“Bad Inquiry”: How Accountability, Power, and Deficit Thinking Hinder Pre-Service Practitioner Inquiry

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Abstract: This study of 30 pre-service teachers’ practitioner inquiry papers explores potential pitfalls of practicing inquiry with pre-service teachers. Focusing on the types of questions pre-service teachers ask about student learning, the challenges they face when engaging in inquiry, and the weaknesses of their inquiry products, this paper finds that accountability culture in education, pre-service teachers’ lack of power in the classroom, and deficit thinking left unchallenged by instructors led to weak inquiries. Implications include the need for teacher educators to work with mentor teachers across university and K-12 boundaries, and the need to teach explicitly about the power inquiry holds in neoliberal contexts.

Introduction

Practitioner inquiry, defined by Cochran-Smith & Lytle (1993) as “systematic, intentional inquiry by teachers” (p. 5), has increasingly been incorporated into pre-service teacher (PST) education programs in the United States (Ballock, 2019; Cochran-Smith, Barnatt, Friedman, & Pine, 2009). As a result, scholars have begun to look into its usefulness at the pre-service level. Because of the tenuous position of pre-service teachers (PSTs) in practicum or internship classrooms, the competing claims over their work (Smith & Sela, 2005), and the ever-changing policy environment of teacher preparation (Ballock, 2019), the development of an inquiry stance in PSTs and their ability to conduct an intentional and systematic inquiry project about which they are passionate is under question (Phillips & Carr, 2009).

In this paper I examine the challenges to developing an inquiry stance in one teacher preparation program and the weaknesses of those inquiries as a result. Operating under the belief that PST inquiries can tell us something about the ideologies of teachers entering the field, I also identify the assumptions that PSTs in this study held about teaching and learning, how those assumptions might influence their inquiry projects, and how instructors may make improvements to challenge PSTs to question their assumptions. This study, an analysis of inquiry projects completed by 30 PSTs in the final undergraduate semester of their elementary teacher preparation program, suggests that cultivating an inquiry stance in PSTs requires instructors who acknowledge and actively work towards mitigating the challenges inherent in that endeavor. This sample of practitioner inquiry papers contain the elements of what I term “bad inquiry,” or key pitfalls
teacher educators must be aware of when facilitating practitioner inquiry with PSTs.

**Conceptual Framework**

The conceptual framework guiding this study is based on a particular vision of practitioner inquiry understood as the systematic and intentional study of one’s own practice in the classroom. In this section, I outline a vision of practitioner inquiry that guided this research. I then position practitioner inquiry as an empowering force for teachers in the age of accountability (Curri, 2019). In doing so, I hope to highlight the idealized vision of what practitioner inquiry can and should be in order to contrast that ideal to the findings of this study.

Serving as an umbrella term complete with many “versions and variances,” (Dana, 2016, p. 1) practitioner inquiry draws from the traditions of action research, teacher research, self-study, and classroom research (Dana, 2015), which allows teachers to focus in a sustained, intentional, and systematic way on the learning needs of their students and frees them from a reliance on standardized test scores or the work of outside experts to direct their instruction (Ulanoff, Vega-Castaneda, & Quiocho, 2003; Webb, 2002). Each of the traditions of teacher research acknowledges “the shared aims of disrupting mainstream knowledge paradigms and advocating for a more equitable society” (Crawford-Garrett, Anderson, Grayson, & Suter, 2015, p. 480; Hulse & Hulme, 2012). To be sure, in an educational system that operates as “a network of transactions” in which “elite academics produce or discover knowledge [and] pre-service teachers attend college to obtain it” (Curri, 2019, p. 1), practitioner inquiry disrupts not only the transmission of knowledge from teacher to student, but questions “whose knowledge and values are of most worth” (Cochran-Smith & Lytle, 2009, p. 10). In practitioner inquiry, practitioners generate knowledge from their insider perspective, thus challenging the dominance of scientifically-based research in the field of education (Van Cleave, 2012).

While not lacking in value, mainstream knowledge paradigms privilege “outsider” knowledge that lacks the first-hand perspective that practitioners are able to bring to investigations of their own classroom practice (Cochran-Smith & Lytle, 2009; Campbell, 2013). Ulanoff et al. (2003) argue that it is this “unique perspective” that “affords the teacher researcher an insider (emic) perspective in terms of the data s/he gathers and analyzes” allowing teachers to see through the eyes of both “practitioner and investigator” (p. 404). In this way, practitioner research has the potential to serve as “a vehicle for teachers to question the educational status quo” (Dana, 2016, p. 1), shifting the teacher from transmitter of
knowledge to creator of knowledge. The dual role of the practitioner inquirer is crucial in an era characterized by the increased deskilling, deprofessionalization, and over-regulation of teaching (Apple, 1986), a result of high-stakes accountability and neoliberal reform that has only exacerbated since Apple first noted the phenomenon (Au, 2008; Brass, 2016; Dunn, 2018; Hursh, 2007; Kumashiro, 2012). As a result, practitioner inquiry has been lauded as a way for teachers to regain lost autonomy in the classroom (Meyers & Rust, 2003; Webb, 2002). Indeed, in an era of decreased teacher autonomy (Au, 2011; Olsen & Sexton, 2009; Smith & Kovacs, 2011), is imperative that teachers are equipped with strategies that not only empower them, but empower their students as well (Carter Andrews & Castillo, 2016). This requires teaching practices that are adaptive, equity-oriented, and differentiated based on the needs of the diverse students in one’s class (Darling-Hammond, 2005), pedagogy that may be facilitated through an inquiry stance (Caro-Bruce, Flessner, Klehr, & Zeichner, 2007; Dana & Currin, 2017; Simms, 2013).

