

Preparing Social Justice Oriented Teachers: The Potential Role of Action Research in the PDS

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ABSTRACT: Deliberate investigation into practice is an essential of the National Association for Professional Development Schools' defining elements of a Professional Development School (PDS). This article reports on the pilot efforts of one PDS as it initiated deliberate investigation through action research with a small group of teacher candidates. The process of implementation across a semester is detailed as the authors attempted to integrate action research into an already existing internship structure. There is a particular focus on how action research can serve to prepare social justice oriented teachers and help them to develop the necessary inquiry stance for such an orientation. The candidates' own stories of their action research are told and the PDS supports that enabled their success are detailed—critical friends groups, clinical mentor faculty, and the very process inherent in action research. Two of the interns additionally share their experiences during their first year and a half of in-service teaching.

PDS Essentials Addressed: #4/A shared commitment to innovative and reflective practice by all participants; #5/Engagement in and public sharing of the results of deliberate investigations of practice by respective participants

Introduction

Social justice is a necessary goal for which we need to be preparing our pre-service teachers to strive. This means helping our pre-service teachers to develop the tools necessary for such work, including the skills to recognize injustice. As Young characterizes below, oppression operates as something so normal that we often do not recognize its existence. It is just the way things are.

Oppression refers to systemic constraints on groups that are not necessarily the result of the intentions of a tyrant. Oppression in this sense is structural, rather than the result of a few peoples' choices or policies. Its causes are embedded in the unquestioned norms, habits, and symbols, in the assumptions underlying institutional rules and collective consequences of following those rules (Young, 2000, p. 36).

Young's characterization of oppression as being structural means our actions and thoughts are guided by an invisible framework

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that dictates what we see and how we see it. We often do not recognize oppression, as we are within it. We continue on, recognizing that things are just and as they should be.

Schools, as institutions, can be places of such structural oppression for both students and teachers. They are filled with unexamined assumptions and unquestioned habits, and as a result, are often accused of perpetuating a cycle of social injustice. Students from subdominant social groups have historically found themselves victims of oppressive conditions. Their school outcomes are grossly affected by the teaching and undetected bias or ignorance of those within the invisible framework (Hinchey, 2004). Students, however, are not the only group affected by the institutional oppression that exists in schools. Teachers have historically felt the marginalization of their skills and identities as they are reduced to technicians rather than skilled professionals (Apple, 2009; Goodlad, 2004; Kozol, 2005).

Interrupting a cycle of oppression that exists in schools due to unquestioned assumptions and habits is a task of great magnitude. However, there are promising practices that engage school faculties in awakening their skills for examining both advantaged and oppressed populations within the institution. The structures and practices of Professional Development Schools (PDSs) hold this kind of promise.

Professional Development Schools are “institutions formed through partnerships between professional education programs and P-12 schools. Their mission is professional preparation of candidates, faculty development, inquiry directed at the improvement of practice, and enhanced student learning” (NCATE, 2001, p. 1). According to the National Council for Accreditation of Teacher Education (NCATE), PDSs have five standards that define them. The standards are in the areas of Learning Community; Accountability and Quality Assurance; Collabo-

ration; Diversity and Equity; and Structures, Resources, and Roles.

When operating within a framework of social justice principles of equity, access, and respect, the fourth standard is particularly salient. Standard 4: Diversity and Equity, highlights a demand for ensuring equitable outcomes for all students within a PDS. By implementing “curricula in the university and school programs that reflect issues of equity and access to knowledge by diverse learners” (p. 14), in-service and pre-service teachers are pushed to systematically reflect on themselves, analyze their students’ learning data, and evaluate school-level practices that support equitable opportunities and outcomes for all students, especially those that have been historically underserved in public education.

This article highlights a partnership between George Mason University and a local elementary PDS site. In this article, we detail our first pilot attempt to address social justice principles through pre-service teachers’ inquiry into student learning. We focus on a group of interns in the PDS who engaged in formal inquiry through action research. We studied our attempt and, in this article, detail how the interns’ work within the Professional Development School structure aided their ability to study their practice and afforded the interns the opportunity and power to do so. Working collaboratively with their mentor teachers (Clinical Faculty or CF), the school-based PDS site liaison (Site Facilitator or SF), and the university faculty member assigned to the school (University Facilitator or UF)¹, the student teaching interns conducted inquiries into student learning and successfully promoted student success. The PDS interns, who

¹George Mason’s elementary PDS program uses the terms Clinical Faculty (CF), Site Facilitator (SF), and University Facilitator (UF). CFs are mentor teachers who have taken a 3-credit graduate course in mentoring. Each PDS has one SF who is a teacher at the school and who facilitates PDS elements at the school site. Each school has one UF who is a university faculty member and who facilitates between the university and the school and is responsible for intern supervision and coaching. The UF is at the PDS a minimum of one day per week.

are also article co-authors, chronicled their process, identifying resources and structures that supported their progress along the way. Two of the interns also reported on how their newly developed inquiry stance influenced their first year and a half of teaching. Our learning throughout this process has much to offer others who seek to engage PDS interns for the first time in action research and who seek to foster an inquiry stance for social justice.

