased goods indicative of the availability of resources at schools and homes, and the projects made from rigidly cut construction paper and markers. "You could tell which projects came from more affluent homes because they were well-decorated with fancy lighting and materials, and which ones didn't" and "It was obvious when a parent helped their child and when the student did it alone because more than likely the parents were working or

didn't know." Several interns came to the realization that they will have classes comprised of a variety of socio-economic levels, and that they will have to compensate by providing resources so that their students will have equal opportunities to experience success at a science fair. One intern said, "I felt bad that several students had great ideas but because their project wasn't well organized and decorated, they didn't have a chance of winning."

A significant trend in every reflection was the awareness that as educators, they would have to assume responsibility for connecting the real world to curriculum in the classroom. Many shifted from 3rd person descriptive wording of the experiences to the 1st person mind-altering perspective that "as a future educator, I will have to embrace science content and be a learner myself in order to make this happen for my students," and "some students had real-life ideas that I would never have thought of. How am I to help them if I don't even understand the science content behind some of those ideas?" One intern was surprised by the extent the student's imagination could stretch when "narrowed FCAT pressures were removed, and the educator gave his or her students the opportunity to think out of the box." Further, *all* participants expressed that the experience gave them a "visual foundation to establish reasonable expectations for their students." Related comments include "I would never have known what to expect from a 3rd grade science project and a 5th grade science project" and "I was really surprised by what they could do in 4th grade compared to the work of a 3rd grader. One year makes such a difference."

Overall, this experience clearly reflected Shulman's pedagogies of uncertainty, engagement, and formation. Students became science fair judges overnight, having to make important decisions under unfamiliar and uncertain conditions. Their discussions with their mentors supported pedagogies of engagement as they grappled through the experience. More significantly, the awareness of socio-economic differences, their responsibility to foster that creativity in their classroom, and the establishment of grade-level appropriate

expectations for their students, presents evident examples that this experience influenced the formation of their identities and their values as teachers.

Finally, through the use of this experience, I was able to facilitate the development of pre-service teachers' conceptualization of their role beyond instruction. The pre-service teachers expressed the importance of participating in out-of-school events that allow them to "see their students in a different light," and learn "what they are capable of outside of the classroom."

Classroom Management Inquiry Project

Pre-service teacher enthusiasm for inquiring about a classroom management question escalated throughout their study due to the pragmatic and personally meaningful application. One intern noted, "The opportunity to talk to other teachers encouraged me to get out of my box," while another stated "It was great to have the chance to study something that was interesting and necessary to me in the classroom." Because our university interns shadow most exclusively their assigned collaborating teacher, discourse with educators beyond their classroom walls is minimized, thus making it an awkward experience to reach out to others as the apprentice. One intern stated it best when she said, "I never would have reached out to Ms. Fisher if I hadn't had to make time to work on this project. So glad I did. She was full of great ideas." This inquiry project made learning from others around them a priority. As such, I perceive this to be an essential skill reflective of educators capable of improving their craft through changing times and contexts (Dana & Yendol-Hoppey, 2008).

A second common thread among the pre-service teachers was the initial belief that teachers accomplish basic classroom management tasks in the same consistent ways. One participant acknowledged that though she was intrigued by her topic, her preliminary lack of enthusiasm for the inquiry project was due to this belief. She stated "I was sure that every teacher I asked would be organizing their library in the same way." Another said, "I remember thinking how

many ways could there possibly be to grade papers?" All of the pre-service teachers expressed surprise to witness great variation in classroom management methods, sharing the sentiment, "So many ways to do so many things in the classroom." Another participant felt that she "had never realized how important it was to have a procedure in place for checking homework." Upon learning of many methods, she was forced to examine her "philosophy of homework" to determine how much meaning she would apply to holding students accountable for turning it in.