Because teacher inquiries form as a result of “felt difficulties,” wonderings, or burning questions that practitioners have about practice, scholars have positioned inquiry as “a tool which empowers teachers” to take control of their own learning and professional development (Smith & Sela, 2005, p. 295). Inquiries can arise from “a puzzling moment, student, or learning pattern raising questions” (Athanases, Bennett, & Wahleithner, 2013, p. 10), and many teachers may view the inquiry cycle as a means to understand more deeply that puzzling classroom feature. However, inquiry is much more than a mere tool to improve the technical aspects of teaching. It is a stance, “a worldview, a habit of mind, a dynamic and fluid way of knowing and being in the world of educational practice that carries across the course of the professional career” (Cochran-Smith & Lytle, 2009, p. 113). According to Cochran-Smith (2003), this definition of inquiry differs from “inquiry as time-bound project or activity within a teacher education course or professional development workshop” (p. 8), and instead serves as a way of being that is “both social and political” (p. 8). Others identify the inquiry stance as a “relational stance of outward motion—a seeking of understandings, both of the world and of other people” (Lysaker & Thompson, 2013, p. 182). If the goal of inquiry is for it to become “a professional positioning or stance, owned by the teacher, where questioning, systematically studying, and subsequently improving one’s own practice becomes a necessary and natural part of a teacher’s work” (Dana, 2015, pp. 162-163), then the development of an inquiry stance, not simply the development of an inquiry project or question, should be the goal of teacher preparation programs.

Key to the inquiry stance is a focus on reflection, or the development of
reflective practitioners. Myers (2013) explains that reflection is “the process of thinking beyond the superficial elements of experience to explore them in greater depth” (p. 1). Summarizing Dewey, Myers (2013) explains further that reflection “moves beyond impulsive actions, those based on trial and error or routine, or those guided by convention or endorsed by authority” (pp. 1-2). Developing a reflective position in others, particularly in PSTs, is not easy. As Kottkamp (1990) reminds us, “The practitioner is in total control of deciding whether to reflect, and, as a result, whether and how to change his or her practice. We cannot reflect for anyone else” (p. 199). For teacher educators committed to the inquiry process and wishing to inculcate in future teachers a reflective stance, this can be a difficult pill to swallow (Cochran-Smith & Lytle, 2009), as Gustafson & Bennett (1999) and Orland-Barak (2005) argue that PSTs struggle to dig deeper beyond superficial reflections. If practiced superficially, reflection loses its power and its ability to challenge traditional educational paradigms.

Likewise, despite the power and potential of practitioner research, “there is nothing inherent in practitioner research that makes it a threat to the status quo of schools and universities” (Anderson & Herr, 1999, p. 17). As it grows in popularity, there is a risk that practitioner research can become “institutionalized” and “incorporated into models congruent with technical rationality” (Anderson & Herr, 1999, p. 17). Bieler and Thomas (2009) have termed this “false inquiry” because it “takes on many of the rigid characteristics of traditional teacher education and professional development” (p. 1033). Like anything else, practitioner inquiry is only a tool for change and teacher autonomy if introduced and cultivated for those specific purposes. Thus, it should be noted that the development of an inquiry stance is a lofty goal in teacher preparation programs, as true inquiry is not assigned to teachers, but engaged in by practitioners based on their sincere desire to do so.

**Literature Review**

Despite the opportunities afforded to teachers through inquiry, the position of the PST differs greatly from the teacher of record. In this review of literature, I explore how teacher educators have engaged in inquiry with PSTs, specifically engaging in the opportunities and challenges of this work.

Scholars have understood PSTs’ inquiry projects as “insider stories of learning to teach,” providing teacher educators a lens into the experience of PSTs in teacher preparation programs (Phillips & Carr, 2009, p. 223). Scholarship on PST inquiries has also explored how inquiry could be used to foster a social justice stance in teacher education, arguing that inquiry provides a space to
question and interrogate the culture of teaching. In this space, PSTs learn to become “advocates” for students and “analysts” of their own thinking about teaching (Lynn & Smith-Maddox, 2007, p. 104). Teacher preparation, Smith and Sela (2005) argue, should dispense with the “cookbook approach” (p. 297) wherein a teacher candidate might look for a best practice, and instead offer pre-service educators the cognitive tools to enable them to create their own knowledge at the local classroom level. Similarly, Moran (2007) argues that practitioner inquiry, introduced during teacher preparation, can limit future teachers’ reliance on “prescriptive teaching stances” (p. 430), thereby increasing their professional autonomy.

Empirical studies conducted regarding how PSTs understand and practice inquiry show great promise (Koomen, 2016). Truxaw, Casa, and Adelson (2011) describe how implementing inquiry in the master’s year of a teacher preparation program helped teacher candidates gain confidence in the inquiry process and shift their thinking towards “a more holistic, professional, future-oriented view of inquiry” (p. 87). Likewise, Lysaker and Thompson (2013) assert that teacher inquiry can empower PSTs to be “independent thinker[s] and relationally sensitive teacher[s]” (p. 189), who move “beyond the obvious” (p. 190). While this can be challenging, Althanases, Bennet, and Wahleithner (2013) contend that inquiry shows promise “in helping develop data literate, evidence-generating professionals” (p. 26). Collaborative inquiry projects have also shown success, although struggles exist for preservice teachers who have little experience in the classroom and, as a result, little knowledge-in-practice (Cochran-Smith & Lytle, 1999). Because of their novice status, PSTs embarking upon collaborative inquiry benefit from the role teacher educators play in facilitating collaborative teacher research and even practicing teachers struggle to conduct inquiries that facilitate democratic outcomes (Willegems, Consuegra, Struyven & Engels, 2017).

