Action Research as Empowering Professional Development: Examining a District-Based Teacher Research Course

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Abstract

Using critical constructivism as the theoretical lens, the researcher used action research to systematically examine the experience of PreK-12 teachers in his district-based teacher research professional development course, while also examining his development as a teacher educator. The results of this study showed that the teachers made progress as teacher-researchers. The teachers expressed being empowered by the teacher research process and showed a critical awareness in their work. Finally, the teachers faced several important barriers in adopting an inquiry stance in their practice. This research generates both local and global knowledge about teacher research as a form of inservice teacher education.

Purpose

Serving in dual roles as a practicing high school teacher and teacher educator, I created a professional development course to foster teacher research in the urban district where I taught. The course objective was to educate other teachers¹ about research methodology and modes of analysis, so they could design and enact their own classroom research studies. In this endeavor, I encouraged my colleagues take an inquiry stance (Cochran-Smith & Lytle, 2009), while I took an inquiry stance in my own work as a teacher educator. As a result, I engaged in action research to better understand my practices as a teacher educator and the experience of the teachers in my professional development course. In this action research, the following questions were asked: Did my course help teachers develop their action research skills and inquiry stance? Did my

¹ To avoid confusion, I use "instructor" to describe my role as the teacher of the course, I use "participants" or "teachers" to describe the teachers participating in my course, and "students" to describe the PreK-12 students the teachers work with.

course lead to increase critical awareness of the course participants and myself? Did my course empower the teachers who took it? If so, how and to what extent did it empower the teachers?

Theoretical Framework

This study used critical constructivism (Kincheloe, 2005) as its theoretical lens. Critical constructivism is a learning theory that contends individuals make meaning based on their interactions between prior knowledge and new ideas. However, critical constructivists promote "self-reflection in relation to social power" (p. 33) as a crucial component of meaning-making. As such, critical constructivism has a particular emphasis on the systems that privilege some people while marginalizing others. As teachers and teacher educators are marginalized within the power structures of education and academia, forms of practitioner and action research offer ways to not only reflect and make meaning of their work, but also empower them as educators. Furthermore, since the course participants and I worked in an urban district, our work should challenge the power structures that marginalize many of our students, including those who are from poor and working class families, immigrants, and students of color.

Zeichner and Noffke's (2001) review of practitioner research helps situate this study within a larger context of teacher research and action research. They outlined the several historic critiques of teacher research, including the view that teachers are incapable of doing research, teachers' jobs make it difficult to find time to research, teachers cannot overcome preconceptions in their research, and teacher research may be potentially harmful to students because it undermines their education through distracting their teachers. These critiques of teacher research highlight the low-status of teachers and their work. In response to these criticisms, Cochran-Smith (2005) has highlighted the importance of local knowledge of practice, as well as the global application of that knowledge. Through various forms of action research, practitioners offer important insider knowledge that is often missing from other types of educational research.

Zeichner and Noffke's review also highlighted the scant nature of research on teaching teacher research or teachers learning to use practitioner inquiry. More recently, Choi (2011) found "there are limited accounts from the perspectives of teacher educators who instruct teacher-researchers" (p. 36), and of these studies, very few are from districtbased teacher educators. By examining a district-based teacher research course, we can better understand the impact of learning to use action research on the professional development of teachers and ways to improve the instruction of action research for teachers.

Methods and Data Sources

In this study, I used action research to examine my practices as a teacher educator. Action research is an opportunity for practitioners to learn from their work by critically and systematically examining it. Moreover, I work from a position of *inquiry as stance* (Cochran-Smith & Lytle, 2009), which as "instrumental in the sense of figuring out how to get things done, but also and more importantly, it is social and political in the sense of deliberating about what to get done, why to get it done, who decides, and whose interests are served" (p. 121). I take on the dual role of teacher educator and researcher of my own practice.

Context and Participants

As the instructor of the teacher research professional development course, I was both a teacher and teacher educator in the district. During this study, I was in my tenth year of teaching high school social studies. I also served as an adjunct professor at two local universities. In my roles at the university-level, I had taught teacher research courses to preservice teachers. However, this course was my first attempt at teaching it to inservice teachers.

The professional development course was taught in the Milltown Public Schools. Milltown is a New England factory town and one of the 24 urban school districts in Massachusetts. The district serves approximately 8,000 students, with 36% of its students being classified as low-income. It is traditionally a community of immigrants and 34% of the students are English language learners. Across the school district, the students' racial make up is 64% White (with approximately 20% of the White population identifying as Brazilian), 23% Latino, 6% Black, 6% Asian, and 2% other/multiracial.

The course participants included 13 teachers. Although the course was predominately high school teachers, there were two elementary and one middle school teachers. The teachers' subject areas included elementary generalist, English as a second language, English language arts, math, science, social studies, Spanish, art, and health. Their teaching experiences ranged from 3 to 20 years. All of the teachers are White. Nine teachers were female and four were male. Five teachers volunteered to participate in an interview after the end of the course. A description of the interview participants is listed in Table 1.

