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See the profound effect on a single system in such a short time. Perhaps what we need to observe as educators in this new millennium is not how we “teach students,” but instead how we enable students “to learn.” If we want our students to have enduring knowledge and skills in which they are mindful of the natural world, then we need to involve our students in the process of science. Individual choices and decisions regarding the environment are not restricted to those students who pursue a career in the sciences. This must become an imperative for those of us who “teach science.”

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You can learn more about HabitatNet at www.spire.com/shs/habatnet/default.htm
You may contact Dan Biascatti at dbiascatti@spire.com

Barbara Scott Nelson and Annette Sassi

In this millennium, we are capable researchers, providing concrete examples of instructional leadership by investigating the way in which several principals observe and provide feedback to their teachers’ math instruction.

Educators, just like the students with whom they work, vary in the prior knowledge and experience they bring to the table. When it comes to the study and teaching of mathematics, some elementary teachers shy away from skills that they themselves are not comfortable with. Administrators with similar apprehensions might welcome a math lesson with a superficial awareness of conceptual understanding and focus more on whether or not students were able to complete the task or solve the problem.

In mathematics, conceptual understanding must support algorithmic skills. In The Effective Principal, Nelson and Sassi take us into several classrooms where teachers are working on mathematics instruction. Each case study is focused on the principal’s observation, understanding and feedback to the teacher. Nelson and Sassi discuss how the principal’s level of content knowledge impacts the focus of the observation and the feedback provided to the teacher. In each case a deeper understanding of pedagogy and content leads to more focused feedback to the teacher, greater impact to teaching and learning, and improved student success.

I was contemplating my instructional leadership after reading The Effective Principal. As I worked with my third-grade teachers to review their benchmark data, they identified a weakness in the areas of place value and subtraction with regrouping. One teacher insisted that she “teaches” the concept every day (equating additional practice with re-teaching). Another seemed more open to trying an alternative approach. Although both stated they had used manipulatives in the past, they were wary of going back to hands-on with the State test looming in the background.

With Nelson and Sassi in mind, I continued to push the conversation trying to identify where the conceptual understanding of these third graders had broken down. I questioned how continuing to provide algorithmic practice, which had not been successful for the past six months, would help prepare students for the test let alone for future learning in mathematics. The teachers finally came up with a plan for addressing the two areas of weakness and a cooperative way of supporting both classes.

I believe that The Effective Principal is a wonderful tool to help administrators become true instructional leaders and learners. As such, Nelson and Sassi state, “they engage in instructional leadership from a stance of inquiry, that is, a stance of curiosity about how children learn, how teachers teach, why certain instructional strategies work the way they do, or why the teachers in the schools have such a variety of ideas about instructional practice.”

You may contact Gina Kaplan at gkaplan@phila.k12.pa.us