Teacher recruitment and retention is one of the most daunting problems facing the teaching profession today. “Few educational problems have received more attention in recent times than the failure to ensure that our nation’s elementary and secondary classrooms are all staffed with qualified teachers” (Ingersoll 2003). Few would argue that attracting the best and brightest teachers to the profession is a priority. And yet, “school administrators and educational researchers have long known, hiring bright new teachers is only part of the problem—the attrition of both new and experienced teachers is as great a challenge for schools and school systems” (Buckley, Schneider, and Shang 2004). In this presentation, I will address the problem of teacher retention in terms of its relationship to my own work and passion—teachers’ engagement in researching their own practice.

Early Departure

To illustrate the relationship between teacher research and teacher retention, I’d like to begin by painting a picture of the problem at hand. Statistics on teacher retention are grim; researchers have consistently found that younger teachers have high rates of departure. In fact, the National Commission on Teaching and America’s Future reports, “with the exception of a few disciplines in specific fields, the nation graduates more than enough new teachers to meet its need each year. But after just three years, it is estimated that almost a third of new entrants to teaching have left the field, and after five years almost half are gone. No teacher supply strategy will ever overcome this staggering attrition rate” (2003, 19).
Young teachers report a myriad of reasons for their early departure from the profession. These include low teacher salaries; inadequate preparation; job dissatisfaction; poor physical conditions of the workplace; lack of resources; personal reasons (such as pregnancy and child rearing); poor administrative support; student discipline problems; lack of faculty influence and autonomy; poor student motivation; no opportunity for professional advancement; inadequate time to prepare; intrusions on teaching time; overlarge class sizes; government policies; negative portrayal of teachers in the mass media; low status of teachers in society; and, my personal favorite, as it highlights one of the great ironies of NCLB—"accountability and increasing use of high-stakes, standards-based testing with the associated 'drill and kill' curricula that often comes with it" (Tye and O'Brien 2002; Darling-Hammond and Sykes 2003).

This laundry list consists of the tangible reasons that can be articulated and reported to educational researchers by young professionals who have departed the field of teaching. While this list is impressive in its comprehensiveness, and educational researchers have done a phenomenal job of describing major issues associated with the decision to leave teaching, I believe there is an essential underlying reason teachers leave the profession that is perhaps not as easily articulated and tangible and therefore not captured by the numerous studies that have been completed on teacher retention. That reason, simply stated, is the overwhelming, inherent complexity of the act of teaching itself.

**The Complexity of Teaching**

To illustrate, let’s take a look at what it means to be a teacher. Effective teachers must know their content deeply, know pedagogy, know human development, and know the twenty-five (in elementary school) to over one hundred (in secondary school) students they interact with each day, including identifying every one of these learners’ academic, social, and emotional needs. And teachers must simultaneously attend to these individuals’ needs, all unique and varied, during each instructional moment of the day. Teachers must understand lesson planning and realize that with every lesson taught, there will be a unique outcome that results from the interaction of the context in which one teaches it, the timing of the teaching, the teacher him- or herself, and the learners in the room. Teachers must attend to management and transitions of large groups of learners before, during, and after each lesson. Teachers are bombarded with decision making every minute of their day, ranging from deciding the next steps when a planned lesson is not progressing productively to deciding if Johnny, who just asked to use the bathroom for the third time that day, should
be given permission to leave the lesson to take care of his personal needs. In addition, teachers must constantly assess their students’ learning and progress both formally and informally. Teachers make contributions to the running of the school, managing such tasks as the collection of lunch money and bus and lunch duties. They must communicate and collaborate with parents and other education professionals such as guidance counselors, the principal, school psychologists, and other teaching colleagues. In their spare time, they serve on committees, attend faculty meetings, and read professional journals and books to keep abreast of the latest developments in their field. They do all this while keeping an eye on high-stakes testing and their students’ performance, balancing preparation for test taking and the teaching of test-taking skills with real teaching and learning of content.