What is Action Research and How Does It Relate to Social Justice?

Action research in education is a process known by many names, including teacher research, teacher inquiry, self-study, and practitioner inquiry. These terms come with their own histories and underlying intents, but each describes the same general process that positions teachers, not outside experts, as the drivers and the scholars of their instructional practice. As Hinchey (2008) defines it, action research is “a process of systematic inquiry, usually cyclical, conducted by those inside a community. . . . [I]ts goal is to identify action that will generate improvement the researcher believes important” (p. 4). The “improvement” element of this kind of work is paramount. The goal of action research is just that—action. The study of practice for the sake of study is not of interest to the teacher researcher in the same way it might be to an academic. Rather, the study of one’s practice in ways that can lead to improved outcomes and enhanced educational equity for *their* students is the purpose of such endeavors. Teachers as researchers seek to surface and problematize taken-for-granted assumptions that underlie their work in schools. Reflection is intentional and inward (Dana & Yendol-Hoppey, 2008). The National School Reform Faculty’s cycle of inquiry (NSRF, 2013) is a useful tool to visualize the model, although it

must be noted that the process is typically anything but linear (Figure 1).

Scholars advocate for the potential of action research to promote social justice, particularly when employed in teacher education programs. For example, Zeichner (2009) claims that “action research offers much potential as an instructional tool for teacher educators who want to work toward a better education for all students within the context of a social reconstructionist-oriented teacher education program” (p. 67). Working for social justice through such a means offers a way to counter what he cites as the “new professionalism,” which “accepts the view that decisions about what and how to teach and assess are largely to be made beyond the classroom rather than by teachers themselves” (p. 87).

When teachers begin thinking of themselves in such a technical way, assumptions about student progress and about the nature of school mask teachers’ abilities and moral obligations to respond to their students’ needs. Often a culture of excuses develops in schools when teachers are unable and unprompted to recognize that student success is highly dependent on their teaching practices and school policies. Thus, when students are unsuccessful, teachers resort to placing the blame on students’ shoulders rather than looking inwardly or at the broader teaching and learning environment (Corbett, Wilson, & Williams, 2002; Heilbronn, 2011). Such behaviors and perspectives characterize an institutional stance of oppression.

As Hinchey (2004) stated, “the fact that we can’t make choices until we recognize choices has profound implications” (p. 136). Considering action research as an emancipatory act or process offers promise for lifting the veil on oppressive conditions in schools and classrooms that might otherwise go unexamined. The idea that action research can simultaneously create greater conditions for educational equity for students while empowering teachers to question the status

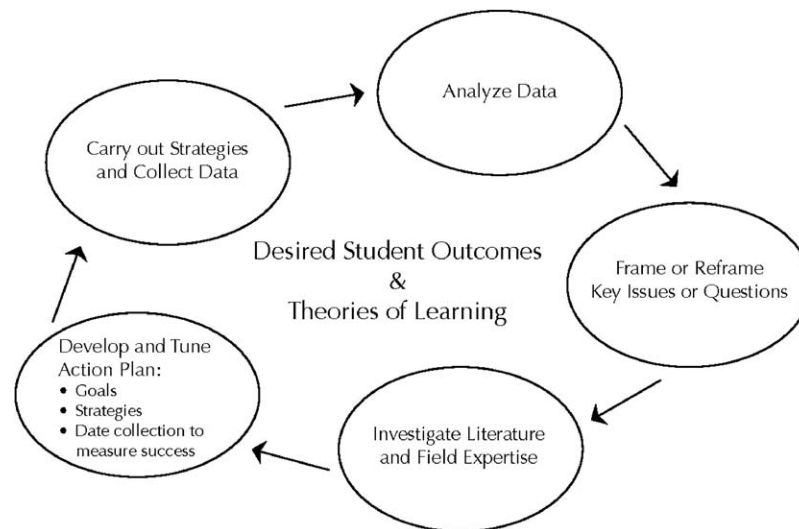


Figure 1. Cycle of Inquiry from the National School Reform Faculty www.nsrffharmony.org

quo is of great benefit to PDS work. In summary, action research offers teachers the ability to recognize—and change—their instructional choices.

Setting

The PDS site in which we operated is a high-poverty, English Language Learner (ELL) dominant school. Over half of the students are English Language Learners (54 percent) and 65 percent receive free or reduced price lunch. The school is characterized by a majority Hispanic and Asian population (58 and 27 percent respectively), with White, “Other,” and Black making up the remaining student body in that order. The school had been an active PDS site for fifteen years. During this time, it had experienced a variety of administrative, teacher, and student changes.

