Collaborative Research and Teacher Education

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It's our place only when we [teachers] make it our place, and we have to work at owning the research. Taking that responsibility may be painful at times. But in order to own teacher research we have to be honest with ourselves, our question, our design, our community, and our place in the larger research picture. We approach this honesty by keeping our commitment to improving our practice, to our students, and to each other. We talk, we teach, we write, we question. And we will not plan future studies without knowing our classrooms, our students, and ourselves. (Keffer, Wood, Carr, Mattison, & Lanier, 1998, p. 34)

Historically, teachers have been conceptualized as consumers and implementers of academic researchers' findings (e.g., Fenstermacher, 1986). While those roles have been critiqued elsewhere and for some time (Apple, 1987; Fenstermacher, 1987; Giroux, 1988; Kilbourn, 1987; Munby, 1987; Russell, 1987), they persist today in this era of standardization and accountability (Kincheloe, 2003), as "diverse educational stakeholders...are coming to regard teachers as technicians...and teacher learning as training about 'what works'" (Cochran-Smith & Lytle, 2009). In keeping with the teacher as technician metaphor, the U.S. Department of Education (2004) published a *Toolkit for Teachers*, which directs classroom teachers to use strategies aimed at improving student performance on standardized tests.

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Volume 19, Number 2, Fall 2010

Additionally, educational policy reforms give teachers little control over their professional roles. Consider, for example, how NCLB (2001) was imposed upon, rather than initiated by teachers (Fischer & Weston, 2001). Most recently, Arne Duncan, the U.S. Secretary of Education, put forth the *Race to the Top* reform effort, which ties teacher quality to student performance on standardized test scores. Similarly, in California, Governor Schwarzenegger and the California State Board of Education have tied improved test scores to merit pay for California teachers. What is more, teacher certification programs in some states gain approval only if they implement pre-approved content standards that ensure teacher candidates comply with state mandates (e.g., California Credential 2042).

According to Diane Ravitch (2010), such policies undermine education and may lead to the "death" of the American school system. Likewise, I argue that current educational reforms being implemented can lead to the demise of teacher education. Consequently, never before has it been so important for teachers and teacher educators to collaborate with one another to produce studies that expand educational research beyond the narrow "randomized controlled trials" that are being trumpeted by politicians and policymakers, despite the fact that classrooms are "complex social settings" and not laboratories (Lareau & Walters, 2010).

Collaborative teacher research provides a way for teachers to participate in examination of classrooms and schools in order to shape policies, as well as bridge the divide between teachers, academics, and statehouses (Rust & Meyers, 2003). Over the last 15 years, there have been numerous research collaborations between teachers, students, administrators, and university professors (e.g., Cochran-Smith & Lytle, 2009; Olson, 1997; Pine, 2009; Wells, 2001; Wells et al., 1994). Such collaborations have made educational research more accessible to teachers, and thus, have helped redress some of the unequal power dynamics subjugating teachers in educational research.

Collaborative research efforts in teacher education have also helped candidates navigate the complexity of practice and theory. Traditionally, teacher education has not focused on research methods; however, recent efforts to transform pre-service education and professional development have changed to incorporate teacher inquiry (Cochran-Smith & Lytle, 2001, 2009; Zeichner, 2003). Thus, collaboration offers not only the potential breakdown of historical divisions between universities and public schools, but also offers future teachers useful models for participation in educational research. If teachers, student teachers, and academics can begin to see themselves as collaborators engaged in educational

research, the scholarship produced on teaching and learning can reflect a wider array of voices, ideas, and perspectives.