Despite promising research, key pitfalls exist in the execution of pre-service inquiry projects. The majority of pitfalls surround what Shulman (1986) identifies as “process-product research,” or research that “portrays teaching as a primarily linear activity and depicts teachers as technicians” (Quoted in Dana & Yendol-Hoppey, 2013, p. 10). Trained to receive knowledge, many PSTs struggle to problematize curriculum or teaching practices passed on to them from outside experts. Hulbert and Knotts (2012) found that “several interns presented a best practice as if it was applicable to any context in any time” (p. 105). Cochran-Smith et al. (2009) also found that many weak inquiry papers focused on the “impact of a particular technique” (p. 22) guided by a “rigid” or “linear view of classroom research as a scientific process” (p. 26). In other words, rather than understanding teacher research as recursive and adaptable to the needs of students
and demands of schools, teacher candidates believed they needed to implement a strategy with fidelity to the research design only. These ideologies fit within the process-product paradigm of educational thinking. With decreased control over their own work some PSTs find it hard to “move beyond talking about what was wrong with students and what went wrong with lessons to asking why what they did as teachers did not always work as well as they had expected” (Ulanoff, 2003, p. 429).

Perhaps in response to these pitfalls, a theme appears in the literature on PST inquiry: the need for explicit and focused attention in teacher preparation programs on practitioner inquiry (Ballock, 2019). To be sure, a call for a more integrated approach to programming that pays attention to inquiry appears repeatedly in the literature (Truxaw et al, 2011). Because action and teacher research with PSTs “can have both intended and unintended consequences” (Price, 2001, p. 45), the framing of the research process is of paramount importance. In other words, teacher research can be transformative or it may “reproduce what already exists” (Noffke, 1995, p. 7). As Crawford-Garret et al. (2015) remind us, “like any practice, teacher research cannot be mapped onto teacher education uncritically” (p. 481). As a result, they contend that teacher education needs to be “reconceptualized” to emphasize “the action research cycle as a core experience” and encourage “question-posing, data collection and collaborative analysis” (Crawford-Garret et al., 2015, p. 494). This study is part of an effort to reconceptualize the infusion of inquiry into teacher preparation.

**Methodology**

In an effort to identify ways to better coach PSTs through the process of inquiry, this study asked the following questions: What kinds of questions do PSTs ask about student learning?; What challenges do PSTs encounter while conducting their inquiries?; and What are the weaknesses of PSTs’ inquiries? To investigate these questions, I made use of qualitative content analysis of thirty inquiry papers composed by PSTs during the spring semester of 2015. Twenty-six of the PSTs identified as white, three identified as African American, and one identified as Hispanic. The thirty inquiry papers analyzed in this study are the result of a convenience sample offered to me by three additional instructors of the capstone seminar course that occurred concurrently with the full-time student teaching experience. 14 of the papers were conducted under my supervision. All of the instructors were doctoral students at the time of teaching the course. Three identified as white females and one identified as a white male. Only one of the instructors identified practitioner inquiry as an area of research expertise. This instructor had considerable experience working with pre-service teachers to
develop classroom inquiries, while the other three instructors were relative novices with one to two semesters of experience. No formal training was provided to instructors before teaching the course for the first time and the instructors did not participate in a substantive community of practice.

All PSTs who authored papers included in this study were in the final semester of their undergraduate elementary teacher preparation program and wrote the papers as a capstone assignment, the result of a semester-long inquiry cycle conducted in one of four elementary schools in a rural district in a southeastern state. The PSTs were enrolled in a well-regarded teacher preparation program in the southeastern United States, which at the time of study was ranked as one of the top 20 teacher education colleges in the United States by U.S.A. Today. The program is fully accredited by the Council for Accreditation of Teacher Preparation (CAEP). Despite its well-regarded status, the program did not have an explicit focus on social justice or asset-oriented approaches to education (Nieto, 2000; Souto-Manning, 2019), although some instructors brought such approaches to their teaching.

Each inquiry was conducted during the pre-internship practicum, the culminating experience of the undergraduate elementary program. During the pre-internship, PSTs worked in pairs for 16 hours per week in their assigned elementary school classroom with one mentor teacher and a supervising instructor from the local university. While in this pre-internship, PSTs attended evening classes at the university which included a seminar course related to the pre-internship. In this seminar course PSTs were coached through the inquiry cycle. Although inquiry papers were collected from four different instructors, the course syllabi and inquiry assignment objectives and directions were identical or very similar from class to class (See Appendix A for assignment directions). Activities designed to support the development of wonderings, data collection, and data analysis varied from instructor to instructor, although in all courses PSTs were expected to read from and engage in class discussions on Dana and Yendol-Hoppey’s (2013) *The Reflective Educator’s Guide to Classroom Research*. Instructor support was variable and, as previously stated, the instructors’ experience levels with conducting and coaching practitioner inquiry varied as well. Still, each PST was encouraged to follow Dana and Yendol-Hoppey’s text as a guide for their inquiry project design and execution, which provided a sense of continuity throughout all projects. Moreover, because inquiry was infused throughout the final two semesters of the elementary undergraduate program, all PSTs had previously completed a mini-inquiry project in a technology course before the spring semester and, as part of that course, had each participated in the bi-annual inquiry showcase at the university during the previous semester.
The explication of these data sources points to some limitations of this research. This study notably does not include observation of or interviews with PSTs. Examining only one data source certainly limits the types of conclusions one can draw from this study. Moreover, the data sources are representative of only a percentage of the total number of students enrolled in the teacher preparation program. Other data collection methods may have yielded different findings. Findings and implications should be considered with these limitations in mind.