Table 1. Interview Participants

| Participant | Background | Grade/Subject | Experience with Research |
|-------------|---|--|--|
| Amelia | White female. Bachelor's in Spanish and master's in applied linguistics. Went into teaching as a career change and was certified through an alternative program. Speaks fluent Spanish. | Has taught high school Spanish for 10 years. | Had no experience with teacher research. Had attended conferences where university-based research was presented. |
| Betty | White female. Bachelor's in English and master's in education. Graduated from teacher preparation program at a local Jesuit university. | Has taught high school English for 5 years. | Her preparation program included a required teacher research course and inquiry project. |
| Mollie | White female. Bachelor's in journalism and master's in elementary education. Graduated from a teacher preparation at a large local private university. | Has taught middle school English as a second language for 3 years. | Had no experience with teacher research. Had read research as part of her undergraduate and graduate education. |
| Marissa | White female. Bachelor's in psychology and master's in education. Graduated from a teacher preparation program at a local ivy league university. | Has taught high school social studies for 7 years. | Had no experience with teacher research. Had participated in university- based psychology research. |
| Stacy | White female. Bachelor's in math and master's in education. Graduated from a teacher preparation at a large local private university. | Has taught high school math for 3 years. | Had no experience with teacher research. Had participated in university- based education research. |

The course met for 3 hours a week over 12 weeks in one of the district's high school classrooms. The goal of the course was develop teachers' ability to design and implement teacher research studies in their classrooms, including their ability to ask questions about their practice, their classroom, and their students. I encouraged teachers to take an "inquiry stance" (Cochran-Smith & Lytle, 2009) and encouraged them to go beyond inquiry as a one-time project and instead integrate action research into their regular practice. The course was organized around five themes: introduction to teacher research, forming questions and developing a conceptual lens, research methods, working sessions and peer support, and sharing work inside and outside school communities. The course assignments included reflective journal entries connected to each step in the process, participation (including in the working sessions and "critical friends" groups), an inquiry presentation, and a final inquiry project report.

Data Collection

I collected data through seven sources: interviews, questionnaires, instructor observation notes, participant work, participant reflections, course artifacts (syllabus, plan book, assignments, course handouts), and an instructor journal. For the interviews, I created a semi-structured interview protocol consisting of 11 questions around three themes: teacher research, views of professional development, and teacher background (See Appendix A). Interviews were recorded and transcribed. To assure that the participants would be most comfortable answering the interview questions honestly (and less influenced by my status as their instructor), I scheduled interviews after the course grades were finalized. After the course ended, I also asked all of the participants to complete a questionnaire (See Appendix B). Furthermore, I gained permission from the participants to use their course work and course reflections. During the course, I took observation notes. After each course meeting, I would reflect on my practices and write in my instructor journal.

Data Analysis

In the first stage of the qualitative analysis, I took multiple passes through the data corpus. This involved a thorough reading through all of the interviews, questionnaires, observation notes, participants' work and reflections, course artifacts, and my reflective journal, taking extensive notes. After a rough coding of the data, I developed a coding scheme based on my research questions. I used the work of Erickson (1986) for guidance in the generation of assertions and then preliminary testing of those assertions. The assertions that had evidentiary warrant were included in my qualitative findings. I then proceeded to a final coding of the data, which was an iterative process, where codes

remained flexible and I worked through cycles of induction and deduction to power the analysis (Miles & Huberman, 1994, p. 61). In sum, there were 30 individual codes. A complete coding dictionary can be found in Appendix C.

The coding process included several "in vivo" codes or what Miles and Huberman (1994) described as "Phrases that are used repeatedly by informants" (p. 61). The "in vivo" codes included: "All Teachers" labeled the participant's reference to all teachers should do teacher research. "Best PD" labeled the participant's reference to this course being their best professional development. "Beyond Test Scores" labeled a participant's reference to teacher research helping them collect different types of data beyond test scores. "District Should Support" labeled a participant's reference to the district needing to support more teacher research. "Elevated Status" labeled a participant's reference to an elevated status as a result of their research. "Fear of Research" labeled the participant's reference to having a fear of research. "Inside/Outside" labeled a participant's reference between insider and outsider knowledge. "Instructor Modeled" labeled a participant's reference to me serving as a model teacher-researcher. "Peers" labeled a participant's reference to teacher research leading to discussions about practice with peers. "Time" labeled a participant's reference to the difficulty of doing teacher research due to their time constraints.

Results

The results of this study are organized around three themes. First, I describe the overall reaction of the teachers to the teacher research course and their general development of research skills. Second, I focus on the teachers' definitions of teacher empowerment and if they believed teacher research empowered them as teachers. Third, I examine if the teachers developed a critical lens in their teacher research. Finally, I describe the barriers teachers faced in adopting an inquiry stance in their practice.