This picture I’ve painted of a teacher’s work is by no means complete, but I believe it is complete enough to illustrate what is meant by the inherently complex nature of teaching. Young teachers, when confronted with the reality of this complexity, naturally become overwhelmed. Void of an experiential base or tools to help them untangle the complexity of their work, it is not surprising that they leave the teaching profession within the first five years of their careers. Lamenting about the number of young teachers he had hired only to have them leave after a few years, a principal I work with shared with me that now when he interviews and hires young teachers, he looks for someone who has waiter or waitress experience. He says, “My experience tells me that young teachers who have worked as a server in a restaurant understand hard work, they can do multiple things at the same time, they are aware of customer service, and they can certainly work with others (including bartenders, kitchen personnel, and the restaurant manager) to make the dining experience work. I know that anyone I hire who has this experience is a better bet to stay in teaching because they have experienced a job that in many ways emulates the demands and intensity of teaching.”

Now, I’m not suggesting that we add waiter or waitess experience as a qualification for entering the teaching profession, but I do think we can learn from that principal’s hiring experience that those who are entering the profession of teaching have a better chance of staying in the profession if they are in some way equipped to deal with the tremendous intensity and complexity inherent in their chosen field. I believe one tool that can help young professionals navigate the complex nature of teaching during their early years is practitioner inquiry, also referred to as teacher research.
Creating a Culture of Inquiry

So, what is this thing called teacher research that potentially holds some promise for keeping young teachers in the profession? With few examples of classroom research to draw on, many prospective and practicing teachers in the early days of the teacher research movement envisioned late nights in the library poring through numerous educational research journals and crunching numbers. These images were antithetical to what notable scholars on teacher research—such as Marilyn Cochran-Smith and Susan Lytle—had in mind when they advocated for teacher research. Hence, as the word “research” carried so much baggage with it, I made a conscious decision many years ago to abandon the use of the word in my own work and replace it with “inquiry.” To me, creating a culture of inquiry was what the teacher research movement was all about from its inception. As you will see, young teachers entering a culture of inquiry will find themselves in a much better position to understand the complex nature of teaching, and to navigate and thrive in this complexity.

A culture of inquiry is defined by three components. The first is “problematizing” practice. In a culture of inquiry, teachers accept that teaching is an inherently complex endeavor. Because it is so complex, it is natural and normal for teachers to face many issues, tensions, problems, and dilemmas as they practice. Rather than sweeping the problems under the carpet and pretending they don’t exist, teachers embrace problems by deliberately naming them, making them public, and making a commitment to do something about them. Doing something about problems of practice requires three components. First, it requires understanding problems in a systematic way. Second, teachers must study their practice—the key component of an inquiry culture. Third, after a problem has been identified and systematically explored, teachers both articulate what they learned about practice and develop an action plan for change in their classroom based on what they learned.

Let me pause to make clear what we’re talking about and what we’re not. We’re not talking about an inquiry culture being about doing lots of teacher research projects. Rather, we are talking about a community of teachers celebrating, accepting, and adopting these three components of an inquiry culture as a way of being a teacher.

Teacher inquiry, therefore, is less about what one does than about who one is. It is a stance that teachers take toward their practice—a professional positioning, owned by the teacher, where because of the tremendous
inherent complexities that exist in the act of teaching, questioning one's own practice becomes a necessary and natural part of a teacher's work. When young teachers are immersed in a culture of inquiry, surrounded by veterans who problematize and question practice, they have less chance of viewing the natural issues, tensions, problems, and dilemmas they face as personal attestations to their inadequateness as teachers. Rather than having to keep questions and problems private for fear of how they will look to their principal and colleagues, they are supported by administrators and colleagues to both name their issues and questions, and bring resources to bear on understanding and doing something about them—in other words, to adopt an inquiry stance toward teaching.