The school faculty has sought to break a cycle of underachievement that often plagues schools with similarly high rates of poverty and English Language Learners. Increasing or maintaining student achievement in schools with high percentages of students living in poverty tends to be challenging. For instance, when poverty levels in an elementary school

rise twenty-five percent, reading and math achievement scores decrease by approximately thirteen points (Planty et al., 2009). Nationally, 11% of Hispanic students are retained in kindergarten through eighth grade, and the Hispanic school dropout rate is four times higher than that of White students (Planty et al., 2009).

To combat such outcomes, the faculty at our PDS school now offers ongoing professional development for their teachers that their student teaching interns also attend. Research-based best practices are taught by colleagues from within the building, county, or occasionally national leaders. For example, faculty members have been trained in Kagan collaborative learning strategies (1994), Marzano’s reviewed instructional strategies (2004), and Eric Jensen’s brain research (1998). The school’s early release Mondays provide two hours at least once a month to engage in these professional development opportunities. The county has also embedded into the calendar, days devoted to training and provided a budget for teachers to attend county trainings. Staff is also using learning data to drive their instruction and they regularly ask questions about their instruction and student learning as part of the Professional Learning Community (PLC) model. In the PLC model, teachers are

organized into working groups to collaborate on instructional design and the analysis of data. For some teachers at the school, questions raised in these groups become formal opportunities to study their instructional practice through the process of action research. School faculty members have the voluntary opportunity to be part of a group of colleagues that engages in processes of inquiry together.

Our Action

Social justice is a core value in George Mason's elementary education program. This principle defines our work in the program and reflects our program's commitment to developing teachers who share this value. Promoting equitable learning opportunities for students is a key standard of NCATE. As mentioned, we believe the marrying of these two ideals, PDS and social justice, holds great potential for the success of students who have been historically marginalized in school.

Part of Mason's graduate elementary education program includes a teacher research capstone course that all candidates take upon completion of their student teaching experience. As a part of this course, students had traditionally crafted a proposal for a potential action research study, but did not actually have the opportunity to implement the proposed plan as they were finished with their student teaching by that time. Upon reviewing the course and the action research proposal task, the first author of this article—a university faculty member and University Facilitator—grew concerned about the potential to fully and meaningfully create teacher researchers who would be able to question the status quo of their new school environments. Because the teacher research course took place in the summer, the proposal was unavoidably disjointed from the purposes that underlie action research; it did not grow out of a real classroom question or issue, but rather was decontextualized into just something that may

have held pedagogical interest for the candidates.

Upon realizing that our elementary education graduates did not have the opportunity to engage in systematic inquiry during their student teaching, we as a team—the SF, who engages in action research as a teacher herself, and the UF, who has led numerous teacher education students through the inquiry process—grew interested in how we could begin to weave such an inquiry element into the student teaching semester. We jumped in feet first to see where the process would take us. Beginning in January when student teachers at the school began their independent student teaching semester, we met with the four interns at our PDS site to discuss the possibility of conducting some form of action research during their internship.

We used an already existing internship task to frame the work in order to keep the process familiar and embedded in already established expectations for the teacher candidates. We wanted to avoid the perception of action research as “one more thing to do.” A critical incident reflection task was already a requirement for all interns. The original task asked each intern to choose a specific incident from their independent teaching experience where there was a discrepancy between their intent and the outcome that was achieved. They were then to analyze the incident, support it with information from the research literature, describe alternative ways of thinking about the incident, and finally describe what they would do differently as a result of their analysis. Their process would be presented to PDS faculty in a sharing session at the conclusion of the internship. While it was intended to be a robust task to engage interns' critical reflection skills, interns typically used the task to showcase their implementation of a unit of study and chose incidents that were more superficial in nature rather than critical (for example, anticipating one type of response from students and getting another).

To achieve a similar reflective experience, but one that was grounded in immediate use of data and ongoing reflection designed to change instruction for students immediately—as action research projects require—we molded this task into an ongoing systematic study of the effect of the interns’ instruction on students. While we know that critical incident reflections can be very powerful for reflective learning and developing social justice dispositions in teacher education (Knight-Diop & Oesterreich, 2009), we wanted the experience we were designing to be more robust than it previously had been interpreted by our students. That is, we wanted it to offer opportunities for immediate implementation of reflective learning so that inequitable learning conditions could be immediately interrupted in interns’ classrooms.

As stated, we needed to fit the work within already established structures since this was a pilot for implementing action research at the PDS site. Therefore, in addition, we used already scheduled one-hour monthly seminar times as Critical Friends Groups (CFGs) where the SF and UF provided both instruction on action research and guidance in conducting it. Critical Friends Groups are school-based groups where members focus on student learning and developing their capacities to positively affect that learning. Curry (2008) explained that CFGs “rest on the premise that classrooms ought to be the center of school reform efforts and that teachers should lead educational change” (p. 735). CFGs avoid the practice of reducing teachers to technicians and instead enable them to actively inquire into student learning and their own instructional practice with peers who support yet push their thinking. Through engaging in CFGs, our interactions became, in the words of one intern, a “highly scaffolded” process, which afforded the interns the space necessary to begin to wrap their heads around this new idea of teacher research while simultaneously engaging in it.