Data Analysis

Data analysis combined ethnographic content analysis methods (Grbich, 2013) with thematic analysis (Braun & Clark, 2006). To analyze the data set, each inquiry paper was read in its entirety and annotated with initial thoughts and questions. Upon a second reading, broad deductive codes were imposed onto the data and then organized into a matrix. Examples of deductive codes include: topic of inquiry, wondering, content area focus, goals of inquiry, types of data collected, findings, new wondering, challenges encountered (as identified by the PST), and researcher concerns. Data in the matrix then underwent a second coding process in which I looked for more precise codes, particularly in the “challenges encountered” and “researcher concerns” categories. Data in the “researcher concerns” category included what I believed to be problematic statements or red-flags that indicated a reinforcement of the status quo of white, middle-class, neoliberal schooling (Sharma, 2018). For example, data coded as a concern might read: “When we imagine an elementary classroom we are likely to imagine a comfortable environment full of learning and creativity.” I coded this a concern due to the culturally imbued assumption that elementary classrooms are places of comfort, which signaled to me a lack of understanding of the myriad ways students and families understand schooling in the United States. Other examples included color-evasive statements (Annamma, Jackson, & Morrison, 2017) or the exclusion of race as a demographic marker in describing a child. I ultimately sorted the data in each category into themes, which I then used to answer my research questions. The data were then read once more in entirety and previously unsorted data was coded and organized into themes or discarded as unrelated.

Role of the researcher

Acknowledging my own positionality in this study is crucial (Mason-Bish, 2019). As previously stated, I served as a pre-internship supervisor and seminar instructor. In this role, I led 14 of my own students through the inquiry process,
and I have included their papers in this study. As a result, I am positioned as an “insider” (Grossman, 2005), which has enabled me to bring my knowledge of the program, its students and instructors, and its goals to the research. However, due to my insider status, I have had to bracket my own assumptions about the program and PSTs in order to be sure that unfounded assumptions were not guiding my analysis (Fischer, 2009). To ensure credibility and trustworthiness I circulated the study findings with other instructors familiar with the inquiry process and received feedback from critical friends (Loughran & Northfield, 1998).

Additionally, it is important to acknowledge my own inquiry stance. In doing so, I cannot separate the products of these classroom inquiries (i.e. the data sources for this study) from the quality of instruction PSTs received in how to conduct teacher research. Indeed, the weaknesses that emerge from these papers reflect a number of contextual factors that lie outside of the PSTs’ control. The shortcomings addressed here should be viewed holistically, as the outcome of a variety of forces that teacher education programs have the power to alter, not as the failing of any individual PST.

**Findings**

After analyzing the thirty inquiry papers, three overarching themes emerged. First, and as others have noted about inquiry in general (Dana et al., 2009), accountability measures framed many of the PSTs’ inquiries. The problem of standardization, standardized testing, and standardized curriculum was nearly ubiquitous throughout the inquiry projects. In particular, PSTs grappled with the lack of time they had to teach and conduct teacher research due to testing. The second theme pertains to the PSTs’ conceptions of inquiry, which some PSTs attempted to use as a method to control or manipulate students to fit within an educational paradigm that was already failing them, thus perpetuating deficit thinking that significantly reduces the chances of student success. In other words, PSTs sought to mold student behavior to fit the needs of the pre-determined classroom behavior management plan without asking deeper, more probing questions as to why the classroom environment was not working for a particular student. Finally, the inquiries in this study reveal the tension of being a guest in mentor teacher’s classroom and the tenuous position of the pre-service teacher, as many were unable to fully develop a wondering of their own choosing and data collection plan of their own design. A more detailed discussion of the findings related to each research question is below.
Research Question 1: What questions do PSTs ask about student learning?

Because PSTs were asked by their instructors to pose wonderings about the learning of one individual student, 28 of the 30 inquiry projects posed a wondering about one specific student in their practicum classroom. Twenty of the students were male and eight were female. Mentor teachers were often instrumental in guiding the PSTs towards the individual student. The two remaining inquiry projects in the data set focused on either the entire class or a small group of students. Inquiry papers largely focused on improving the reading skills (13 papers) of a struggling student, behavior management strategies (5), or the development of math (3) and writing (2) skills. The majority of these questions PSTs asked fall within Gordon’s (2016) “pragmatic research” typology of inquiry. Pragmatic research questions seek “to solve a concrete problem and to develop new knowledge through the problem-solving process that will improve future practice” (p. 1). Indeed, wonderings regarding reading typically asked how implementing a reading intervention program with a struggling student would increase their performance in fluency, accuracy, and confidence. Wonderings such as, “How can the use of a behavior contract and PBS [Positive Behavior Support] increase the overall positive behavior produced by a previously retained 1st grader?” or “What behavior management strategies work best to prevent and control the behavior of a child with autism?” are representative of the types of wonderings formed regarding behavior management.