Doing teacher research is one way to actualize an inquiry stance. Historically, we've focused a great deal of attention on the doing of teacher research, as it has proved to be an extremely powerful vehicle to actualize an inquiry stance, as well as a way to make this stance visible.

**The Process of Inquiry**

Teacher research is defined as systematic, intentional study by teachers of their own classroom practice. The process begins when teachers define a wondering. A “wondering” is a burning question a teacher is passionate about exploring as it relates to his or her classroom. Wonderings emerge when two constants in teaching intersect. The first constant is the inherent complexity of teachers’ work, which I previously discussed. And, because teachers’ work is so complex, each day they walk through their classroom doors they are bombarded with perceived difficulties and real-world dilemmas. It’s at the nexus of these two constants in teaching that burning questions emerge.

**Eight Areas of Wonderings**

Looking at hundreds of teacher research pieces completed in the past, I’ve noticed that these questions have historically emerged in eight different areas, which I’m going to discuss briefly. (For more details and examples of inquiries focused in these different areas, see Dana and Yendol-Silva 2003, which takes both novice and veteran teachers through the process of teacher research step-by-step.)

The first area is a child. There may be a particular learner in the classroom who is puzzling to a teacher for a particular reason.

The second area is the curriculum. This type of project looks at a particular unit of study, how a teacher might improve on that unit of study, and the impact those improvements will make on student learning in the class.
The third area—related to curriculum research—is content knowledge. Some teachers find that they want to deepen their own understanding of content knowledge in a particular area and later use teacher research as a way to translate their newly acquired adult-level content knowledge into developmentally appropriate, sound practice for the learners in their classroom.

The fourth area focuses on teaching strategies. These are the generic techniques we use in the classroom, such as questioning, facilitating discussions, and cooperative learning. There are many teachers who look quite closely, microscopically, at some of these strategies; the ways they play out in their classrooms; and what that means for their learners.

The fifth area is beliefs and practice. Because teaching is such a complex endeavor, it's not uncommon for a teacher to discover that some of the things that are going on in the classroom are not consistent with his or her beliefs about sound educational practice—a situation that can occur for many reasons. Therefore, a ripe area for many pieces of teacher research has been looking at the continuities and discontinuities between what one believes about teaching and what one's practice actually is.

The sixth area is similar to the fifth—personal and professional identity. William Ayers (1989) writes very eloquently about exemplary teachers. For these teachers, who they are as people is very connected with who they are as teachers. Some research has therefore focused on teachers looking inward to discover who they are as people, as well as the connections between who they are in their private lives and who they are within their classroom’s four walls.

The seventh area is social justice. Some teachers, passionate about issues of race, class, gender, and ability, find their wonderings emerging in this area.

The eighth and final area is context. These inquiries focus not just on what happens within the classroom itself but on the ways school policy, district policy, state policy, and federal policy are impacting what occurs within the classroom.

A Four-Component Plan

Historically, once wonderings are defined, teacher researchers develop a four-component plan for study. The first component is data collection. Data collection means capturing the complexity of what occurs in the classroom through such things as field notes, documents, interviews, surveys, journaling, and student work.
Once data is collected, teachers take a close look at the data. This data analysis entails piecing together the discrete components of data collection to develop a picture of what was learned.

Next, teacher researchers are given a forum designated to pulling their work together, such as a conference, professional development day, faculty meeting, or study group. In this space, teacher researchers publicly share their work, opening it up for critique, dialogue, and discussion.

Finally, teachers take action for change based on what they learned through their study.