In this article, I explore how collaborative teacher research can reposition teachers to be powerful stakeholders and policymakers rather than skilled technicians and implementers. I begin with a brief review of the historical antecedents to collaborative teacher research in order to detail how teachers and their allies have fought off marginalization and misrepresentation of teachers in educational research. Then, I highlight selected collaborative approaches, both in pre-service and in-service teacher education, to illustrate how collaboration helps transform practice and research, as well as how it bridges epistemic divides between academics and practitioners. In so doing, I suggest how teacher education programs might retool and reconceptualize their work to include research relationships with teachers and teacher education that involves teacher inquiry. Ultimately, I make the case for collaborative research practices in educational scholarship that are democratic and inclusive, and warn against practices that may involve teachers, but nonetheless reiterate past knowledge hierarchies that subordinate and co-opt them. Understanding the strengths and limitations of collaborative teacher research practices is of the utmost importance at a time when, teachers are continuing to lose control over their work, and Arne Duncan has called for scholars at universities and colleges to give up their ivory towers and get more involved with underperforming public schools (Nelson, 2009).

Antecedents to Collaborative Teacher Research

The teacher research movement of the 1980s fought hard for the inclusion of teachers in educational research (Hollingsworth, 1994). The fight to include teachers became necessary for two persistent reasons. First, experimental, positivist, and quantitative research from the 1970s and 1980s (Berliner, 1987; Gage, 1978, 1985; Fenstermacher, 1988) had come to dominate the university scholarship on teaching and learning. Descriptions of teaching in educational research became less relevant and less connected to classroom learning:

The scientific nature of research on teaching split theory from practice. The search for generalizable theories about teaching decontextualized teacher education and technical rationalism became valued over practical knowledge in the training of teachers. The hierarchical nature of the institutional structure reflected the hierarchical epistemology of positivism. The emphasis on scientific rigor as having more status than practical application led to the "denigration of the school classroom as the appropriate focus of educational study." (Urban, 1990, p. 64)

Critics of experimental scientific research correctly pointed out that classroom environments differ from experimental settings with controlled factors, and therefore, experimental findings cannot generalize to different classroom contexts (Jungck, 2001; Mischler, 1979). However, the reappearance of positivist rationalism in the context of the NCLB (2001) reform continues to create a rift between teachers, university academics, and policy-makers (Cochran-Smith & Lytle, 2009; Davis, 2008). Note, for example, that educational reform efforts have typically come from the outside, with little input from teachers (Fischer & Weston, 2001).

The second problem the teacher research movement sought to address was the hierarchy between teachers and university academics. Under a scientific rationalist model, university academics' create and transmit knowledge, whereas teachers implement that knowledge or become objects of study (Cochran-Smith & Lytle, 1990, 1993; Connelly & Clandinin, 1994; Fenstermacher, 1986; Giroux, 1994; Kapunscinski, 1997; Nias, 1991). Historically, academics and policy-makers have established criteria for credentialing, evaluation, curricular mandates, and even appropriate research paradigms for advanced degree work (Apple, 1985; Hollingsworth & Miller, 1994).

Thus, over the years, teachers have been asked to implement others' ideas, curriculum, and pedagogy, which demeans their own expert knowledge and relegates it to "craft" or "technical work" (Apple, 1987; Apple & Teitelbaum, 1986; Wilson, 2005). However, teacher researchers are situated to theorize their own work from their lived experiences in teaching (Britzman, 2003). Teachers are uniquely positioned to rework "repertoires of theories, and inventing and re-inventing continuously reflexive practices in non-linear ways" (Comber, 2005, 51). Situated teacher knowledge stands in contrast to knowledge that claims universality or generalizability (Hollingsworth, 1994; Cochran-Smith & Lytle, 2009).

While recent developments in teacher research have led to more teacher-conducted studies, the following criticisms from within academia have reinforced the hierarchical divide between teachers and university academics: (1) teachers do not have the research skills needed for rigorous inquiry (Huberman, 1996); (2) teacher research is too idiosyncratic, self-referential, and ungeneralizable (Bullough & Pinnegar, 2001; Hiebert, Gallimore, & Stigler, 2002; Wilson, Floden, & Ferrini-Mundy, 2001); and (3) the teacher role conflicts with or is distinct from the researcher role (Hammack, 1997; Hammer & Schifter, 2001). Such ontological approaches to roles and status, however, are simplistic and outdated, and as such, negate the role of social context and power dynamics (Christianakis, 2008). Furthermore, such critiques assume that teachers do not have research training. However, as Darling-Hammond

(2010) argues, excellent teacher education programs across the world incorporate inquiry and research into their pre-service curriculum.