The experience of each intern was unique as they focused on aspects of their instruction and their students’ learning that were most relevant to and essential for their teaching contexts. To illustrate this experience and provide context for the identified essential supports that follow, we first present brief cases describing each of the four interns’ research. The cases of interns—who are also co-authors of this chapter—Melissa, Renee, Aaron, and Christine—are presented in their own first-person words. Each intern describes his or her attempt at interrupting potentially oppressive conditions in their classrooms, both for their students and for themselves as teachers. Each case below opens with the question each intern chose to address and then details their implementation. The sections of this chapter that follow the cases detail the structures and supports that aided their action research at this PDS. They include the ongoing Critical Friends Groups, the involvement of the clinical faculty, and the reflective nature of the action research process itself.

Intern Cases

Melissa: “How Does Student Engagement During Reading Mini-Lessons Translate to Preparedness and Understanding During Guided Reading?”

Upon learning that I would conduct action research during my teaching internship, I felt overwhelmed. The overwhelming feeling likely came because I had never heard of action research before and had not taken any classes about action research. However, the more I learned about action research in the classroom, the more I realized how much more I would learn about teaching and myself by engaging in this experience.

Since my first graduate school class about curriculum and management, I was curious about student engagement levels and how best

to actively engage students in the content being taught. I always found myself asking, “How could they be learning if they are not engaged?” In my highly culturally and linguistically diverse first grade class, some students may sufficiently engage without the help of active engagement techniques while other students have a harder time focusing and are therefore less prepared for guided reading that occurs after our whole group mini-lesson. Such disengaged students are not as equipped as others for success in reading overall. Through the use of active engagement techniques, I wanted to attempt to give each student the same opportunity to be as prepared as possible for guided reading and, later, independent reading.

Therefore, during reading mini-lessons, students were asked to turn and discuss questions posed by me and share thinking with their peers. By asking students to turn and talk, I wanted each student to be held accountable for answering, or at least thinking about, the question asked about the lesson being taught. In other words, I wanted to heighten their level of thinking and engagement. In this way, all students would be given access to the content taught in a way that best met their learning styles. In addition to the use of “turn and talk,” action was taken by asking all students to provide nonverbal responses in the form of sign language. In this way, each student was responsible for answering every question I asked in a low-risk way. Students also experienced modeled instruction in the form of physical cues for reading strategies and visual reminders of sentence frames written on sentence strips.

In order to collect data for my research, I used engagement checklists and anecdotal notes during reading mini-lessons and running records, anecdotal notes, and student work samples in guided reading. In order to analyze the data, I compared anecdotal notes and engagement checklists taken during reading mini-lessons to running records, anecdotal notes, and student work samples collected from guided reading sessions. Comparisons were made between engagement level and performance and then paired with specific strategies used to attempt to heighten active student

engagement levels. Such action and data was taken and collected over a one-month period.

Most notably, students’ engagement levels and success in guided reading was improved through the use of turn and talk and physical cues for reading strategies. As a result of the action taken during my research, I found that students who seemed passively engaged during reading mini-lessons in the past were now experiencing success in guided reading. Most importantly, students were aware and proud of their success because their behaviors in guided reading mimicked the behaviors they practiced during reading mini-lessons. Due to the presence of active engagement techniques, all students were given the opportunity to practice reading strategies in a whole-group setting before employing them in their own reading.

Renee: “How Does Explicitly Teaching Quality Talk Affect How Students Articulate Their Thinking?”

About a week into my spring placement in third grade, my mentor teacher, Mrs. S, attempted to hold a Socratic Seminar with the class. Socratic Seminars are “collaborative, intellectual dialogues facilitated with open-ended questions about a text” (Billings & Roberts 2003, p. 16 as cited in Chowning, 2009). Socratic Seminars use conversation and questioning to empower students by purposefully developing their abilities to think analytically and question inconsistency. For this Socratic Seminar, the students all read *Jack and the Beanstalk*, and wrote up their own questions about the story ahead of time. Mrs. S explained and modeled for the students how a Socratic Seminar works, and truly attempted to maintain the role of a facilitator throughout the discussion.

However, the Socratic Seminar did not go as planned. About four students dominated the discussion, and there was little indication that the students were listening to one another before responding or posing a new question. Furthermore, the students did not wait for others to finish a response before beginning to talk, and when they did begin to talk, everyone started talking at the same time. There was little

back-and-forth discussion, and it became clear that students had a hard time speaking with one another in this open forum.