While inquiries generally centered on controlling student behavior or improving reading or math performance through pullout-type instruction, other inquires focused on developing solutions to particular classroom problems, including using guided conversation to increase a students’ likelihood to speak, delivering instructions through song, developing a student’s social/emotional competence, tinkering with font type to aid in reading ability/transfer, and using dialogue journals or technology to improve academic performance. Five of the thirty inquiries asked about student confidence in addition to a content focus. Only one student developed a wondering that was unrelated to a tested subject area (science). No inquiry focused on social studies.

The overwhelming focus on reading skills in these inquiries can likely be attributed to two related factors. First, the influence of standardized testing on elementary schools has led to an increased focus on tested subjects—math and reading—leading to the marginalization of other subjects (D’Souza & Kullberg, 2018; Fitchett & Heafner, 2010; Fitchett, Heafner, & Lambert, 2014; Heafner & Fitchett, 2012). The imperative to prepare students for the upcoming reading (and to a lesser extent, math) tests, and the likelihood that reading instruction
dominated the school day, likely influenced the focus on reading. Second, and certainly connected, the teacher preparation program of which the students were a part focused heavily on a literacy initiative developed by university faculty. PSTs had been provided an extensive summer training to become certified instructors. Half of the reading-focused inquiries used this initiative.

Research Question 2: What challenges did PSTs encounter?

Although only 16 of the 30 inquiry papers explicitly mentioned the challenges they faced while working on their inquiry, challenges emerged both implicitly and explicitly. Challenging time constraints, the imposition of standardized testing, and a lack of autonomy in the practicum classroom emerged as the greatest challenges PSTs faced while implementing an intervention for a student in their classroom. Not unrelated to one another, each challenge limited the PSTs’ abilities to collect data in a systematic and intentional way. Time management was by far the most often cited challenge to implementing an inquiry in a systematic and intentional way in the practicum classroom. One PST investigating how to improve literacy skills wrote, “I found that our word work sessions cut into time set aside for classwork and station work.” Another PST investigating a similar inquiry had to modify a pre-existing literacy initiative to “save on time.” Pre-interns cited other responsibilities such as working at reading stations or teaching when the teacher was unexpectedly absent as roadblocks to engaging in inquiry. One PST wrote, “while it was important to me to spend as much time as I need to work on the skills that were being targeted in my inquiry, there are also other responsibilities to be seen to.” Another explained, “It became extremely difficult to keep up with all that I had planned.” In other words, inquiry was apart from, rather than a part of teaching practice. Time constraints led to fewer opportunities for data collection and fewer interventions with the individual student each pre-intern worked with. As a result, some inquiries were the result of one week of interventions with a student or sporadic data collection leading to what PSTs determined to be inconclusive results.

Closely related to the challenge of time management, standardized testing interrupted inquiry projects. Students characterized the testing interruptions as “out of [their] control” and claimed they were unexpected interruptions to their data collection process. One student wrote, “due to FSA testing, my plans did not work out as I intended. I had to forfeit one of the two full-days I was in the classroom… so I was unable to pull her out for one of the two days for three weeks worth of testing.” Another wrote,
Although my plan was to implement the audio recording strategy with Kyle (pseudonym) for at least 20 minutes a day, two days per week, I was only able to do so three times over the course of several weeks, due to testing, which messed up our class schedule.

The structure of the day, determined by mentor teachers and school administrators, also interfered, as one PST wrote, “My intervention plans were unsuccessful due to the way the reading block is structured. I am responsible for leading a reading station, which made it difficult to set aside the 15 minutes to intervene with just Deon (pseudonym).” Others claimed that school wide standardized assessments (not state tests) interrupted their inquiries and provided them with faulty data that, after working with students one-on-one, they came to realize was not an accurate portrayal of students’ ability level.

Lack of autonomy also challenged PSTs. Because of the nature of the practicum placement, pre-interns spent only 16 hours per week in a classroom and had to determine an inquiry question early in the semester. Some PSTs explained that implementing a data collection plan in an intentional way would be impossible if they were only in the classroom for three days per week. When pre-interns were not at their school site, mentor teachers conducted class on their own terms, sometimes undoing the work of the pre-service teacher. One PST wrote, “the classroom teacher decided to take her own endeavor towards helping Derek (pseudonym) and keeping track of his behaviors,” a decision she believes derailed her progress with the student. Other students wrote about how their mentor teachers’ practices and beliefs interfered with their projects, including the use of ineffective behavior charts or negative and hurtful talk to “problem” students. With a lack of autonomy to change established routines and practices of the class, PSTs were asked to enact policies and procedures that they believed were not effective. One PST wrote that her mentor teacher actually chose her inquiry project for her, leaving the PST to conduct an inquiry about which she was not passionate. As a result of this lack of autonomy, many inquiries were conducted with the goal of trying to mold students to fit into an existing classroom environment rather than asking how the classroom environment might be altered to meet individual student needs.

Research Question 3: What are the weaknesses of PSTs’ inquiries?