Within the last 15 years, the teacher research movement has made inroads into educational scholarship. More teachers have published in journals such as Language Arts, The Reading Teacher, The Bread Loaf Teacher Network Magazine, and The Harvard Educational Review, to name a few. In addition, they have established a special interest group at the annual American Educational Research Association (AERA) conference. Moreover, the Spencer Foundation has funded collaborative research projects (e.g., Lewis, Guerrero, Makikana, & Armstrong, 2002). Also, teacher researchers and their university-based allies (mainly teacher educators) have sought to redress the absence of teacher voices by creating collaborative research relationships such as the Teacher Research Collaborative, a group of teachers, teacher educators, and National Writing Project experts, who meet to discuss and write about issues of equity in education (Friedrich, Tateishi, Malarkey, Simons, & Williams, 2005). What is more, in 2003, the National Research Council encouraged "Strategic Research Partnerships" between academics and practitioners to create networks for learning and instruction (Donovan, Wigdor, & Snow, 2003).

Collaboration and Teacher Research

Research collaboration can take on many forms: teacher and teacher (Keffer, Wood, Carr, Mattison, & Lanier, 1998; Mohr, Rogers, Nocera, MacLean, & Clawson, 2004; Ritchie & Wilson, 2000); academic and teacher (Allen & Shockley, 1998; Kapunscinski, 1997; Rust & Meyers, 2003; Wells, 2001); whole school practitioner teams (Clayton Research Review Team, 2001; Senese, 2001); and community practitioner collaboration (Cochran-Smith & Lytle, 2009). Collaboration between different practitioners can offer opportunities for interdependence, diverse thought and blurred boundaries (Cochran-Smith & Lytle, 2009; Fox, 2003; Nesbitt & Thomas, 1998). Collaboration amongst teachers can help build and strengthen solidarity (Keffer, Wood, Mattison, & Lanier, 1998). Either with or between teachers, collaboration offers a way to address the technical rationalism that results from positivism by contextualizing findings (Olson, 1997).

Common to all collaborative research is the goal to overcome the traditional and contentious theory/practice rift between academics and teachers (Rock & Levin, 2002). Without collaboration, academic researchers run the risk of developing ideas only through their data, while practitioners risk developing ideas only through interactions with

students (Fox, 2003). Through collaborative work and dialogue, practitioners and researchers can build more robust educational theories and practices.

Collaboration provides teachers and university researchers to explore common interests. In one study, Dyson et al. (1997), in collaboration with Oakland Public Schools and Berkeley Unified School District, organized a professional development group of urban elementary school teachers who were all interested in studying diversity in their teaching. The teachers, who named themselves the San Francisco East Bay Teacher Study Group, met every Tuesday to discuss issues of diversity. Dyson and two graduate students made observational visits to the teachers' classrooms, and the teachers observed one another. They conducted case studies that they presented to the group. The group's collaboration resulted in a book entitled What Difference Does Difference Make: Teacher Reflections on Diversity, Literacy and the Urban Primary School. With the exception of a 20-page introduction, all chapters were written collectively and all of the collaborators' voices were included throughout the entire book. In this way, the teachers took ownership of their own professional development in a supportive and transformative environment through collaboration that included a "multiplicity" of voices (Russell, Plotkin, & Bell, 1998). Consequently, the San Francisco East Bay Teacher Study Group's work offers not only a framework for teacher reflection on issues of diversity; but also a model of how academics and classroom teachers can conduct collaborative research, while respecting one another's expertise.