I felt that the students' inability to engage in open dialogue with one another stemmed from the fact that open discussion in the classroom is typically extremely limited, and they honestly did not know how to speak to one another. Therefore, Mrs. S and I decided to implement "Quality Talk" during guided reading. Quality Talk is an adaptation of Accountable Talk (Michaels et al., 2010) that uses sentence stems to scaffold full-sentence answering and pushes students to talk and think deeper. Quality Talk teaches students a method of effectively engaging with others in back-and-forth discussion. In order to roll out Quality Talk, Mrs. S and I modeled a conversation by incorporating the discussion stems into each of our four guided reading groups. As we modeled, the rest of the students observed and took notes on what made the discussion effective. We asked them to make comments about our body language, eye contact, words used, and the tone of our voices.

The students were then able to practice speaking with each other using the new criteria they established. During guided reading for the next four weeks, students were prompted by the teacher to use the stems during guided reading. By the end of week four, students were beginning to use the stems, unprompted, in whole group carpet discussions and guided reading. In order to study the effectiveness of Quality Talk, I took anecdotal notes throughout each guided reading discussion. Mrs. S and I reviewed these anecdotal notes to find trends and changes in the frequency of use of Quality Talk, the stems used by students, which students were or were not participating, and the overall strength of the discussion. In addition, I held another Socratic Seminar, which I analyzed using a rubric to compare to the same rubric used for the first Socratic Seminar. Lastly, I asked the students to fill out a questionnaire asking them what they thought about Quality Talk. The questionnaire was read over to find trends in students' opinion and thoughts about Quality Talk.

As a result of analyzing the data I gathered, I discovered how valuable discussion is to learning in the elementary classroom. Using Quality Talk as a scaffold to promote discussion in the classroom allowed students to share their opinions freely and to more readily learn from one another. Based on anecdotal notes, strong, student-led conversations increased over the five weeks. And from the rubric analysis, I found that students' abilities to justify their thinking increased during the Socratic Seminar from "seldom" to "usually." Students' higher level thinking skills seemed to be activated when they were asked to listen, analyze what was said, and form a response. Furthermore, Quality Talk dramatically helped them to become better listeners, as students' responses were more frequently based on preceding responses made by their peers. During our final Socratic Seminar, the students were respectful and polite to one another, even when they had differing opinions.

This process instilled in me the desire to conduct action research with my future classes. The goal of action research is to study an impact that will benefit the students. Action research makes any change you implement much more deliberate and meaningful to the students.

Aaron: "How Can I Maximize Student Engagement in Kindergarten Whole Group Lessons? How Does Increased Engagement Affect Student Learning?"

I had just begun a placement in a kindergarten class that was comprised mostly of English Language Learners. I began to notice that during whole group time student engagement was low. In particular, the part of the day designated for learning math through the monthly calendar was becoming extremely difficult, due to a planned length of 40 minutes. This low level of student engagement led to many off-task behaviors during whole class lessons and made the lessons difficult to complete. Planned lessons were extending well beyond their allotted time, even though I knew that it was possible to complete them within that timeframe. I could see that the two issues (low student engagement and length of lesson) were

related. When student engagement started to decrease, students with lower focus levels were participating less, which meant that they were unjustly being left out of the lessons.

I met with my CF (mentor teacher) to discuss potential intervention strategies. We chose to video record a lesson to serve as a baseline, observing when students were disengaging from the lesson and discussing strategies that might serve to increase student engagement. We came up with a list of methods to implement, which included structuring the lesson to include movement, explicit directions, calling on students randomly instead of just those students who raised their hands (cold calling), targeting leveled questions toward students based on their readiness stages, and elimination of dead time during the lesson.

When I first began collecting data, I noted that often only a handful of students would be involved in the lesson. The students who were not engaged and involved seemed to be apathetic for a number of reasons – namely lack of interest, lack of accountability within the structure of a whole group lesson, and lack of confidence. As a result, I came up with a plan to increase involvement for students who were less likely to volunteer on their own. Cold calling and targeted questions helped engage my disengaged students and with impressive results. Several specific students who had been listless in whole group lessons became much more attentive. Additionally, as these strategies were implemented, the number of interruptions and off-task behaviors decreased and more students were raising their hands to participate. We were able to cover more material with greater efficacy during our allotted time.

Overall, the changes I implemented led to higher student participation and an increase in student attention during these whole group lessons. These changes were apparent in more than just the levels of student engagement. I hope this change was due to a change in perception by the students: from my observations, they seemed to begin to believe not only in their *ability* to answer questions, but in their *right* to answer questions alongside their peers. These students had (unintentionally) been given

an inequitable opportunity to participate in the group, simply because they were not as dominant or as confident as their fellow students. Students were shown that they would all have opportunities to participate in the lesson, and that they may participate at any point within the lesson. When given the opportunity to participate in a system that rewarded their own styles of demonstrating their knowledge, these students began to flourish.

