This study examined 10 urban middle school teacher leaders who played significant roles in their districts' and states' large-scale standards reform efforts. Interviews, observations, and shadowing were conducted during the first year to examine the teachers' scope of work. Observations focused on teachers working with a range of students and with colleagues in formal and informal situations. Participants constructed portfolios with reflections on their own practice. The portfolios included lesson plans and student work; reflections on the lessons; and information on work with peers. A similar approach was used during the second year, with greater attention to teachers' leadership roles. Each year included a 3-day working conference in which the teachers completed action research. Presented in four papers, the results: evaluate the usefulness of a reflective tool for identifying essential qualities comprising teacher leadership; examine math and science reform issues that might explain the relative lack of middle school teacher leaders in these two disciplines; analyze the situation in middle school science; and discuss efforts to identify teachers' leadership qualities and how they were developed. The results note the importance of high quality professional development in understanding the career development of teacher leaders. (Contains 12 references.) (SM)
The Role of Teacher Leaders in Scaling Up Standards-based Reform

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Symposium Session 45.51

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The Role of Teacher Leaders in Scaling Up Standards-based Reform

Symposium Overview and Research Design

This symposium was organized to share the research findings from a two-year study of ten teacher leaders who have played significant roles in their district and states' standards reform efforts. The study of The Role of Teacher-Leaders in Scaling Up Standards-based Reform in Urban Schools was designed to achieve two goals: 1) to develop a deeper understanding of what it takes for teachers to learn, implement, and help other teachers learn the content and skills needed to translate standards into classroom practices that focus on raising student achievement; and 2) to identify the additional skills and orientations needed for teachers to effectively lead their colleagues in this reform effort.

A little over a decade ago, the notion of teacher leadership was a new idea. Researchers began to explore what teacher leaders do, how people were selected for such roles, and what criteria would be used to identify teacher leaders (Lieberman, 1992). While there have been efforts to conceptualize the various formal and informal roles of teacher leaders (Troen & Boles, 1994; Fessler & Ungaretti, 1994), and the skills needed to assume these roles (Wasley, 1991), there is no coherent “curriculum” for developing teacher-leadership. Our research was designed to learn inductively from those who have taken on leadership roles. These four papers present our findings identifying: (1) the significant experiences in these teachers’ professional journeys that have shaped their careers, (2) the essential knowledge, skills, and dispositions the teacher leaders have acquired in order to implement curricular and instructional practices that promote high levels of student learning, and (3) the leadership skills that enable them to extend their influence and help others improve their practice. By studying how these teacher leaders have been able to learn new ways of working within their classrooms, buildings, and beyond the school boundaries, we tried to identify what districts can do to facilitate exchanges, provide support, and promote collaboration among teachers and schools, in the effort to get to scale with standards reform.

Background & Rationale for the Study: This research grew out of an ongoing evaluation study that Education Matters, Inc. has been conducting for the Edna McConnell Clark Foundation. We have been engaged in a five-year study of the design, implementation, and progress of district-wide standards-based reform at the middle level in six urban districts. Each district provides a different context for reform as does each state. Each has a slightly different approach to implementing standards-based reform that they believe will lead to higher academic achievement for all students. And, not surprisingly, each has faced many of the same difficulties inherent in such a sustained and complex effort.

Standards-based, systemic reform attempts to establish rigorous curricula that stimulates students' abilities to think critically and become skilled problem solvers. This reform clearly specifies what all students should know and be able to do, and requires attention to curriculum, instruction, and assessment. In practice, the implementation of standards-based reform requires the integration of all three at the classroom level, placing new and challenging demands on teachers. As a result, teachers are increasingly placed at the center of school reform efforts, underscoring the need for expanded and enriched professional learning opportunities that tie directly to student
performance. The 1986 report of the Carnegie Task Force on Teaching as a Profession, A Nation Prepared: Teachers for the 21st Century, went so far as to say that without teacher support, "any reform will be short lived" and that, "the key to successful education reform lies in creating a new profession . . . of well educated teachers prepared to assume new powers and responsibilities to redesign schools for the future." (P.1)

The National Education Goals strive to ensure that all children have access to challenging content, and moreover, will be able to demonstrate a high standard of performance in mastering that content (O'Day & Smith, 1993). These goals cannot be achieved without profound changes in classroom teaching and learning. These changes demand new models of professional development that are built upon an understanding of three essential elements: 1) What teachers need to learn in order to change their practice; 2) How teachers can learn new ideas and practices in the course of their professional work; and 3) What system supports are needed to foster and sustain teacher learning. To make this possible, the National Staff Development Council has identified a critical need for "the study of professional development to understand its relationship and contribution to overall school transformation" (NSDC, 1994). While the role of professional development in school reform has received an enormous amount of attention, it is also an area about which surprisingly little is known.

Useem, Christman, Gold, and Simon (1997) identified a set of variables that prevent school faculties and their administrators from implementing and sustaining changes in teaching, learning, and governance, which included prevailing practices regarding scheduling, assignment, and transfer of professional personnel and compensation policies. We have also learned from Newmann and Wehlage (1995) and McLaughlin (1994) factors that facilitate change: when staffs work together to articulate and enforce high expectations for students, coordinate teaching methods, improve their technical competence, and establish a sense of collective accountability for student learning then student outcomes improve. However, we know very little about what a coherent curriculum (Cohen & Ball, 1999) would look like to enable teachers to learn, not only new technical knowledge and skills, but also to develop new social norms among colleagues to create professional learning communities. In most cases, teachers have had to construct their own course of professional learning. We wanted to know what it looks like and how they did it.