Collaboration can also result in beneficial explorations of content-area pedagogy. Consider, for example, the collaborative partnership between teachers, graduate students, and university researchers that Wells (2001) fostered for over a decade. The focus of their collaborations was science inquiry. Wells explains that all phases of research, from grant writing, to formulating questions, to publishing, were "negotiated among all members of the group" (p. 9). In this way, collaboration was voluntary and leveraged different types of expertise from all collaborators.

As the above collaborative research projects demonstrate, collaborative teacher research has the power to disrupt hierarchy. First, collaboration can protect teachers from exploitation, since the researchers share and interpret data together (Shockley, 2001). Second, collaboration ensures that teachers' views are represented in the literature and that knowledge production is not unidirectional (Zeni, 2001; Wells, 2001). Third, collaborative research facilitates publication for teachers, who would otherwise have much less access to research tools, journals, conferences, and research networks (Minarik, 2001).

Collaborative teacher research also helps build reciprocal alliances

amongst teachers as well as between teachers and academics. Alliance building helps create communities of educators who have common instructional goals and agendas (Dyson, 1997; Wells, 2001). These alliances broaden the collegiality within educational research (Mohr, Rogers, Nocerino, MacLean, & Clawson, 2004). Additionally, alliances between all education practitioners can lead to coalitions that influence policymakers and help shape educational legislation (Cafferty & Clausen, 1998; Cochran-Smith & Lytle, 2009; Rust & Meyers, 2000b; Wayne, 2003).

Collaborative teacher research alliances have emerged in school-based and in pre-service settings. The Clayton Research Review Team (2001), for example, chronicles efforts to create a culture of collaborative inquiry that embeds practitioner work in the ongoing work of the district. Their team, consisting of administrators and teachers, grew from a reflective teaching group to a classroom-based research group that included Zeni, a university researcher contracted to help assist in their qualitative study of multi-age classrooms. Their collaborative research explored concerns such as, the challenges to teaching and researching, district visions versus teacher research questions, and the rights of families during research. The collaborative alliance helped stakeholders support and understand teacher inquiry.

Alliances have been especially important in pre-service teacher education as well. In one collaborative effort, Graham and Hudson-Ross (1999), both professors at the University of Georgia, reformed their teacher education program to better integrate theory and practice. Together with mentor teachers, they began their collaborative reform efforts by examining their respective roles in knowledge production and in the education of student teachers. Very early on, Graham and Hudson-Ross discovered that mentor teachers were disgruntled with their previous roles in teacher education and perceived the split between university and schools as a "great divide":

For years, mentor teachers had remained silent because they rarely were asked to comment, because they felt less knowledgeable than the university supervisors did, and because as traditional teachers, many were not sure they provided the model the university teacher educators envisioned for student teachers. Silence and compliance were more comfortable than the risk of being judged wrong by "outsiders." (Graham & Hudson-Ross, 1999)

The mentor teachers perceived their lack of meaningful involvement as a sign that the university neither valued, nor understood the work of teachers. Yet, despite their negative feelings, the teachers were committed to teacher education, and were willing to work collaboratively to create

coherence between what student teachers learned in the university and what they learned through their practice.

Collaborative research with mentor teachers showed these student teachers that teaching necessitates continuous learning (Graham & Hudson-Ross, 1999). Mentor teachers also benefited from the collaboration in that researching reinvigorated them to think deeply about their practice. In the end, the education program overcame the traditional divisions that had kept academics and mentor teachers apart, while exposing student teachers to research tools and practices.

Collaborative research in pre-service education can also result in relational benefits. It can deepen the relationships between mentors and teacher candidates. Levin and Rock (2003), who studied five pairs of pre-service teachers and their respective mentors, for instance, found that collaborative research helped build both pedagogical and mentoring relationship. Collaborative research can also change the sources and methods by which pre-service teachers learn. Additionally, collaboration offers a way for mentor teachers, student teachers and teacher educators to help one another reach a greater understanding of their pedagogy and, thus, better serve their respective students.

