

## What's the Trouble with Teacher Knowledge?

As a foundation of their professional learning, Knowles Fellows regularly engage in *practitioner inquiry*—a systematic process in which teachers investigate problems of practice that they encounter in their daily work in classrooms and schools. Inquiry is a significant focus throughout the five years of the Teaching Fellows Program, so it's no surprise to hear from Fellows that they overwhelmingly value practitioner inquiry in their professional growth, they make it a regular part of their teaching practice, and they believe that it contributes to improvement in education beyond their classrooms<sup>1</sup>. As one Fellow wrote in a recent survey, inquiry “empower[s] teachers to improve our practices with each other and for each other.” Many Fellows have shared what they've learned through their inquiry at conferences with other educators, or by writing for blogs and other publications, including the Fellow-run journal at Knowles—*Kaleidoscope: Educator Voices and Perspectives*.

Given this strong commitment to inquiry, we're often surprised when Fellows are hesitant to name what they learn through their inquiry as "knowledge." It's clear that Fellows believe that they are *learning* about their own practice through practitioner inquiry, and that they value what they are learning. In fact, they also find what other teachers share from their inquiry to be "evocative," "compelling," or offering important insights about teaching. Yet, because teachers often describe what they learn through inquiry as very "practical," or uniquely situated within their own classroom, they have a sense that these learnings are less generalizable to other classrooms or schools. We hear comments like: "This feels so specific, not universal or transferable to other classrooms." And therefore, Fellows often stop short of naming these insights as *knowledge*.

This has become consistent and perplexing challenge for us as we support our inquiry community. We may value what we learn through practitioner inquiry, but can we go so far as to call it *knowledge*? If we can, what *kind of knowledge* is it?

In education, when people talk about teacher knowledge, they typically mean that teachers are expected to be consumers of knowledge, not generators of knowledge. Knowledge about teaching and learning is generally assumed to come from university researchers, and teachers are expected to apply this research-generated knowledge to their own teaching. For example, researchers like Thomas Carpenter and his colleagues (1999) spent years studying elementary students to codify the range of ways that these early learners think about basic operations in mathematics (like addition and multiplication). This kind of university-based research is invaluable to mathematics teachers as they design instruction, assess student work, and interpret their students' problem-solving strategies. This is what Cochran-Smith and Lytle (1999) call *knowledge-for-practice*—a formal knowledge base generated through rigorous academic research, where knowledge is often assumed to be "proven," generalizable, quantifiable and replicable across many schools and classrooms. And in general, we hear Fellows reserve the term *knowledge* for talking about this kind of research.

But this way of thinking about knowledge assumes it to be a universal and transferable "currency" that can be taken up and used by any teacher in any classroom. This may be true for some kinds of knowledge (in the sense of *knowledge-for-practice*)—for example, documenting a specific counting strategy that elementary students tend to use when adding numbers, which many math

teachers might recognize in their own students. But this is not the only way to understand knowledge in the context of teaching.

When teachers engage in practitioner inquiry in their own schools and classrooms, the goal is not necessarily to approximate the same kind of research done by university researchers in order to generate something that we can call *knowledge*. Rather than aiming to replicate or compete with university research, practitioner inquiry pushes back on the assumption that there is only one *way of knowing* that matters in teaching—replicable, generalizable kernels of knowledge that can be applied across different contexts. In fact, when teachers engage in practitioner inquiry, they are exploring a different relationship between knowledge and teaching practice, which embraces the notion that context matters, that knowledge cannot always be generalized, and what teachers can explore and learn from their unique “insider” perspective may be different from—but equally important to—what “outside” researchers can learn.

Teachers who engage in inquiry intentionally ask very specific, context-based questions that are grounded in their own classroom teaching. Instead of asking “What common strategies do students use to solve problems?”, a teacher-researcher might ask: *How aware am I of my students’ thinking and problem-solving strategies? How can I help my students make their thinking strategies more visible?* These are different kinds of questions than a university researcher might ask. But these questions are important in their own right, and exploring them will likely lead teachers to discover important things about their students, their practice, and themselves.

So that brings me back to the questions we often hear from Fellows: *When we engage in practitioner inquiry, are we actually generating knowledge? If so, what kind of knowledge is this?*

While a teacher might have read research about problem-solving strategies, learning to recognize how your own students are thinking is not trivial. Asking these questions likely requires a teacher to reconsider what he *thought* he knew about assessment, and to find new ways to uncover and value student thinking. As much as we might learn from university research about thinking strategies in general, the devil is in the details. What does this look like in *my classroom*? With *my students*? To what degree does *my teaching* support and value this? Asking questions about one’s own teaching may not lead to “easy” answers, and in fact

might open up new cans of worms. Once a teacher starts to explore her students' thinking strategies, she might also ask: *In what ways does my classroom culture support or inhibit students' willingness to "think out loud"?* Questions like these implicate the teacher herself, which can make practitioner inquiry riskier than other kinds of research. Teacher research is intended to be deeply embedded in practice—not "sanitized" from the particulars of one's classroom, students, or even one's own teaching identity.

These questions are personal, contextual, and risky, and teacher-researchers pursue them because they are absolutely important to teaching. Teachers won't likely answer these kinds of questions by "generalizing" from outside research, but instead by purposefully, courageously, and continuously studying their own teaching. By engaging in inquiry, a teacher doesn't aim to uncover "universal" truths or "generalizable" knowledge, but rather to explore how "general" knowledge plays out in her classroom, question what she thought she knew, and address intimate and immediate problems within her own teaching.

Rethinking what they thought they knew? Finding new ways to approach teaching practice? Identifying and addressing important problems of practice? This IS knowledge. This is a kind of *local knowledge* that only teachers can generate through inquiry, and it's this kind of knowledge that matters most to teachers and their students.

## References

Carpenter, T., Fennema, E., Franke, M.L., Levi, L, & Empson, S.B. (1999). *Children's mathematics: Cognitively guided instruction*. Portsmouth, NH: Heinemann.

Cochran-Smith, M. & Lytle, S. (1999). Relationships of knowledge and practice: Teacher learning in communities. *Review of Research in Education* (24), 249-305.

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<sup>1</sup> In a recent survey (Fall 2017), 100% of Teaching Fellows agreed that inquiry is valuable/very valuable to their professional growth; 86% were strongly/very strongly committed to inquiry as a regular part of their practice; 92% agreed (to a moderate, great, or very great extent) that inquiry is a regular part of their practice; 99% agreed that inquiry contributes (a moderate/great/very great

extent) to improvement in education beyond their own classrooms.