Christine: “How Does Inquiry-Based Learning Increase Critical Thinking Within the Social Studies Classroom, and What Are the Effects on Content Knowledge?”

As I sat observing a social studies lesson I found myself daydreaming and not paying attention to what my clinical faculty was teaching. My initial thought was how much I disliked social studies, but then I noticed that it was not just me. Many of the students in the classroom were also off-task and not paying attention. I could not blame them, though. The lesson was textbook direct instruction; students followed along while their teacher read over the information in her PowerPoint slide. It was obvious from their lack of engagement that the students in the classroom were not benefitting from this lesson. Of course, this was not an everyday occurrence, as their classroom teacher was typically very engaging. However, I still knew there could be a better way to relay this content to them.

When I was asked to think about choosing a “wondering” for my action research project, I thought of that moment of disengagement as I made my choice. The wondering I chose to focus on was how to incorporate inquiry into the social studies classroom. Over the course of six weeks I incorporated many inquiry-based lessons into my social studies instruction that was focused on Ancient China. The following are examples of types of activities.

- Asking, “Why?” (Why should I join your dynasty? Where do you think the Ancient Mesopotamians settled and why?)

- Open-ended activities (Choose an Ancient Chinese contribution you would like to explore and report back.)
- Open-ended questions (What does the word “religion” mean to you?)

Along the way, I assessed students’ progress by periodically asking them questions that caused them to provide responses that forced them to think critically about the content. I did this through exit tickets, graphic organizers, Know-Want to Learn-Learned (KWL) charts, and interviews with students. I also monitored their content knowledge through our common grade-level assessments of the unit.

Once all data was collected, I created a guideline to help decide what types of responses would be considered “critical thinking” or “higher level thinking.” I measured written responses against this guideline. I also looked at assessment scores to see if content knowledge was improving or dropping as more inquiry-based learning was being integrated into instruction.

As the research played out over five weeks, I saw an improvement in student responses. I used a rubric to gauge what was considered an appropriate critical thinking response. As the lessons continued, I found students were scoring higher on their responses and showed evidence of connecting to previous material and synthesizing. I also noticed a slight increase in their common assessment scores. Teacher observations noted student engagement from the beginning to the end of lessons, and these observations showed a range of students participating. Student learning was increased during this research experience and students showed more engagement.

Essential Supports

The preceding cases of the interns’ research illustrated how they altered the learning outcomes for their students by intentionally questioning their instruction and its impact on student learning opportunities. The subsequent study of those questions and the

supports to engage in these inquiries was uniquely possible because of elements of the PDS structure. There were a variety of elements that aided our work in implementing action research for the first time at this PDS. In this section, we hone in on three specific components that stood out as especially essential: the ongoing Critical Friends Groups, the PDS Clinical Faculty, and the nature of action research itself as a vehicle of reflection.

The Critical Friends Groups

To guide interns through the action research process, the UF and SF conducted four monthly meetings, which served as Critical Friends Groups. The groups were vehicles for the interns to obtain technical information about the action research process, but perhaps more importantly the groups offered the interns the opportunity for peer feedback and support during the action research process. Table A contains a timeline of our action research CFGs during this semester.

In our first monthly meeting of the semester, we framed the action research process as a process guided by data-driven instruction that develops teacher empowerment. The intensification of teaching and the curricular control that has become the norm across the United States has left many teachers feeling powerless to change their instruction to meet student needs (Apple, 2009). Action research turns this sentiment on its head. The teacher is encouraged to ask questions and to follow through with formal studies that are focused on improving outcomes for students. Through action research they are encouraged to question *and* act. Teachers become agents of change.

To enact the inquiry stance that was our goal, the SF and UF asked the interns to actively attend to their students’ progress and to note incidents where they found themselves questioning student progress in some way. In our subsequent second and third meetings, interns worked together to refine the individual questions that they had regarding their classrooms. The interns engaged in questioning experiences

Table A. Action Research CFG Timeline

<i>Month</i>	<i>CFG Tasks</i>
February (CFG Seminar 1)	Formulated a question for study and developed a plan for action
February/March (CFG Seminar 2 and 3)	Implemented action research plans, including data collection and analysis. In CFGs, shared progress and challenges and collaborated on solutions.
April (CFG Seminar 4)	Completed data collection and analyzed data.
May	Presented findings to the PDS site faculty

where they fleshed out the significance of their potential wonderings about student learning and differentiated between questions that would make meaningful differences for student learning opportunities and those that might just be generally interesting to study. This difference was important as it ensured that the interns were studying something that would have a genuine impact on students. Sample questions were offered to the interns to help them formulate questions that not only would make a difference for students but that would also be examinable. We used Dana and Yendol-Hoppey's (2008) Wondering Litmus Test (p. 64) to assess each question's strength.