Weaknesses of the inquiries in this study stemmed from PSTs’ lack of knowledge of (perhaps stemming from a lack of preparation with) the “nuts and bolts” of inquiry, the positioning of inquiry as a project, not a stance, and the pervasiveness of deficit thinking. Although conducting an inquiry into one’s own
practice is a fluid and recursive endeavor, Dana and Yendol-Hoppey (2008) have identified key phases of the inquiry process, including posing questions, collecting and analyzing data and relevant literature, implementing changes to their practice, and sharing findings with their communities. Because inquiry is a stance, not merely a project, questions should continually emerge from new learning. An inquiry stance should help teachers “continually unearth and discover new questions about his or her own teaching” (Dana & Yendol-Hoppey, 2008, p. 16). Because of the focus in the literature on the importance of the development of new questions and wonderings, and the inclusion of this requirement in course materials, it was surprising that only 11 of the 30 PSTs developed a new wondering in their inquiry papers.

Similarly, only 14 of the 30 PSTs referenced relevant scholarship on their topics, an essential element of teacher research. Literature should be read while developing a data collection plan or during the data analysis phase to help place the learning in a larger context, as indicated by Dana and Yendol-Hoppey (2013). As part of the seminar course, all PSTs were required to investigate the research literature and write a brief literature review related to their topic after reading and discussion of the relevant Dana and Yendol-Hoppey (2013) chapter making the absence of scholarly references notable.

Lastly, while data collection methods varied widely from paper to paper, and many of the methods were rich and varied in individual papers, PSTs avoided interviewing students, even when their papers would benefit from student voice. While this was not a requirement of the assignment, it was an option—an option that was not chosen by many of the PSTs. Seven of the 30 PSTs interviewed students, but a closer look at the transcripts of these interviews reveals that PSTs did not know how to elicit responses from young children, likely from a lack of preparation to do so. Many responses were one or two words and rarely did the PST ask a follow-up question to obtain more information. The lack of student voice in the papers, especially inquiries that focused on connecting academic content to student interest, is a crucial oversight.

A second weakness was the indication in many papers that inquiry was a project, not a stance maintained by the pre-service teacher. This manifested itself in two ways. In some instances, PSTs indicated their desire to come to a conclusive finding rather than acknowledging that inquiry is a process of unearthing new questions. For example, some PSTs made conclusive statements about students (lacking appropriate data) and failed to problematize their own bias and assumptions. One PST wrote, “Through data collection I was able to conclude that the behavior had no connection to the medication and instead was caused by
lack of engagement.” Others explained, “After completing my inquiry, I have come to the conclusion that implementing behavior management systems all depends on motivation,” or, “In Derek’s case, we know that his lack of motivation stems from his environment at home.” These conclusive statements leave little room for future wonderings and place blame on students rather than turning the gaze inward to question what might be altered in the classroom environment.

PSTs also indicated that they viewed inquiry as a project and not a stance in more explicit ways. Rather than framing their projects as a way to help students, a small number of PSTs were more likely to frame their projects as a way for students to help them. They referred to “using” students for their inquiry projects or explaining to students how they were “helping me for my school work.” Similarly, when roadblocks interfered with her data collection, one PST wrote, “I therefore changed my schedule to do a session every day for the remainder of my time with her (about a week at this point), in order to try and make up for lost time and get the results I need.” Framing the intervention as a way to get results for a project does not indicate a burgeoning inquiry stance to help students improve academically and instead suggests that some PSTs view the inquiry project as just that—a project.

Lastly, deficit thinking manifested in some of the inquiry papers. In particular, low-income students and students of color, as well as students labeled exceptional or in need of special services, have been the target of deficit thinking (Picower, 2009; Trent & Artiles, 1998). To borrow a definition from Sharma (2018),

Deficit thinking is a very common way of thinking which affects our general way of being in and constructing the world. Differences from the “norm” are immediately seen as being deprived, negative, and disadvantaged. It never questions the legitimacy of what is deemed to be normal nor does it consider that differences may actually go beyond expected norms. … Deficit thinking leads to stereotyping and prejudging. It marginalizes certain people on the basis of misinformation and misconstructions. (p. 137)

This type of thinking framed some PSTs’ inquiries and revealed implicit assumptions about “problem” students. PSTs positioned students as the problem in the classroom that needed to be fixed. For example, one PST wrote of an African American student: “Intervention after intervention has been tried with the Fieldcreek staff and Derek. Hopefully soon there will be success with a method that one caring individual implements.” She concluded that Derek’s inability to
comply with behavior expectations was the result of “how the mother and grandparents feel about education,” and failed to acknowledge that behavior management charts are guided by a culturally imbued value system based on a teachers’ understanding of “good behavior.” Weinstein, Tomlinson-Clarke, and Curran (2004) remind us that “definitions and expectations of appropriate behavior are culturally influenced, and conflicts are likely to occur when teachers and students come from different cultural backgrounds” (p. 26). As many teachers can attest, “a lack of multicultural competence can exacerbate the difficulties that novice teachers (and even more experienced teachers) have with classroom management” (p. 26). This lack of cultural competence led to a reliance on negative stereotypes to explain undesirable behavior, such as a PST describing “a lack of motivation on the part of the student,” even as she later described the same student as “volunteering to answer questions…and actively participating in small group work.” Rather than investigating what activities did motivate the student and transforming instruction for the student, the PST instead settled on what appears to be an inaccurate stereotype to explain undesirable behavior.