**Case Study: Judi Kur**

Engagement in teacher research can make a tremendous difference in the lives of veteran teachers and, subsequently, a tremendous difference for educational practice and the ways young teachers are inducted into the profession. To illustrate this difference, I’d like to share the story of a teacher, Judi Kur, and her first piece of teacher research—a curriculum inquiry. In 1999, Judi had been teaching primary-age children for over twenty years when she began mentoring a yearlong intern as part of the State College Area School District—Pennsylvania State University Elementary Professional Development School program, a program I developed and co-directed at the time. In order to serve as a mentor, teachers had to agree to engage in teacher research. Judi had been dissatisfied with teaching a unit on dinosaurs that hadn't been updated for years—a unit that Judi and many of her colleagues affectionately referred to as “prehistoric.” Judi wanted to do something about it, and so, through the process of teacher research, she wondered, “How can I take a science unit that is heavy on content and make it more science-investigation based?” and “What evidence exists that my newly developed investigation-based lessons on dinosaurs will help children develop abilities advocated by the National Science Standards?”

To gain insights into these wonderings, Judi reworked the entire dinosaur unit around one question she explored with her first-grade learners: How do scientists know so much about dinosaurs? To answer this question, she divided her class into paleontology teams. Each team received clues from a dig site about a “mystery dinosaur” and needed to make sense of the clues to discover the mystery dinosaur’s identity.
For example, one clue was a letter from a dig site telling students that a skull had just been found and asking what could be learned from looking at a skull. One student responded that you could tell how big the brains are and what kind of teeth it has.

After students received clues, they did scientific investigations and applied what they learned to their mystery dinosaur, such as experimenting with 3-D glasses to learn about the differences between stereovision and monovision.

As Judi taught this unit, she collected data by taking anecdotal notes, keeping a journal, looking at her students’ paleontology notebooks, taking pictures, and talking with other teachers in the primary division at her school. To analyze her data, she compared what she was seeing in the data she collected with the National Science Standards, which showed that her revised dinosaur unit was making a difference.

For example, one of the National Science Standards states, “Do students use data to construct reasonable explanations?” The following is an excerpt from Judi’s data—first-grader Kevin’s entry in his paleontology notebook:

“We discovered that it is hard to see with nonstereovision because things look flat and stereovision it looks 3-d because your eyes work togethr and meat eaters have stereovision and plant eaters don’t.”

Yes, Judi’s students were using data to construct reasonable explanations.

Another science standard states, “Do students develop explanations using observations and what they know?” One of Judi’s paleontology groups received a drawing of a skull that was found at a dig site and students were asked, “What do you know about this dinosaur now?” One student responded:

“We think it’s a meateater because it has canines, and its eyes are close to the nostrils.”

Yes, Judi’s students were developing explanations using observations and what they know.

A third science standard states, “Do students review and question each other’s work?” The following piece of data is from Judi’s own journal entry:

“It was interesting when they shared their skeletons and what they thought [they were] with the class. Other members asked questions and made comments like, ‘I don't think so; look, the head is different.’ Or, ‘You must be right, look at the feet; they look like the ones you cut out.’ How exciting to hear them interested not only in their own dinosaur but in other groups’ as well.”
Yes, Judi’s students were reviewing and questioning each other’s work. Judi’s research affected the colleagues she worked with in her school, as they agreed to teach Judi’s adaptation of the dinosaur unit in their own classrooms. Judi’s work also affected teachers across her district; in the year following her presentation at the district’s annual inquiry conference, teachers in other schools began implementing Judi’s changes in their classrooms. Within two more years, the entire school district adopted what Judi had learned from her inquiry and officially revised the dinosaur unit, which—thankfully—was no longer prehistoric.

Finally, in 2003, Judi was invited to be a keynote speaker at the annual Holmes Partnership Conference, where she shared with a room of over four hundred teachers and teacher educators from across the nation the story of transforming her curriculum through teacher research. While I have no direct evidence of change in these teachers’ classrooms, I have no doubt that Judi’s work inspired teachers nationwide.