Course Experience

The teachers had a positive reaction to my teacher research professional development course. The teachers showed success in developing their research skills, which was evident in their final projects. This success included their use of methodology and ability to analyze data. Furthermore, the teachers showed substantial reflection on their practice through their teacher research projects.

Research Skills. The teachers entered the professional development course with limited research experience and little knowledge of teacher research. In our class discussion, most teachers expressed that they had read educational research in the past. Two teachers described experiences using research methods as psychology and biology majors. One teacher was required to take a teacher research course as a component of her teacher preparation. Of that experience, Betty said, "I didn't feel like I knew how to teach, so conducting teacher research as a novice teacher—it was okay. ... I felt like this would be a good chance to revisit it" (Interview, May 21, 2012). The remaining 12 teachers expressed little to no knowledge of teacher research. One teacher wrote, "Nothing. If someone had mentioned [teacher research] to me beforehand, I would have assumed it referred to professors researching K-12 teachers" (Questionnaire, April 10, 2012). While another teacher wrote, "Next to nothing. I had read a few articles in The English Journal over the years that I now realize were examples of teacher research" (Questionnaire, April 10, 2012). At the beginning of the course, most of the teachers had little to no experience with action research.

As the instructor, I anticipated that most teachers would not have a background in teacher research, as well as a limited background in educational research. I wrote,

Most of the teachers appear to have little knowledge of research. This was expected, but I will need to be mindful and adjust the course as necessary. They also seemed excited by the idea that teachers can produce classroom research and that our knowledge at practitioners has an important value. (Instructor Journal, January 10, 2012)

I designed the first course meeting to introduce teacher research. I also outlined the course content and discussed the final inquiry project. Some of the teachers expressed concern with the amount of work that a teacher research study would entail. I wrote,

Several teachers expressed anxiety about doing research and were worried about the final project in this course. They weren't sure how they could get all this work done. I am also worried that I may be giving them too much work. The teachers are use to PD classes that are relatively easy. Although I feel this group is pretty strong and they seem ready for a challenge. (Instructor Journal, January 10, 2012)

The students' concerns made me aware of the importance of breaking the project into manageable pieces and the importance of allowing time in class to work on their projects. It would not only help the teachers find time to do their research, but also allow them to have a peer support group and the instructor available for help and motivation.

On the second course meeting, we focused on reading and analyzing teacher research studies and forming research questions. I used a handout that explained practitioner inquiry, which stated,

As insiders, who are on the ground level of education, practitioners offer an important insight into teaching and learning, as well as school and student culture. It is a prospective that outsiders are unable to offer, as they do not have the local knowledge that insiders develop. (Course Artifact, January 17, 2012)

This led to a group discussion of insider and outsides knowledge, which to have a positive impact on teachers. The teachers generally appeared open to new conceptions of research and specifically a new view of research that positioned their insider knowledge as valuable. I wrote in my instructor journal, "It seemed that most teachers were really open to the message that researchers have long used teachers and produced research for teacher's consumption" (Instructor Journal, January 17, 2012). After the first course meeting, I had the teachers read different examples of teacher research. In the discussion, the teachers expressed being impressed by the general quality of other teachers' research and a few students found it inspiring.

While most teachers embraced teacher research, three teachers felt that the teacher research was not "scientific" enough. I wrote,

There was some push back, especially from some of the math, science, and psychology teachers, who had a strong preference for experimental research. I think their views are framed by positivism and a belief that it cannot be scientific unless it is quantitative and experimental. This has made me question some of my own ideas. I see value in quantitative research, however, I also do see that an over-reliance on quantitative data is very troubling. I continue to ask myself: Can teacher research be quantitative? Can it even be quasi-experimental? I have always had a view that teacher research does not disregard quantitative findings;

rather, it realizes that much of what should be understood about teaching and learning is qualitative in nature. This explains why the vast majority of teacher research is qualitative. (Instructor Journal, January 17, 2012)

The view that teacher research was not "scientific" enough influenced my decision to make it a course goal to help the teachers see the utility in all types of research and the counterbalance that qualitative research offers. Additionally, it forced me to question my own conceptions of teacher research.

Throughout the remaining course meetings, I structured the curriculum to develop the teachers' research skills. Class 3 focused on literature searches and writing a literature review. Classes 4-7 focused on choosing methods and data collection. Classes 8-10 focused on data analysis. Class 11 involved presentations of preliminary findings and critical friends groups, where teachers gave constructive feedback to their peers. Teachers took their peer and instructor's feedback and revised their papers, which were due on the final class. Class 12 was a celebration of the work, where teachers shared their final papers and we reflected on the course.