Collaborative research, however, presents many challenges. In their work, Levin and Rock (2003) find that pre-service teachers tended to do more of the data collection and write up work. As a result, they point out that collaborative action research in pre-service work requires attention to training, ownership, autonomy, and support. Challenges not withstanding, collaborative teacher research in pre-service education is important because not only can it deepen the relationship between mentors and teacher candidates, but also it can change the sources and methods by which pre-service teachers learn. Additionally, collaboration offers a way for mentor teachers, student teachers and teacher educators to help one another reach a greater understanding of their pedagogy and, thus, better serve their respective students.

Implications

Cochran-Smith & Lytle, 1999; Levin & Rock, 2003; Loughran, Hamilton, LaBoskey, & Russell, 2004; Goswami & Stillman, 1987). Teacher research has the power to improve how prospective teachers learn information about both teaching, as well as transform how they are mentored into the profession. Knowledge discovered through research can then be added to the "codified" knowledge presented in coursework. Integrating teacher research into pre-service education, re-skills and positions teachers to

be inquiry-oriented, rather that implementer-oriented. Many teacher education programs incorporate practitioner inquiry into their credential programs (Levin & Rock, 2005; Graham & Hudson-Ross, 1999). Those programs can lay the groundwork for a common understanding of collaborative educational research.

What might a collaborative research approach look like in teacher education and what kinds of institutional and programmatic changes would need to take place? One way to reconceptualize institutional relationships in research is for teacher education programs to re-think how they work with public schools and the role of teacher mentors. For example, the theme for the Summer (2010) issue of Teacher Education Quarterly entitled, "Moving Teacher Education into Urban Schools and Communities" explores the possibility of blurring the lines between public schools and the academy, by working with schools to relocate teacher education into Professional Development Schools (PDS). PDS cast public schools in roles analogous to teaching hospitals in which they serve as sites where teachers and researchers might jointly explore professional standards, knowledge, practice, inquiry, and research (Darling-Hammond, 1989, 2010; Doolittle, Sudeck, & Rattigan, 2008; Holmes, 1990; Kennedy, 1990). In such professional development sites, academics, mentor teachers, and pre-service teachers could construct on-going, longitudinal, collaborative research projects that might inform curricular development and respond to children's learning needs.

Another way that some teacher education programs might incorporate programmatic changes to support collaborative research is by shifting from teacher "training" to true teacher "education" that requires inquiry (Ravitch, 2010). In this regard, teacher education programs that emphasize incorporating inquiry into practice and student communities need to incorporate research methods, not in addition to, but as an integral part of teacher credentialing. In her groundbreaking book, *The Flat World and Education*, Darling-Hammond (2010) documents that Finland, Korea, and Singapore have developed exemplary pre-service teacher education by, amongst other changes, incorporating a strong teacher inquiry into pre-service education.

Buchberger and Buchberger (2004) document that, in Finland, teacher education takes place in "model schools," which house both academics and experienced classroom teachers engaging in ongoing research. Within those schools, pre-service teachers learn to research learning and teaching with the expectation that they will develop problem solving "capacity" to share with other public school teachers (p. 10). Pre-service teachers in Singapore do their practicum in "school partnerships" between universities and public schools with the purpose of teaching candidates to engage

in teacher inquiry or research (Chuan & Gopinathan, 2001). While the United States does not advocate for such models of collaborative research, an example of such a shift is Pedro Pedraza's (2005) recent community action research efforts in Latino communities in California, which seek to shift teacher education into more collaborative research relationships with schools and their surrounding communities. Pedraza's work shows the collaborative possibilities of pre-service teachers, academics, public school teachers, and community members working together to improve learning and generate relevant knowledge.

In order for teacher education to shift to a more collaborative inquiry-based approach, pre-service teacher assessments would have to incorporate research methods and the incentives must reward teacher research. Darling-Hammond (2010) finds that Korean teachers are promoted based on amongst other achievements, their research accomplishments. While there is no systematic training for teacher inquiry, in California, an emphasis already exists in the Performance Assessment for California Teachers (PACT). In PACT, teacher candidates conduct child case studies, analysis of student learning, and curricular/pedagogical analysis. The PACT assessment lays the groundwork for those credentialing to engage in more systematic teacher research, if they choose to do so.