So, what difference can teacher research make? As evidenced by the story of Judi Kur, as well as those of hundreds of veteran teacher researchers across this nation, the teacher research movement has enabled teachers to generate meaningful knowledge about teaching and learning from within the four walls of their classrooms. The generation of knowledge by practitioners heavily contributes to the possibilities for real change to take place in the classroom, improving schools from within. The teacher research movement has provided a structure for the voices of veteran teachers, like Judi, to be raised and included in informing, shaping, reshaping, and reforming school practice. The teacher research movement has enabled veteran teachers to become leaders in educational reform without leaving their classrooms for administration or higher education. The teacher research movement has enabled this new vision of teacher leadership, as eloquently envisioned by noted educational scholars Sergiovanni and Starratt (2002), to become a reality:

Teacher leadership involves the experimentation and examination of more powerful learning activities with and for students, in the service of enhanced student productions and performances of knowledge and understanding. Based on this leadership with and of students, teacher leaders invite other teachers to similar engagements with students in the learning process. (149)

Let’s pause for a moment to highlight the last few words in this quote: “teacher leaders invite other teachers to similar engagement with students in the learning process.” Let’s replace the word “other” with the word “new,” and get a glimpse at what teacher research can mean for a novice teacher.
Case Study: Amy Ruth

Amy Ruth is now in her seventh year of teaching. I worked with Amy during the 1998–99 school year when she served as a yearlong intern in the same Elementary Professional Development School program in which Judi was a mentor. As part of the program, Amy was expected to learn the process of teacher inquiry by conducting her first teacher research project with the support and guidance of her mentor teacher, her university supervisor, and other education professionals. Although Amy originally resisted the process and viewed it as an assignment disconnected from her teaching, through living the process and being immersed in a culture of inquiry, she soon became a poster child for the power teacher inquiry holds for understanding teaching—especially for a novice entering the profession. Amy has engaged in numerous inquiries during her first seven years of teaching, and attributes her knowledge of and engagement in teacher research as one of the most satisfying components of her job. Let’s take a look at the inquiries Amy conducted during her first five critical years of teaching.

During the 1998–99 school year, Amy was puzzled by one particular learner in her classroom—Adam. Adam came to school speaking little English, and Amy had watched his oral language grow and develop since the beginning of the school year. Adam’s forceful nature, strong personality, and undying energy were both exhausting and exhilarating for Amy. As Adam's oral language developed, Amy was particularly intrigued with ensuring that Adam’s development as a writer progressed as well as his oral language development, and so she focused her energies on exploring the ways peer interaction facilitated Adam’s writing at the kindergarten writing center.

Young teachers are often intrigued with, puzzled by, or frustrated with attempts to meet the unique or special needs of one or more learners in their classroom. Many novices enter the profession proudly proclaiming, “If I can make a difference in the life of at least one student, it will be worth it!” Confronted with the overwhelming reality of the difficulty of meeting individual learners’ needs while progressing through their curriculum and managing all of the other intricacies of teaching, young teachers can easily become disheartened. Inquiry can help novices focus their energy for meeting the needs of individual learners, and give them hope in their ability to have success with puzzling learners throughout their teaching careers.

Following her internship year, Amy was hired as a third-grade teacher. During the next two years, she was confronted with another common issue all novices face: classroom management. For the 1999–2000 school year, Amy found herself teaching a class that had been described by her teaching colleagues
as “a difficult group of kids.” During the year, Amy became frustrated when she realized that in reaction to this group of learners, she had abandoned many of her beliefs about innovative instruction, including using cooperative learning techniques and providing learners with opportunities for discussion. She feared that this group couldn’t handle discussion, small-group work, and other pedagogy she believed to be powerful and meaningful for young learners. Amy brought teacher research to bear on her dilemma, as she explored how she could better align her classroom management style and her philosophy of teaching. First she reworked a unit on explorers she was about to begin teaching. Rather than being given a series of direct-instruction lessons, her learners met curricular objectives in cooperative learning groups. She then scrutinized this shift—the successes and challenges, as well as her own thoughts and feelings in relation to those successes and challenges—through the process of teacher research.