Presentation day sparked interest to an all time high as the pre-service teachers learned from each other's findings. They rotated to stations as one would when viewing a science fair or poster session. The presenters were equipped with power points to share the pros and cons of each method, and models that displayed how they hoped to use the method in their own classroom. During the sessions, the interns took turns being both learners and peer-educators. The experience engaged the pre-service teachers in a spirit of inquiry, reflecting the signature pedagogy type, as well as Shulman's pedagogies of engagement, uncertainty and formation. The students engaged colleagues in professional discussions beyond their classroom walls, learned how to collaborate with others to share and learn strategies, and were forced to question their methods as well as to "try out" different ones with great uncertainty as to their results. Thus, as noted above, students' responses during their weekly reflection support the idea that this activity is capable of effectively serving to prepare pre-service teachers under the signature pedagogy of inquiry.

Prior to presentations, I facilitated reflection of the experience through a group discussion. After the pre-service teachers shared what they had learned from the experience, I asked "What does this mean for you as educators?" Silence filled the room until one student verbalized, "There is so much behind-the-scene preparation that teachers must do to be able to teach." While I felt that some had grasped this significant message as their role beyond instruction, I realized that as the

facilitator, I had much more to do in order to embed the spirit of inquiry within them.

Discussion

As pre-service teacher educators, it is crucial that we engage in continuous inquiry, reflecting on our work as we aim to establish a set of practices that develop educators capable of transforming the understanding of what it means to be a teacher into effective action. Lee Shulman's pedagogies of engagement, uncertainty, and formation provide me with a lens from which to study my practice, making me hypersensitive to the impact my selection of experiences has on the development of my pre-service teachers. For example, by systematically examining my use of science fair judging, parent conferences/phone calls, Professional Learning Community, School Advisory Council and Response to Intervention meetings, and the completion of an inquiry project, I arrived at the realization that while my objective was to facilitate the conceptualization of the educator's role beyond instruction, the practical application of my chosen experiences also resulted in establishing habits of professionalism. The pre-service teachers expressed the importance of continuous participation in events outside of the classroom. Several expressed "I don't want to miss any of the school events and meetings" and "I learned so much about my students when I spoke with others that had also worked with them or even their parents that know them differently than I do. The knowledge helped me support them better when I returned to my classroom." Seeing their students in "a different light" encouraged the pre-service teachers to establish deeper bonds, thus making them more effective in the classroom.

Further, they gained an understanding that engaging in professional discourse with colleagues and parents informed their instruction, allowing them to better serve their students. Simply put, communication beyond the classroom reflected a changing world, revealing a plethora of resources that better informed them as developing practitioners. Pre-service teachers must learn how to grasp and apply these resources, and I perceive that it is my responsibility as a teacher educator to facilitate

the development of these skills. This conclusion has led me to the idea that the application of studied and well-implemented pedagogical practices, and the related experiences that underlie them, facilitate the development of pedagogies of uncertainty, engagement and formation, resulting in educators with professional habits able to continuously improve their practice through evolving contexts.

While my study indicated that the use of experiences such as parent conferences, phone calls, science fair judging, and completion of an inquiry project aided in this development, Professional Learning Community, School Advisory Council and Response to Intervention meetings did so only variably. In my opinion, three factors contributed to the inconsistent lack of effectiveness in the use of these experiences to facilitate the conceptualization of pre-service teachers' roles beyond instruction. First, the intern's personal and professional developmental level. As seen by the comments in their reflections, the pre-service teachers were simply unable to connect their role as a teacher with the overall goals of the discussions. While many of them were able to view their students as learners who concretely demonstrate their skills in the classroom for them, examining data as representative of their capabilities was simply evidence too abstract for their level of development. They felt it was a "waste of time" and couldn't see how it would help them inform their instruction. The few students who felt as though they gained from student data examination were predominantly interns who were more developmentally at ease with meeting individual students' needs, and the deep reflection necessary to inform such work at this internship level. As a result, I will be cautious to employ experiences without consideration to the pre-service teachers' developmental level.