In our work for the Clark Foundation, we were often discouraged by the slow pace of change, and the limited depth and breadth of the reforms, but we were always inspired by a few highly energetic and effective teacher leaders who were actively engaged in school change to improve student learning. Moreover, each of these districts recognized that these teacher leaders were a powerful resource and they have attempted to mobilize these teacher leaders as critical change agents in furthering the district's reform. Originally, the inspiration for undertaking this more in-depth study came from four teacher leaders who happened to be part of the principle investigator's sample of teachers in the Clark evaluation.

**Research Methodology and Data Source:** The study employed a unique design to utilize the expertise of teacher leaders in a collaborative research effort, combining qualitative case study methods with action research that engaged the teacher leaders in studying their own professional learning. The sample included ten middle school teachers, two teachers in each of the four core
disciplines, and two reading specialists, who work across the curriculum. The teachers selected represented four urban districts that have invested in implementing large-scale standards reform. The plan was to seek recommendations from each member of the Education Matters research team to identify additional teacher leaders for the sample. Across six districts our full sample of teachers included 216 teachers, from which we assembled a preliminary list of impressive teacher leaders in language arts, history, and reading. In contrast, only one math and one science teacher had been recommended. We then turned to the curriculum leaders in each of the districts for recommendations of middle school math and science teachers who met the criteria we had established. We were looking for "teacher leaders who have demonstrated a deep understanding of what it takes to translate high standards into effective classroom practices, and have assumed leadership roles in which they are helping other teachers learn to do the same." This inquiry produced only one teacher who met the criteria. We eventually did find an additional math and science teacher to complete our sample.

Our efforts to understand the issues surrounding the lack of visible teacher leaders in middle school math and science is the focus of two of the papers in this collection. The Koency paper identifies insufficient content knowledge as a significantly limiting factor among middle school mathematics teachers. The Berns paper addresses the lack of national and district leadership in science reform at the middle level, particularly in the areas of available curriculum materials and in-depth professional learning opportunities for science teachers.

The data collection began using a traditional case study approach, with the researcher conducting in-depth interviews, observations, and “shadowing” each of the teacher leaders during three separate visits during the first year. The visits were scheduled to learn about the scope of work that comprised these teachers’ professional lives. Our observations included teachers in their classrooms working with a broad range of students, as well as their work with colleagues in both formal and informal situations. The goal was to construct individual professional histories, documenting the significant professional learning experiences in their careers, their professional affiliations, subject matter expertise, their leadership roles within their department or team, school, district, or beyond. In addition, teacher leaders constructed structured portfolios each year with reflections on their own practice with students and with colleagues. The portfolio entries consisted of two elaborated lesson plans for a unit or extended lessons, along with three pieces of student work produced for each assignment. Teachers were then asked to write reflections of the lessons, including: their overall assessment of the lesson; what worked; what didn’t and why; what they hoped students would learn; what evidence they found of actual learning; what they found was difficult for students; and what they would do differently next time to address learning gaps. Two additional entries focused on the teacher leaders work with peers, which allowed us to examine the skills needed for their leadership work. These entries took many forms. Some described mentoring or one-on-one coaching; some described formal staff development workshops or institutes, while others focused on their role in leading study groups or developing assessments. Again, teachers were asked to write reflections of their experiences, addressing the same questions they used to discuss their classroom experiences to evaluate and reflect on their work with colleagues. The portfolios were used not to assess the teachers’ professional competence, but rather as a means of capturing the contexts of “real teaching” and teachers’
authentic responses to those contexts (Shulman, 1988; Lichtenstein, Huebner, & Grant, 1992).

A similar approach was used in year two of the study, but with greater attention to teachers' leadership roles, as this was the area that we understood least well.

The culminating activity each year was a three-day working conference held each summer. We brought together all ten teachers to participate in action research. The goal was to utilize the collective expertise of the group to scrutinize and elaborate the preliminary data summarizes produced from each year of data collection, and to engage them in discussions to synthesize and analyze their portfolios and shared professional learning and leadership experiences. During these meetings, we employed a number of strategies to elicit input and feedback from the teachers, including: portfolio sharing, small group and whole group discussions, and reflective writing. For our final meeting we constructed professional journey maps of each of the participants, which turned out to be a powerful reflective tool in furthering our understanding of the development of teacher leaders. The Snell & Swanson paper provides greater detail of the action research process.

**Research Findings:** The four papers in this collection focus on four different sets of results from the case studies of these ten teacher leaders. The first paper (Snell & Swanson, 2000) evaluates the usefulness of a reflective tool we developed to identify the essential qualities that comprise teacher leadership, and documents the evidence we found to substantiate the central importance of four of the dimensions in our framework.

Two papers focus on understanding the issues in math and science reform that might explain the relative lack of teacher leaders in these two disciplines at the middle level. Gina Koency’s paper explores the critical role of content knowledge in mathematics in implementing standards-based reform. To be able to change their instructional practice, teachers require a deep and broad understanding of mathematics concepts. Unfortunately, too few middle school teachers possess this depth of knowledge, nor are there sufficient opportunities for teachers to develop the competencies required to implement reforms.

The Berns & Swanson paper applies a similar analysis to the situation in middle school science. In some urban districts, science is still struggling for recognition as a core discipline, and suffers from a lack of district leadership, coherent curriculum, and quality in-depth learning opportunities to prepare teachers to implement inquiry-based science instruction.

The final paper in the symposium wrestles with the most illusive findings from this project, our efforts to identify the leadership qualities these teachers possess, and to understand how these abilities were developed. It highlights the significant role that mentors played in fostering their emergence as leaders. In all four papers, the prominent role of high quality professional development is key to understanding the career development of teacher leaders.
References


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