As the course progressed, the teachers continued to develop their research skills. On the assignments, they were successful at creating research questions, engaging in literature searches, justifying methodological choice, analyzing the data, and writing up the findings. For example, Amelia, a Spanish teacher, expressed in one of the assignments,

Narrative analysis seems to be the best theoretical framework and methodology for this inquiry. The interview transcripts and the survey results will serve as the texts for analysis. Using the data gathered from each text I will work to

understand the barriers, fears and misunderstandings that prevent my students from speaking. (Participant Work, February 7, 2012)

On that same assignment Marissa wrote,

I will use a combination of interview and survey... I still need to work out the order of interview/survey, but what I'm thinking is that I will come up with survey for students first with specific questions that address my research question, then make interview questions based on those findings. (Participant Work, February 7, 2012)

The teachers displayed their careful thought into the planning of their studies, often referring directly to the methods texts they were using (cf. Fowler, 2009; Hoy, 2010; Rossman & Rallis, 2003), which were texts commonly used in doctoral-level research courses.

As a result of their teacher research, teachers also routinely reflected on their practice through the various assignments and within their small working groups. I wrote,

The 'guys,' as I call them, is a group that has formed of all male teachers. They did a great job reflecting today. They were really asking important probing questions. They were discussing what they did in the class. I think this group of critical friends is making their research better, but also their teaching better. (Instructor Journal, January 31, 2012)

Throughout the course, the teachers rooted their discussions of practice in the data they were collecting and analyzing.

At the end of the course, all teachers completed inquiry projects. The topics of these projects included: a "flipped" math classroom, teacher political disclosure in social

studies, code switching in a two-way bilingual program, barriers to speaking in Spanish, motivation to read in English, an anti-bullying program in heath, original images in art, effectiveness of reading quizzes in English, inclusive versus segregated ESL classes, student engagement in social studies, collaborative grouping in biology, flexible grouping in 2nd grade, and writing feedback in English. A small group of students chose to do intervention studies, while most students used different forms of descriptive or interpretative studies. The teachers' papers were generally well written with most teachers expressing the reflective nature and personal impact of their inquiry on their teaching practice. In my comments on their work, I personally encouraged 7 of the teachers to submit their work at national conferences and, showing my trust in their work, I promised to help them in the process.

Beyond learning research methods, most teachers expressed that teacher research had an impact on their teaching. Betty wrote in her final paper, "The inquiry process as a whole raised more questions than it provided resolutions to concerns surrounding high school students' reading behavior" (Participant Work, April 3, 2012). On the same assignment, Sandra wrote,

The exploration of student perspective of flexible grouping... has had a dramatic impact on my teaching. I learned the importance of asking students, regardless of grade level or age, their opinions. (Participant Work, April 3, 2012)

These results were representative of the reflections done by the teachers around their research, with many teachers specifically saying this work changed their practice or view of teaching or their students.

I also realized that despite my encouragement and trust in their work, the teachers were reluctant to share this work outside of our class or their schools. I wrote,

Today we discussed sharing work. One positive reaction was that some teachers seemed very interested in presenting future work, but most teachers felt this was more of a pilot study. I wonder if there is a way to boost their confidence. This work is very good (in fact, some of the drafts I have seen are better than some of the submissions I have read for AERA or journals that I know were accepted. How do I encourage the teachers to "go public?" This work is important.

Although sharing within the district will be very worthwhile, it really should have an impact beyond our district. (Instructor Journal, March 20, 2012).

This was a challenge for me as an instructor. Although my class prepared the teachers to be teacher-researchers, it was not successful at building the confidence necessary to "go public" with their work.

Teacher Empowerment

The teachers expressed being empowered by the teacher research process.

Although the participants had varying definitions of empowerment, there were three main themes across their definitions:

- 1. Be able to do something that will change their practice.
- 2. Show themselves the importance and value of their knowledge as a teacher.
- 3. Show outsiders and peers that teachers are intellectuals, which will lead to more professional respect.

This was seen in the teacher's questionnaire responses. One teacher wrote, "Teachers are powerful, metacognitive, and agents of change. Teacher research is hard, but really

beneficial to guiding our practice" (Questionnaire, April 10, 2012). Another teacher wrote, "This class was inspiring to feel you can alter your practice midstream and you can actually use data to examine that change" (Questionnaire, April 10, 2012). Stacy said teacher research was empowering because it,

I felt much more respected then I have in the past... Knowing that I was doing something for everybody and that I was trying to either prove or disprove some sort of theory. I did feel like people were coming in and saying, look at this really cool thing Stacy is doing. (Interview, May 23, 2012)

Amelia said,

I think there are a lot of people who have high respect for teachers, but there's an awful lot of people who do not. I think that if there are groups of teachers in ever building that are actually doing some sort of teacher research, it provides some solid evidence about what is actually happening in the building. (Interview, June 29, 2012)

The reaction of the participants was aligned with Zeichner and Noffke's (2001) review of practitioner research, which found five positive impacts of teacher research on the teacher-researchers:

- 1. It evoked a renewed feeling of pride and excitement about teaching.
- 2. It reminded teachers of their intellectual capability.
- 3. It allowed teachers to see their work matters.
- 4. It reconnected teachers to their colleagues.
- 5. It encouraged teachers to develop a notion of what teachers can and ought to do.