By the end of the second and third monthly meetings, interns had crafted solid questions, reflected on why these questions were important to their own and students' learning, and surfaced related sub-questions that would be addressed through the inquiry. They also identified the information that would be necessary to determine the impact of their interventions and the data collection strategies that would offer them that information.

The third meeting was a workshop for interns to present successes and challenges they were experiencing with the implementation of their actions or interventions. Because these teacher candidates were then at different stages of action research implementation, we created small groups within our already small group of six. Those who had made a good amount of progress with their studies met with others who had also already begun their projects. They shared challenges and received direct feedback and ideas from their peers. Interns who were experiencing difficulty finalizing initial plans and getting started met individually with the CF and SF.

By our fourth meeting, all data had been collected and we began looking at data for analysis. Beginning as a group was important because the interns had not yet learned any of the formal theory regarding data analysis. We used the time together to talk through different types of data and different methods of analysis. Again, we came back to the work of Dana and Yendol-Hoppey (2009) to guide our efforts, as well as using Mills (2011) and his action research tools and procedures. We began some of the analysis together and discussed preliminary findings that were emerging in the process. Melissa described her experience at this meeting in the following way:

Toward the end of the data collection period, I met with my University Facilitator, Site Facilitator, and other interns conducting action research and discussed the findings up to that point. Before attending this meeting, I felt fairly confident that I had the data I needed to answer my question. However, there was still a great feeling of unknown about whether or not I was on the right track. After the meeting took place, I felt much better about my progress and everything I was doing relating to my action research and the improvement of the educational experience I was providing my students. This renewed feeling is a prime example of the importance of peer support in the action research process.

Finally, the interns presented their inquiries at an inquiry colloquium at the PDS. They completed their inquiry cycle by sharing their findings widely with not just each other but with the school faculty and administration.

The Clinical Faculty (CF)

Each intern implemented an action research design *independent* from—but not in *isolation* from—their clinical faculty. Although the interns and their clinical faculty did not technically conduct co-inquiries, clinical faculty in all four cases served as crucial supports for their mentees. Their ability to do this was in no small part due to their participation in the larger learning organization of the PDS. School contextual conditions play an important role in teacher capacity to intentionally work for equity (Philpott & Dagenais, 2012). Because of the learning focus of this school site, developed in part through their engagement as a PDS, the interns developed their skills of inquiry in an authentic context. Some of the CFs had previously conducted or were currently conducting their own action research stemming from questions that arose prior to the interns' arrival. This enabled them to not just help with data collection when needed (taking behavior tallies, for example), but also to mentor the interns in formulating their questions and action plans. This type of positive influence was seen above in all descriptions of the interns' research processes. Although we met as a Critical Friends Groups once per month to scaffold interns through the process, their CFs provided a daily guiding presence for the process as interns continually reflected on their actions and data.

The PDS CF role was more than that of a random mentor teacher. The parallel experience of engaging in action research with other colleagues and then being able to mentor the interns in such an activity seems important to highlight. As does the fact that CFs also engaged in formal academic research and professional development with university faculty on a regular basis. The habit of questioning student learning and formulating plans to explore those questions was more familiar to CFs in this PDS than might be in other settings where such processes were not the norm. This meant that even though ours was a pilot through which we engaged interns in action research during their student teaching, interns had a built-in support network in their CFs, as well as the SF, who because she was a teacher at the school, was also

always on-site and available to answer questions specific to their teaching contexts. Renee expressed the following related to supportive nature of the PDS structure:

In order to be successful with action research, I feel that the most helpful piece was the support of others. I had the support of my mentor teacher, my university facilitator, and my site facilitator. They really helped to guide me during my first attempt at action research. They helped me to shape my question, figure out which types of data to collect, and were there to answer any questions I had. This experience was beneficial because it was highly scaffolded, which has set me up for success when I conduct action research independently in the future.

The Nature of Action Research

The nature of action research itself provided a support for scaffolding the interns through their implementation. Because the essence of action research is to address an issue through systematic study and consequent action, reflection is natural and ongoing. Such targeted and continual reflection affected the interns' instruction, and even more deeply, their views of students. As Aaron indicates in the quote below, the process helped him recognize and address student needs in new ways:

As a teacher, the development of the group dynamic was encouraging me to continue to hone my own practices, including and beyond the intervention strategies. I began to become more aware of which students were getting the opportunities to participate and which students could benefit from a little more guidance, redirection, and increased opportunities. Within a few short weeks, I could see drastic improvements in my teaching – I was acknowledging the

strengths and abilities of all students within whole group lessons.

Seeing the impact of their research on student learning and behavior enabled the interns to escape a cycle of frustration and blame that could have developed had they not been able to examine student behavior and learning in light of their practices.