Finally, for collaborative teacher research to take place, teachers will have to work alongside academics to engage in continuous professional development. Just as in the medical profession, some teachers may choose to do so by focusing on their practice, while others may engage their teaching as teacher-researchers. In Singapore, the government compensates teachers for professional development and facilitates with research training to conduct teacher research (Darling-Hammond, 2010). Such a national commitment to teacher research in the United States does not yet exist.

While very promising, collaborative teacher research, like all research has some challenges to overcome (Castle, 1997). Pine (2009) identifies three specific challenges that those participating in teacher research collaboration must address. First, he argues, collaboration that involves practice must focus on inquiry and research, rather than on discussions and emotional support of the daily practice. Second, collaboration that is contrived (Hargreaves, 1994) must be avoided because it leaves some stakeholders less invested than others. Third, researchers have to be mindful that collaboration can lead to "group think," which limits the possibilities for dissenting views or counter narratives within the collaborative group (Pine, 2009, p. 158).

In addition, there are several concerns regarding equity in collab-

orative research. For one, collaboration is not always egalitarian; it can reiterate hierarchy by reinforcing institutional authority and efficiency (Ede & Lunsford, 1990). Collaborative research should entail a negotiation of roles and responsibilities. Another challenge to egalitarian collaboration in teacher research has to do with the control of the research questions, research focus, budget size, leadership, and decision-making (Kapunscinski, 1997; McGlynn-Stewart, 2001). As Anderson (2002) argues, collaboration in practitioner inquiry may inadvertently serve to reinforce the status quo. For example, administrators or academics might seek to assert leadership over collaboration and determine the direction of the research. If teachers and academics collaborate with one another in forced and uncomfortable ways, the research may reiterate existing hegemonic infrastructures. Thus, those who participate in collaborative teacher research must resist temptations to use their knowledge or social locations to control or undertake contrived or coerced collaboration.

Collaborative approaches have shown great promise to bridge the "great divide" between academics and teachers, between universities and schools, and between theory and practice; however, issues related to control, power, and authenticity persist. As Olson (1997) asserts, true collaboration involves conversation—academics and teachers listening to one another even when they have conflicting opinions. Similarly, Nesbitt & Thomas (1998) argue for a paradigm shift that seeks collaboration on common ground, negotiated by all practitioners:

Authentic collaborative research is conception, investigation, and nurturance of ideas through a naturalness of interaction that underlies any concurrent attention to power disparities resulting from the researchers' particular social locations. Authentic collaboration can occur only when the mutual respect and trust—between those from the dominant paradigm and those who have had to work from the margins—is sufficient to produce interaction that is naturally egalitarian, rather than mediated by vigilant awareness of status difference. (p. 32)

The Wells (2001), Dyson (1997) and the Graham & Hudson-Ross (1999) studies show the benefits of negotiated collaborative research for both professional development and pre-service education. However, note that such collaborations were voluntary.

Overall, it is important to explore and maintain the volunteer and democratic aspects of collaborative research. Collaborative approaches have the potential to improve not only the status position of teachers in research, but also to provide what Cochran-Smith and Lytle (2009) describe as a "constructive disruption" to the educational research hierarchy. Such constructive disruptions shake up the status quo and allow educators to re-imagine what research means in a participatory

democracy. This is not to say that academics and teachers are equally qualified for research. They are differently qualified and differently positioned. Teachers bring different positions and understandings, as do academics. At different points in collaborative research, one may have more knowledge or skill than the other may.

If teacher education is to empower future teachers as powerful stakeholders in both educational research and in production of the professional knowledge base of teaching, then certification programs must move beyond simply educating teachers to implement the standards and assessments their districts provide them. Teacher certification programs should seek to establish opportunities for teacher research with experienced teacher mentors, administrators, and academics.

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