The teachers reported a new sense that their work was important and that they had the intellectual capability to research that work.

In this study, teacher research not only increased the teachers' sense of their work, but also empowered them. Kincheloe (2003) described teacher empowerment as a process where teachers become "active producers of knowledge, not simply consumers" (p. 56) gaining a sense of authority over their work, which is often lost in a top-down education system. Moreover, empowered teachers listen to the voices of their students, which is another group often marginalized in the education system. At the end of the course many teachers expressed a growing confidence in their ability to be knowledge producers. Amelia wrote,

I considered [research] the domain of stuffy academics in a stuffy university. I also never thought it was something I could do... Now it seems some of the best research could be done by practitioners. (Interview, June 29, 2012)

While most of the teachers still believed that they needed more practice before their research could be published or presented at conferences, several teachers said their confidence was increased by the fact their findings directly challenged some of the findings they found in the university-based research found during their literature reviews. Marissa said,

The [research] that I did find, like Diana Hess's work [on teacher political disclosure], which is fantastic and really interesting to read, like she's not a classroom teacher. She might have been, but when she's doing the research, she's obviously not... It felt exciting to be doing something that hadn't been done

before. To be looking at this from a teacher's perspective and to find out what my students thought. (Interview, June 7, 2012)

A teacher wrote on the questionnaire,

Teacher research is an effective means to empower teachers to bring about positive changes in their own classrooms. When done right, it can also prevent teachers from becoming trapped in their own perspectives, which may be completely different from the perspectives of their students. It can help keep veteran teachers vibrant and engaged in pedagogy. (Questionnaire, April 10, 2012)

The teachers expressed that an ability to make change were an important component of doing teacher research.

They also acknowledged the importance of using their teacher research to elevate the voices of their students. Mollie said,

I've noticed as I was doing my research—especially my research question—we're very analytical about our student data and our test scores and what the state says or what the principal says, but it's not often that we ask the students what they think. I feel like... teachers always do what they think is obviously best for the student, but we never really think about what they think is best for them. (Interview, May 28, 2012)

In an interview, Stacy described what her students told her about their "flipped" classroom (a recently popular method of teaching that has students watch lecture for homework and uses class time to work through problems). She said,

The research taught me that I shouldn't have my students rely completely on the videos. There is some importance to having a conversation with the teacher. looking at the person, ... knowing what they're talking about, being able to listen to them, ... being in a classroom atmosphere, but at the same time I learned how important that collaboration is amongst the students because they're forced to talk to each other and if you can explain something to somebody else that means you must be able to understand it. (Interview, May 23, 2012)

Most of the teacher's inquiry projects focused on the students' reactions or perceptions of their teaching.

Critical Awareness

I intentionally designed this course to help teachers develop a critical awareness about their teaching, while I attempted to be critical of my practices as a teacher educator. I anticipated that the teachers would become critical of their practices. I strove to help the teachers reconceptualize the idea of research, but I also wanted to keep questioning my own views of teacher research. Yet, fostering critical awareness was not initially an easy process. I wrote,

Today was mostly a work session. I am trying to get the teachers to be critical, but I feel for some, the questions they ask are not critical. None of the teachers have chosen critical theory as their theoretical framework (although a few have chosen constructivism, where others use a multicultural framework). Kincheloe describes critical teacher research as having questions chosen by the teachers, yet what if the questions they ask do not look into positions of power? I certainly do not want to impose this view on them. I also want them to generate their own questions,

about their practice, around their concerns" (Instructor Journal, February 14, 2012).

I envisioned the teachers embracing a university view of critical theory, something closer to the work that I embraced as a teacher educator. While they did embrace many of the principles of critical theory, their language and conceptions were rooted heavily in the language and practices of PreK-12 teaching.

Much like critical theorists challenge to positivism, because it implies research neutrality, the teachers in this study also started to challenge positivism. As a teacher educator, I was successful at getting the teachers to see the value of qualitative research, see it as scientific, and understand the types of answers it can produce. By the end of the course, Marissa began to challenge her previous assumption of research. She said,

We are in this unique position to see what is actually happening, obviously we are intelligent enough to read all of the theory that is being generated by people who aren't in our position and then to do something, that is a realization I have never had before. (Interview, June 7, 2012)

I wrote of Marissa's work,

Marissa noticed that there are very few studies on teacher political disclosure and those that exist are all studies of teachers views of disclosure, studying teachers from an outsider perspective. She found that most researchers studied the teachers, but very few actually asked students what they thought of teachers telling them their political views. I told Marissa that this is an important insight and that her idea of asking her students was a great one. (Instructor Journal, January 24, 2012).