Because action research requires teachers to examine what is underlying the issues that they observe, the opportunities presented for action are numerous. That action, ideally, addresses vexing challenges and enables teachers to see their decisions making a difference in students' learning and engagement. Such success acts as its own built-in support for changing one's practice. Melissa echoed this when she described how much she learned during the action research process:

Throughout the action research process, I learned a lot about myself as a teacher. One the most empowering things I realized was that I, even as a pre-service teacher, had the power to make a change in instruction to help each of my students achieve. In other words, I was able to create a more accessible educational experience for my students while discovering if my techniques were effective. Further, I learned about the importance of taking risks in instruction. At the beginning of my research, there was no guarantee that my action would benefit student learning. However, this possibility was not as scary as it initially seemed because such an occurrence would still help student achievement overall because of subsequent action that could be taken.

Conclusion

Our first attempt at integrating action research into the student teaching semester at this PDS site achieved significant results.

We saw the interns develop a foundation for seeing themselves as change agents who can question learning conditions and who, as teachers, have the power to change those conditions.

After their first year and a half of teaching, two of the interns reflected back on how their PDS action research impacted their stance as reflective, social justice oriented educators.² They both were adamant about the lasting influence that inquiry had on who they are as teachers, how they consider their students, and how they approach their teaching practice. Aaron offered the following:

My specific action research [during my internship] focused on increasing student engagement, which led to greater equity in my classroom. I find myself constantly reminded of my past experiences with this in my daily teaching. It has helped me focus on remembering to engage those students who need the extra validation of their thoughts and contributions in order to foster a sense of fairness and equality throughout my classroom. In a more macro sense, it has led me to be more analytical of difficulties I perceive within my class.

Melissa echoed his sentiments by stating:

I am more aware of the impact and changes that can be made to make learning more authentic and teaching more effective. I am constantly looking for ways to improve my teaching and tackling potential problems with the lessons I teach. Further, I am more likely to place myself in my students' shoes and think more critically about the way my teaching impacts my students, both academically and socially.

²The other two interns were not available to offer their perspectives.

While neither intern participated in formal action research during their first year and half of in-service teaching, their comments demonstrate that an inquiry stance pervades their teaching practice. They shared a striking understanding that their teaching is about problem-posing, investigation, and change to “make the lives of students, both academically and socially, better” (Melissa). Highlighting this, Aaron additionally shared a story of change in his Head Start classroom that led to a dramatic increase the quality of creativity and dramatic play—change that would not have occurred were he not open to seeing the inequity being fostered through his classroom structure and empowered to change it.

Because of the partnership between the UF and SF and establishment of the school as a seasoned learning organization, our action research efforts were not something that were university directed, but were part of what had become a natural school-based engagement. The PDS structure enabled this engagement. The outcome could have been drastically different were the SF not an integral partner familiar with the interns’ classrooms and the action research process, and if the UF were merely a supervisor who was not embedded in the school on a weekly basis. The Critical Friends Groups that were co-planned by the UF and SF each month enabled interns the site-based support necessary to engage in action research successfully. Additionally, the CFs’ roles in interns’ planning and implementation activities were crucial, and the reflective process itself acted as a support for these novice teachers as they engaged in their first independent teaching experiences.

The process we used at this PDS site to engage teacher candidates in action research holds promise for other sites interested in infusing an intentional focus on inquiry. In fact, in our elementary education program, we have built upon these pilot efforts to expand action research to all PDS sites and all interns. We hope to encourage interns to go even

deeper in their examination of student learning, but these first steps demonstrated how well aligned the PDS standards and structures are to such efforts. NCATE PDS Standard 4: Diversity and Equity demands that PDS constituents are actively involved in examining learning opportunities and outcomes for all learners. In a school site such as the one described here with majority English Language Learners and high rates of poverty, the need for teachers and interns to constantly examine how their actions oppress or empower students is particularly great.

The interns learned more than how to merely go through the motions of action research. They learned how to question their teaching, reflection, and professional development practices, and they developed a stance that will enable them to do something about teaching and learning issues they uncover. As one of the interns, Christine, said at the conclusion of our action research pilot, the process “gave me the empowerment to make a change when needed.” While academic researchers such as Zeichner (2009) wisely caution about romanticizing the effects of action research for pre-service teachers, they also advocate for its potential to engage student teachers in “analyses of their own teaching practice that can become the basis for deepening and broadening their thinking to include attention to the social and political dimensions of their work” (p. 64).

Developing this basis is what we believe we accomplished at this site. Looking intentionally at instructional practice and resultant student learning is key to examining deeply-rooted issues of equity in schools. Teachers must recognize that choices exist. These PDS interns left their student teaching with the foundations of an inquiry stance that took them into their first years of teaching—years that are often very difficult, especially in high-poverty contexts. We hope that their ability to look deeply and critically at their practice will continue to define them as teachers, and that their ability to interrupt oppressive conditions

will continue to define them as agents of change. ^{SUP}

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