Deficit thinking extended beyond behavior and into academics as well. Some PSTs suggested that if students could not succeed during whole group instruction or in one particular classroom environment they might need to be tested for a learning disability. One PST questioned, “Was Billy not completing his work and being sidetracked because he didn't believe he was smart enough to complete it, or again—is it an issue in which his family would need to consult a professional about?” Rather than asking what instructional practices or assumptions the teachers in the classroom could improve, the PST looked to the student for evidence of a deficit, in this case a learning disability. Another PST echoed the same sentiment, learning from her mentor teacher that although the student her inquiry focused on did “not have any identified learning disabilities…they are currently in the process” of establishing that documentation, further connecting distraction to disability. Another PST came to the conclusion that “Students that have been placed in the mainstream classroom, but have continuously struggled all year, need to be retested and placed in an environment where they will learn best.” Again, rather than question the environment and culture of the mainstream classroom, the PST believed a solution would be found in removing the child altogether.

**Discussion and Implications**

This study sought to understand the questions PSTs pose for their practitioner inquiries, the challenges they face in carrying out an inquiry, and the resulting weaknesses and strengths of their final inquiry papers. Twenty-eight of
the 30 papers focused on an individual child, two-thirds of whom were males. The majority of the projects focused on reading, management, or another tested subject area. PSTs faced challenges such as time management, the interruptions of standardized testing, and a lack of autonomy in the classroom. Weaknesses of their final papers included a lack of understanding regarding the essential pieces of an inquiry, including developing a new wondering at the end of the cycle and using literature to help contextualize findings. Other weaknesses included PSTs perceiving inquiry as a project, not a stance, and bringing a deficit lens, rather than a critically reflective lens, to the collected data. Inquiry became dominated by the neoliberal discourse of accountability and deficit thinking (Gaches, 2018) despite its tradition of empowerment and its social justice aims.

Based on these findings, I suggest three critical next steps for engaging PSTs with the inquiry process and one area of concern. First, programs that wish to promote inquiry towards social justice should pay attention to the types of intensive instruction and training PSTs receive throughout their programs. In this study, the literacy initiative that PSTs had received extensive training with appeared as the most common “intervention” with students. If students had similar experience working with programs aimed at disrupting deficit thinking, one wonders if the inquiry papers would have focused on different subjects. As Pollack (2012) argues, “everyday deficit-based teacher talk can operate behind the scenes to undermine teacher educators’ best efforts to help beginning teachers develop a genuine multicultural teaching practice—one that recognizes, honors, and builds upon students’ individual and cultural assets” (p. 98). As a result, enhancing the reflection skills of teacher candidates through coherent approaches in teacher education programs could help to dismantle deficit thinking. As Myers (2013) asserts, “preparation must begin as early as possible and well before” (p. 7) the beginning of an inquiry, as “the entire teacher education curriculum will promote the development of increasing level of reflection and associated cognitive abilities” (p. 7). While certainly the needs of mentor teachers and schools matter when PSTs embark on teacher research, prior coursework matters when PSTs conceive of wonderings.

Time management also became an issue for many of the PSTs. Instructors may wish to reframe how inquiry is presented to teacher candidates in order to eliminate time-related issues. For example, inquiry need not be a “pull out” type intervention that requires one-on-one interaction. Reframing inquiry as a more holistic endeavor involving reflective journaling, observation, and informal interviews—not just numerical scores—could help to ease the issue of not being able to work individually with students. Teacher educators who are working to teach PSTs the inquiry cycle must combat the pervasive accountability culture
that steers teacher candidates towards developing data collection plans around strict interventions that are implemented with fidelity. Doing so requires explicitly teaching about the neoliberal context of education as well as the research paradigms that have been deemed acceptable in such a culture (Van Cleave, 2012). Providing PSTs the knowledge of the larger research context that practitioner inquiry rests within would help improve their inquiries and the power Cochran-Smith and Lytle (2009) claim inquiry can provide.

Third, teacher preparation programs can cultivate a shared knowledge base around the purpose of inquiry by coaching mentor teachers and course instructors through their own inquiry cycles, thereby limiting the expanse of the boundary zone between the university and K-12 classroom (Zeichner, Payne, & Brayko, 2015). At the very least, making expectations clear across the spaces pre-service teachers must traverse around the central practices of practitioner inquiry could support the development of higher quality inquiries. Instructors and mentor teachers could then model the inquiry process for PSTs, encouraging them to see beyond inquiry as project or inquiry as assignment. Programs may also decide to infuse the inquiry cycle with supervision or coaching (Schroeder & Currin, 2019), thereby normalizing inquiry as a process meant to continually improve practice.

While there are certainly steps to be taken to mitigate “bad inquiry,” the concern remains about the lack of autonomy PSTs hold in the classroom. Due to the PSTs’ support role in the classroom during their clinical experience, mentor teachers in this study often requested that the PST focus on a particular student for inquiry. Focusing on an individual child can be helpful in developing “the knowledge base needed for prospective teachers to engage in differentiated instruction and accommodations for diverse learners” (Dana & Yendol-Hoppey, 2013, p. 64), yet by having a mentor teacher determine the inquiry focus for PSTs, a disservice is being done to an inquiry process that should be driven by one’s own felt difficulties and passions (Dana & Yendol-Hoppey, 2013). No one should be pushed into “conduct[ing] research into someone else’s research questions” (Dana & Yendol-Hoppey, 2013, p. 68). Preservice teachers also found their work with students, whether chosen by the mentor or not, being “undone” by their mentor teacher when they were not in the classroom, as their internship experience was not full-time. Lacking control over their topics, time to fully develop wonderings, and implementation of a data collection plan, PSTs struggled to engage in an ideal inquiry cycle. More research is needed into how PSTs navigate this tenuous position with their mentor teachers and how teacher preparation programs can support this endeavor.
Conclusions