Young teachers often enter the profession with an unabashed enthusiasm for implementing creative pedagogy, proudly proclaiming, “If I can make learning fun, it will be worth it!” Confronted with the overwhelming reality of classroom management and discipline, young teachers can easily abandon their beliefs and knowledge of pedagogy, returning automatically to the safety of direct, book-oriented instruction. Inquiry can help novices focus their enthusiasm for designing, implementing, and understanding creative and meaningful forms of pedagogy and feel confident in their ability to teach in a way that is consistent and consonant with their philosophy of teaching.

Similarly, during the 2000–01 school year, Amy focused on management issues. This time, Amy used teacher research to get a better handle on the first fifteen minutes of every school day. Young teachers often enter the profession without knowledge of the routines that are part of the teaching workday yet unrelated to instruction (such as attendance taking, lunch count, and book-money collection). In addition, young teachers often enter the profession without knowledge of the need to establish routines that will ready students for learning. It is easy for novices to drown in this dual sea; inquiry can help these young teachers better navigate routine tasks as well as establish their own routines, which will serve as the crucial foundation for all instruction.

In her fourth and fifth years of teaching, Amy’s inquiries turned toward the curriculum she taught. During the 2001–02 school year, Amy focused on the teaching of writing and used the process of teacher research to establish more powerful writing instruction for her third-grade learners. During the 2002–03 school year, Amy focused on mathematics instruction and used the process of teacher research to look closely at the teaching of estimation and how to help
her learners connect their mathematics to everyday, real-life situations. As with Judi Kur’s work, Amy’s work on curriculum led to change and instructional improvement in her classroom. Amy is an example of a young, enthusiastic, and bright new teacher who not only made it through the first five years of teaching but thrived in a culture of inquiry—a culture that allowed Amy to say she didn’t know or wasn’t sure, but would continually research her teaching in order to understand better.

In a recent phone call with Amy, I asked her to share what the process of “growing up” with teacher inquiry meant to her. Amy articulated that engaging in inquiry has given her the ability and freedom to ask questions, the confidence to look deeper into her own philosophy, and the power to put her inquiry findings into action. In addition, Amy noted that engaging in inquiry has made her a teacher who is open to students sharing their ideas, is willing to explore possibilities for a better working classroom, and gives greater attention to individual students and small groups. Finally, Amy reflected that as a new teacher, the process of inquiry gave her a voice as well as a language to articulate the tensions she felt in her first few years. Inquiry helped her feel valued and a part of the community of teachers. At present, Amy has no plans to leave teaching. She continues to teach, inquire into teaching, and—through her work as a mentor—induct new teachers into the profession with an inquiry stance.

We are truly fortunate to have kept Amy Ruth in the profession of teaching. Amy’s story illustrates the ways in which teacher inquiry can contribute to professional growth and development early in one’s career, and the ways in which teacher inquiry can help novices understand and untangle the many complexities of teaching that remain a constant throughout a teaching career.

Transformation

Today Amy takes her place alongside Judi Kur as a veteran teacher and inquirer. Their work contributes to a larger educational reform—the transformation of the teaching profession itself. This transformation is characterized by the recognition that practitioners generate valuable knowledge about teaching and learning, and that the knowledge generated by practitioners is necessary to improve learning and life in schools. This transformation is necessary to keep the Amy Ruths of the world in the profession of teaching, which will inevitably improve the learning and lives of every student.
Engagement in teacher inquiry is a strong, perhaps untapped resource that may keep beginning teachers in the field. But as we have discussed, teaching is incredibly complex, as is the problem of teacher retention. As Michael Fullan (1993) would say, there are no silver bullets. I hope you will join me in exploring the potential teacher inquiry holds as part of the answer to the problem of teacher retention. For, to keep the best and brightest in the teaching profession and improve the learning and lives of every student, it will take the work of us all.

References