The teachers in this course offer insight into the divide between the academic and practical definitions of what it means to be critical. Marissa and the others teachers were being critical, despite not choosing critical theory as a framework or using the language of the critical theorists.

As teachers who chose to work in an urban district, with disparities between racial and class groups, almost all of the teachers addressed this in their work. Most of the teachers' work focused on students of color and immigrant students. For example, Mollie, an ESL teacher, examined her English language learners' preferences for one type of instruction. Betty, an English found some differences between her students' motivation (or lack thereof) to read based on race and she decided to allow more student choice in the future. Amelia examined the anxiety to speak Spanish in her classroom and found that her Black higher percentage of her Black students reported anxiety when using Spanish in class. Another teacher wrote, "I am much more aware of how race may be impacting performance and I am making efforts to discover ways to bridge those gaps" (Questionnaire, April 10, 2012). Finally, each of the teachers described some way that the research helped them listen to their students, ask questions to students that they would have never asked, or improved their ability to consider the students' needs in designing their courses.

By the end of the course, I was reevaluating what it meant to be a critical teacher researcher. I wrote,

Looking at the presentations given by the teachers today and the final papers they have written, I think I may be wrong on the critical nature of the teachers' research. Although none of the teachers used critical theory as their theoretical

lens, many of these projects are critical in nature. They examine positions of power, they work for better education for the poor or immigrant students that the teachers work with, and most importantly they offer a research position that speaks back to traditional educational research. There is an underlying critical theme. Specifically, I am thinking of Marissa's examination of herself as a teacher who partially discloses her political views. She is speaking back to a society that tells her that teachers should not have a political voice. I think of Denise, whose work found that how she grouped students in science class had a positive impact on immigrant and ELL students. She learned new ways to help ELL students in her science class. Kurt, who works with students with emotional or behavioral issues, looked at how his bullying curriculum in health class impacted his students, many of who feel powerless. Sharon looked at the impact of flexible grouping within her classroom, which was racially and socioeconomically diverse. (Instructor Journal, April 3, 2012)

There was an inherent examination of power in all of the teachers' work. This included elevating their students' or their own marginalized voices, which are often left out of traditional research and the public discussions of education. This seems closely aligned with the Frierian notion of "teaching as mining," where the teacher not only helps the students learn, but also learns from their students (Freire, 1974). Although none of the participants would have claimed to be working from a critical perspective or using critical theory, they had taken a critical stance in their work.

Barriers to an Inquiry Stance

While teacher research was a source of empowerment and helped the teachers establish a critical awareness, those positive attributes were not enough to make it a regular part of their practice. While the teachers in this study recognized a need for "insider" research and agreed with an inquiry stance, there were major barriers to their adoption of an inquiry stance in their practice. The main barriers included time and lack of district support.

On the questionnaire, 7 of the 13 teachers expressed a desire to integrate teacher research into their regular practice and many had referenced ideas or even early planning for their next study. One teacher wrote, "There are a number of things I am thinking about. For example, I'd like to do a yearlong study on anxiety and speaking in the Spanish classroom. I am also interested in looking at how race impacts [students'] performance in my class" (Questionnaire, April 10, 2012). However, when I contacted the teachers in a follow up e-mail two years later, only one teacher said they continue to do teacher research and two teachers said they had presented their work outside their school. Despite this, several participants said they continue to use the instruments they designed (surveys, questionnaires) to collect informal data from students or have redesigned courses or adjusted their teaching based on the results. As such, this course had a more local, rather than global, impact.

The teachers in this study expressed concerns about finding time to continue doing teacher research. One teacher wrote,

Teacher research is beneficial but time consuming. Ideally a project would be a yearlong endeavor to allow for thorough data collection and adequate time to

process data. It can also be difficult to broker everyday teaching and the rigors of research. (Questionnaire, April 10, 2012)

In an interview, Betty said,

It's really hard to find the time to do it because the job itself is so demanding that if you were to do it well, it should take a lot of your time. And then to add on the component of teacher research with any other things that you might also be interested in—coaching, working with the union, any sort of mentoring. All those things that can enrich you personally and professionally that it's hard to fit that in and also do the teacher research right (Interview, May 21, 2012).

Due to the time constraints of teaching, it was difficult for teachers to engage in research.

The issue of time was exacerbated by a lack of district support for teacher research. Although this district had embedded collaboration time at the high school level, it did not have this for middle or elementary teachers. Additionally, this collaboration time was generally used for school-based needs (discussing standardized test results, designing common lessons, etc.), rather than a focus on teacher reflection. Betty said,

I think the professional development that I've experienced... [is] generally pretty worthless... It just feels very unfulfilling. It feels like a lot of going through the motions... Teacher research is the first time that I feel professional development is directly improving my teaching. I wish the district supported it more.

(Interview, May 21, 2012)

Another teacher described the lack of support for sharing teacher research,

I want to share my work. But presenting at a conference is a pricey proposition.