Ultimately, inquiry will not have the transformative impact it is intended to have if it becomes a tool to maintain deficit thinking or the status quo of accountability culture in public schools. Analyzing tenets of “bad inquiry” enables teacher educators to see the pitfalls of inquiry when not carefully coached and intentionally planned for in teacher education programs. This study suggests that PSTs must be carefully guided through inquiries, challenged when they fail to question their own practice, and pushed to think beyond the constraints of accountability and standardized testing. Teacher educators who coach PSTs to move beyond deficit thinking and accountability culture by thinking carefully about coursework, educating PSTs about the neoliberal context of education, and cultivating a shared knowledge base around inquiry will be one step closer to helping PSTs develop an inquiry stance so necessary in an age of decreased autonomy.
References


Lysaker, J., & Thompson, B. (2013). Teacher research as a practical tool for learning to teach. Language Arts, 90(30), 181-191.


Appendix A

Writing the Inquiry Paper

Parts A-C: Getting To Know My Student and Her/His Needs

A. **Introduction and Rationale**: Who is the student? (grade, age, etc.) Provide as much relevant background information as possible. Why did you select this student(s)? What elements led your curiosity about the student(s) need for an intervention? End this section by stating your inquiry Wondering.

B. **Preliminary Data Collected**: What initial information did you gather about your student in order to learn more about him/her and his/her learning situation and needs? Include the specific types of assessments, names of tests, indicate what information was teacher created or student created. Describe in detail the process you went through to gain knowledge and insight into the student(s) background and previous learning experiences. Include specific/relevant details about your three observations (i.e. location, subject, time of day).

C. **Analysis of Preliminary Data**: What did you learn about the student(s) through the initial data collection process? Share ANY insights that have been gained about the student(s) through your initial collection of data (i.e. observations, review of folders, teacher interviews, student work).

Part D-F: The Intervention(s), Data Collection & Analysis

D. **Description of Intervention/Accommodation/Strategies**: What exactly was your plan of action with the student(s)? What specific interventions, accommodations, or strategies did you implement to assist the student(s)? What was your rationale for these actions?

E. **Description of Data Collection**: What was your systematic data collection plan? How did you gather data that indicates the student(s) response to your action, from part D? Remember these actions should correlate directly with your inquiry question. What specifically did you use to track the observations? This will include, but not be limited to, student work samples and your inquiry journal.

F. **What Happened (Data Analysis)**? As you implemented new interventions, accommodations, and strategies how did the student respond in reference to your inquiry question? What specific indications suggests that the actions taken were effective/ineffective and to what extent? What data support your findings?

Part G: What I Learned

G. **What have you learned about this student, your teaching, and the challenges of public schools**? Explain what you have learned about the student(s) from your actions with this inquiry. First be specific about this student(s) then you may
generalize about how this information may impact how you teach other students in the future. How does this connect with the way you will approach your future teaching experiences and the challenges you may face in the process?

### Rubric for Teacher Inquiry Paper

<table>
<thead>
<tr>
<th>Elements</th>
<th>Low Level Evidence</th>
<th>Mid-Level Evidence</th>
<th>High Level Evidence</th>
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<tbody>
<tr>
<td><strong>Part A:</strong> Rationale and Wondering</td>
<td>Little or no rationale for studying your student’s learning is provided and/or question to be explored (“wondering”) is not stated.</td>
<td>Discussion of rationale is present, but lacks clear connection to a question (“wondering”) that can be systematically studied.</td>
<td>Rationale for studying your student’s learning is strong and maintains a clear connection to the question (“wondering”). The wondering is one that can be systematically studied.</td>
</tr>
<tr>
<td><strong>Part B:</strong> Description of Preliminary Data Sources</td>
<td>Little evidence of preliminary data collection</td>
<td>Inappropriate selection of data, or data collected is not connected to “wondering”</td>
<td>Initial data collection process is clearly defined and described to the point that it could be replicated by someone else.</td>
</tr>
<tr>
<td><strong>Part C:</strong> Summary of Analysis of Preliminary Data</td>
<td>Summary of analysis lacks depth</td>
<td>Summary is well written, but there is insufficient use of data to support your findings.</td>
<td>Findings are clearly connected to your analysis of preliminary data. Data is used to explicate and provide evidence for the preliminary findings.</td>
</tr>
<tr>
<td><strong>Part D:</strong> Description of and Rationale for of Intervention Plan</td>
<td>Inadequate description of intervention(s)</td>
<td>Description of intervention lacks details or a strong rationale.</td>
<td>Detailed description of intervention plan includes artifacts as evidence. Rationale for this particular intervention is clearly stated.</td>
</tr>
<tr>
<td><strong>Part E:</strong> Description of Process and Methods for Data Collection</td>
<td>Inappropriate selection of data or data is not connected to your “wondering.” or description is too weak or too few sources of data collection were used.</td>
<td>Data collection methods and your process/plan is appropriate to your “wondering” and described. However, the plan would not be able to be replicated by someone else because not enough information is given.</td>
<td>Data collection methods and process/plan is clearly defined and described to the point that it could be replicated by someone else.</td>
</tr>
</tbody>
</table>