Secondly, one can be certain that the quality of meetings at different schools varies according to the presenters and resources available, as well as the professional development level of the participants. The pre-service teachers were located in three different schools, and as a result, some meetings were prepared with ample

amounts of resources, support and discussion to facilitate understanding, while others were simply not. As a teacher educator, I could not predict the quality of a school-based meeting, making the use of this experience questionable overall. To ensure the effectiveness of the experience, teacher educators must select specific Professional Learning Community, School Advisory Council and Response to Intervention meetings that they are confident are positive experiences.

Finally, I will attest to the lack of substantial background that I provided in preparation for this experience. I could have prepared the interns by sharing with them the purpose of each meeting, a list of participants, and expectations for how they function. Without this schema to attach the new experiences to, I perceive that the pre-service teachers could not be certain of what they were going to see, their required level of participation, and the objectives of the experience. Therefore, they could not maintain a keen eye for what they should extract from the experiences and were instead overwhelmed by them. For my own practice, I learned that for *any* experience to become effective, an instructor must scaffold the learner with schema. Only in this way can the pre-service teacher fully engage in meaningful professional learning.

Likewise, asking meaningful questions and exploring ways to address them did not surface as an educators' role beyond instruction for the pre-service educators completing the classroom management inquiry project. While I maintain that scaffolding their learning as they collected and analyzed data, and engaging them in discourse to support them as researchers was much needed on my part, making pre-service teachers inquirers of our profession is in fact an ongoing developmental process (Dana & Yendol-Hoppey, 2008). I believe that as a teacher educator and facilitator of their development, this is my responsibility. Through the use of inquiry as a type of signature pedagogy and facilitated experience, I have only begun to take the first step in this journey.

Implications

Inquiry as a signature pedagogy and experience is crucial to continuous development. While I perceive that all signature pedagogy has the potential of ensuring professional development over time, inquiry makes the educator an instrument of change (Dana & Yendol-Hoppey, 2008). By exploring his or her learning through changing contexts, the pre-service teacher is at the forefront of the field, trying out new methods and evolving with its needs. This empowers educators with the ability to improve themselves and influence colleagues and the profession through research. Unfortunately, I believe that teachers have fallen victim to rapidly changing contexts, lacking the necessary skills to engage in meaningful inquiry and inform their own profession. As a teacher educator, I will soon be working with pre-service teachers in a science methods course to facilitate the necessary preparation required to make them researchers, exploring their wonderings, investigating them through data collection and analysis, and implementing evidenced findings. In doing so, I will examine my practice by exploring "In what ways do I facilitate the development of pre-service teachers as inquirers of their own science instruction?"

Conclusion

Establishing a set of pedagogical practices and experiences to foster the necessary attributes characteristic to high-quality professional learning is key to the success of our profession (Shulman, 2005). Lee Shulman's work on signature pedagogy encourages teacher educators to describe and examine the effectiveness of our practices. As proven experiences that facilitate the development of pre-service teachers' conceptualization of their roles beyond instruction, participation in parent conferences and phone calls, judging science fairs, and engaging in meaningful inquiry can successfully support this professional learning. However, the role of the teacher educator in effectively facilitating the experiences is extremely crucial. Selecting developmentally appropriate experiences, scaffolding learning, and ensuring the quality of these experiences, is the difference

between another requirement for the pre-service teacher to fulfill, and true signature pedagogy.

Most importantly, one might argue that a set of static pedagogical practices and experiences in pre-service teacher preparation contradicts the continuously changing contexts that educators endure in our profession. However, this changing context in my opinion means that pre-service teachers must be prepared with experiences that develop professional habits rooted in inquiry and evolving development. Informed practice within classroom walls must occur through professional engagement outside of classroom walls, and thus *beyond instruction*. Empowering our pre-service teachers with deeply studied experiences that align with the criteria of signature pedagogy reinforce this philosophy and will surely produce a profession able to withstand the test of time.

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