As a teacher there is no available money or incentives to travel and share your

research with others. Academia, at the college level, has a well-developed process of grants, research, peer review, publications and appropriate accolades learning to the advancement of careers and more grant money. Teacher research is still in early development [and has] not been established to offer the teacher the proper incentive or accolades to share research beyond one's own community (Questionnaire, April 10, 2012).

Amelia expressed the need for the district to support teacher research. She said,

I think if this were really something to take off in the district, I think the district would need to support it, and by that I mean monetarily, providing a class reduction or at least subs during class time to do or present our work. (Interview, June 29, 2012)

The lack of district support was a major struggle that I faced as an instructor and that the teachers faced in their work. While the teachers were creating excellent research, they did not have the support, financially or professionally, to share their work outside our class or their schools.

Implications

This research generates both local and global knowledge about teacher research as a form of inservice teacher education. It offers one model for other teacher educators who work with prospective teacher-researchers within school districts or universities. For the teachers in this course, it was a valuable professional development experience. While the course helped them reflect on their practice, the teacher's long-term use of teacher research was more difficult to sustain, due to time constraints and lack of district support.

There are several implications from this study. First, teacher research is not only an incredibly valuable reflective tool, but it also generates important knowledge about the teaching practice. The teachers in the study produced important work and, in many ways, their findings speak back to the university-based research done on similar topics.

Moreover, the teachers learned from the work of their peers, helping build a stronger intellectual community and building relationships across departments and schools in the district.

Second, as a form of professional development, it is crucial that instructors in teacher research courses allow the participants to examine questions rooted in their own vision of practice. Instructors may feel compelled to influence the teacher's studies or the frameworks they use. However, for this work to be most powerful, the teachers must be the drivers of the work. As instructors of teacher research courses, we must be continually challenging our own perspectives. We must acknowledge the valuable "insider" knowledge that PreK-12 practitioners have about teaching and that this knowledge can manifest differently than how we as teacher educators envision it (even if we have been teachers or are currently teachers).

Third, teachers must be given the room to develop their own conceptions of research. Often instructors of teacher research courses, as well as some teacher-researchers, want teacher research to mimic traditional forms of educational research. The value in teacher research is that it speaks back to traditional forms of research. As such, teacher research studies often take different forms, which may seem unusual or be labeled as "not research" by traditional educational researchers. Yet, the work of teacher-

researchers offers important insight into the classroom. As instructors, we must nurture this "differentness."

Conclusions

As action research should, this study also led to more questions about my practice as a teacher educator and professional development in general. As more teachers embrace an inquiry stance in their practice and the teacher research movement continues to grow (Cochran-Smith & Lytle, 2009), we must be mindful of the numerous barriers that exist for teacher-researchers. Since teacher research can be unsustainable for many teachers due to lack of time and support, we must find ways to gain support for teacher research programs within school districts. We must find ways to connect teacher research courses to teacher research networks, which would provide additional supports and places to share work and receive feedback.

Modeled off of the work being done in the Madison Metropolitan School District in Wisconsin (Caro-Bruce, Flessner, Klehr, & Zeichner, 2007) and the Brookline Teacher Research Group (Cochran-Smith & Lytle, 2009), I started this teacher research course with the intention of it becoming a regular professional development course in the district and possibly growing it into a teacher research community. I envisioned inviting past participants to attend course session to stimulate their future projects and build a community of inquiry. This would not be realized. A new superintendent was appointed the year after I taught this course and the district decided to not offer my teacher research professional development course. There was a shift in professional development toward Common Core State Standards and assessment, as well as Massachusetts's new supervision and evaluation system. As the teachers struggled to make teacher research a

regular part of their practice, I struggled to make teacher research a regular part of our district.

This study makes clear that without professional support, it is difficult for teachers to continue their teacher research. The teachers suggested that support for conferences and time to collect and analyze data would be one solution. This does occur in a select number of districts (Cochran-Smith & Lytle, 1993, 2009), including Madison, Wisconsin, where teachers receive a stipend for supplies and release time (Caro-Bruce & Zeichner, 1999). In a world with decreasing resources, I imagine most districts would be hard-pressed to commit time and funding to teacher-researchers. Yet, this seems like a poor choice. As was evident in this study, teacher research offers an important way to foster reflection leading to improved instruction, which ultimately will have a positive impact on student learning.

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 American Educational Research Association.

Appendix A: Interview Protocol

I. Teacher Research

- 1. Why did you sign up for this PD course? What were your thoughts after signing up, but before taking the course?
- 2. Describe for me your experience during this teacher research course (from beginning to end).
- 3. What role should teacher research have in teaching? Who should do teacher research? What are the short-term supports for doing this work? What long term supports would help sustain your teacher research?
- 4. Did you learn from the other teachers' teacher research? If so, can you describe this learning?

II. Views of Teaching and Professional Development

- 5. Has this course changed your views of teaching? If so, can you elaborate how it has changed your views of teaching?
- 6. Has this course changed your views of student learning? If so, can you elaborate how it has changed your views of student learning?
- 7. How does teacher research as professional development compare to your previous experiences with professional development?

Probe: Has this course changed your views of professional development? If so, can you elaborate how it has changed your views of professional development?

- 8. Have you changed any practices as a result of your teacher research? If so, could you explain?
- 9. Did this course empower you as a teacher?

Probe: What does empower mean to you?

10. Do you plan on doing any teacher research in the future? If so, do you have any topics for studies or research questions you are considering investigating? Can you explain why those topics or research questions interest you?

III. Teacher Background

11. What is your educational background?

Probe: What was your teacher preparation experience like? What has been your general teaching history?

Probe: Where have you taught and for how long? What grade levels? What subjects?

Appendix B: Questionnaire

- 1. What did you know about teacher research before taking this class?
- 2. What do you think about teacher research after taking this class?
- 3. What did you learn (about your students, your teaching, the curriculum, the process of research) from conducting a teacher research study?
- 4. Did this class influence your views of research? If so, explain.
- 5. Has this class changed your views of teaching or your classroom practices? If so, explain.
- 6. If you are planning to use teacher research in your classroom in the future, could you please describe some areas you would like to research or some research questions you would like to ask in the future?
- 7. Do you plan on presenting your teacher research inside your school (colleagues, administrators, students, etc.) or outside your school (conferences, workshops, etc.)? If so, can you list some ideas you have for presenting your research.
- 8. How many years have you been a teacher (not including student teaching):
- 9. What grade(s) do you teach?
- 10. What school do you teach at?
- 11. If you are a subject-specific teacher, what subject(s) do you currently teach?
- 12. If you are a subject-specific teacher, other than above, what other subject(s) have you taught in previous years?
- 13. What is your gender?
- 14. What is your race/ethnicity (If you are multiracial, please circle more than one)?
- 15. Do you speak a language other than English fluently?

Appendix C: Coding Dictionary

LEVEL ONE CODES (T-) LEVEL TWO CODES (T-BG-)

LEVEL THREE CODES (T-BG-GEO)

NOTE: There is no dash (-) if there are no levels below

| Nickname | Full Code Name | Description |
|----------|---------------------|--|
| T- | Teachers | Related to the teachers who took the professional development course |
| T-BG- | Background | Related to the teaching of history content |
| T-BG-PER | Personal | Teacher described her/his own personal background, including schooling and demographics. |
| T-BG-TP | Teacher Preparation | Teacher described her/his own teacher preparation |
| T-BG-TR | Teacher Research | Teacher described her/his own prior experience with teacher research or action research |
| T-CR- | Classroom Impact | Related to the application of their action research in their classroom |
| T-CR-CHG | Changed Practices | Teacher expressed changing practices |

| T-CR-NCG | Did Not Change Practices | Teacher expressed not changing practices |
|----------|--------------------------------------|--|
| T-CR-STD | Students | Teacher described students' reactions to their teacher's research |
| T-CR-RES | Research | Teacher described their development in doing or understanding research |
| T-PD- | Professional Development | Related to the response to action research as professional development |
| T-PD-EXP | General Course Experience | Teacher described a general course experience |
| T-PD-VAL | Valuable Professional Development | Teacher expressed this was valuable professional development |
| T-PD-NOT | Not Valuable Professional | Teacher expressed this was not valuable professional development |
| T-CA- | Critical Awareness | Related to the teachers' development of critical awareness |

| T-CA-INC | Critical Awareness Increasing | Teacher showed increasing critical awareness |
|----------|----------------------------------|---|
| T-CA-DEC | Critical Awareness Decreasing | Teacher showed decreasing critical awareness |
| T-CA-IAS | Inquiry As Stance | Teacher showed adoption of an inquiry stance |
| Т-ЕМ- | Empowerment | Related to the teachers' discussion of action research as empowerment |
| T-EM-INC | Empowerment Increasing | Teacher showed increasing empowerment |
| T-EM-DEC | Empowerment Decreasing | Teacher showed decreasing empowerment |
| I- | Instructor | Related to the instructor (myself) of the professional development course |
| I-CD- | Course Development | Related to the instructors' (my own) course development |

| I-CD-STR | Strength | Instructor expressed a strength to the course |
|----------|------------------------|---|
| I-CD-NCG | Weakness | Instructor expressed a weakness of the course |
| I-CA- | Critical Awareness | Related to the instructors' (my own) critical awareness |
| I-CA-IAS | Inquiry As Stance | Instructor showed adoption of an inquiry stance |
| I-EM- | Empowerment | Related to the instructors' (my own) empowerment |
| I-EM-INC | Empowerment Increasing | Instructor showed increasing empowerment |
| I-EM-DEC | Empowerment Decreasing | Instructor showed decreasing empowerment |